

PUCO Case No. 22-0154-EL-BLN

Submitted to: The Ohio Power Siting Board Pursuant to Ohio Administrative Code Section 4906-6-05

Submitted by: AEP Ohio Transmission Company, Inc.

March 7, 2022

#### Letter of Notification

#### AEP Ohio Transmission Company, Inc. (AEP Ohio Transco) Lima-Fort Wayne 138kV Transmission Line Rebuild Project

#### 4906-6-05

AEP Ohio Transmission Company, Inc. (the "Company") provides the following information in accordance with the requirements of Ohio Administrative Code Section 4906-6-05.

#### 4906-6-5(B) General Information

#### **B(1) Project Description**

# The name of the project and applicant's reference number, names and reference number(s) of resulting circuits, a brief description of the project, and why the project meets the requirements for a Letter of Notification.

The Company proposes the Lima-Fort Wayne 138 kV Transmission Line Rebuild Project ("Project"), which consists of rebuilding approximately 15.9 miles of the double-circuit Lima-Fort Wayne 138 kV transmission line asset, between North Delphos and Rockhill stations, located in Allen and Putnam Counties, Ohio. This segment of the line carries portions of three circuits: North Delphos - Sterling 138 kV circuit, the East Lima - Haviland 138 kV circuit, and the Rockhill - West Lima 138 kV circuit (see map in Section B2 below).

The Project consists of rebuilding the existing 138kV double-circuit transmission line by replacing the existing lattice towers with new steel monopole structures predominantly within an existing right-of-way ("ROW"). Due to existing residential and commercial buildings within the existing ROW, the Project also consists of approximately 1.2-miles of line adjustments that will occur outside of the existing ROW.

Figure 1 and Figure 2, included in Appendix A, show the location of the Project in relation to the surrounding vicinity.

The Project meets the requirements for a Letter of Notification ("LON") because it is within the types of projects defined by item 1(b) and 2(b) of Ohio Administrative Code Section 4906-1-01 Appendix A of the Application Requirement Matrix For Electric Power Transmission Lines:

- (1) New construction, extension, or relocation of single or multiple circuit electric power transmission line(s), or upgrading existing transmission or distribution lines(s) for operation at a higher transmission voltage, as follows:
  - b. Line(s) greater than 0.2 mile in length but not greater than two miles in length
- (2) Adding new circuits on existing structures designed for multiple circuit use, replacing conductors on existing structures with larger or bundled conductors, adding structures to an existing transmission line, or replacing structures with a different type of structure, for a distance of:

#### b. More than 2 miles

The Project has been assigned PUCO Case No. 22-0154-EL-BLN

#### B(2) Statement of Need

## If the proposed project is an electric power transmission line or gas or natural gas transmission line, a statement explaining the need for the proposed facility.

The Lima – Fort Wayne 138 kV Transmission Line Rebuild Project consists of rebuilding approximately 15.9 miles of the double-circuit Lima-Fort Wayne 138 kV transmission line asset, between North Delphos and Rockhill stations, in Putnam and Allen counties, in Ohio. This segment of the line carries portions of three circuits: North Delphos - Sterling 138 kV circuit, the East Lima - Haviland 138 kV circuit, and the Rockhill - West Lima 138 kV circuit (see map below).



This project addresses both reliability (baseline) and asset renewal (supplemental) needs. The first 12.5 miles of the line south of North Delphos will be rebuilt as a baseline project to address the planning criteria violations identified. The remaining 3.4 miles of the line into Rockhill Station will be rebuilt as a supplemental project to address the asset renewal issues identified on the line.

Regarding the baseline needs, the East Lima – Haviland 138 kV circuit was identified as overloading in PJM's 2019 Winter RTEP analysis for multiple different scenarios including various different breaker

failure scenarios at the Company's East Lima, Marysville, and Maddox Creek stations. There were also several different circuit outage scenarios that resulted in an overload of the East Lima – Haviland 138 kV circuit in PJM's 2019 Winter RTEP studies. These scenarios involved outages of the following circuits: East Lima – Maddox Creek 345 kV, Maddox Creek – RP Mone 345 kV, RP Mone – Allen 345 kV, Marysville – Sorenson 765 kV, and Hanging Rock – Jefferson 765 kV.

The supplemental needs of the Project relate to the Lima – Fort Wayne 138 kV line that utilizes lattice structures and 397.5 ACSR conductor that were originally installed in 1925. Currently there are 99 open conditions identified on the line section proposed for rebuild on this project. In addition to the open condition issues noted, pre-1930's vintage lattice transmission towers are not designed for modern wind and ice loading requirements and lack adequate lightning protection. The nearly 100-year-old towers have well exceeded the 70-year typical lifespan for this type of structure. In addition, these lines pose significant risk of failure due to the loss of strength identified with similar constructed lines. These issues include loss of strength of up to 50% of the tower legs, insulation and hardware attachment deterioration, tower support with no redundancy for strength, and loss of conductor strength. Additional details regarding the need to replace pre-1930 transmission lattice towers can be found at <a href="https://www.pim.com/~/media/committees-groups/committees/srrtep-w/20191218/20191218-aep-system-pre-1930s-tower-lines.ashx">https://www.pim.com/~/media/committees-system-pre-1930s-tower-lines.ashx</a>.

Failure to implement the proposed Project in the specified period of time will likely result in PJM implementing operational controls which may include preemptive shedding of a significant amount of load served from the area transmission and distribution network in order to alleviate the thermal issues associated with the scenario identified above. Although load shedding is an approved PJM operational procedure to control thermal overloads, load shedding is not acceptable from the Company's perspective and directly impacts both large commercial and residential customers in the area. The proposed solution for this baseline identified need is necessary for the Company to continue to provide safe, reliable service to their customers.

This Project was originally presented to PJM on 02/14/2018 as a supplemental project and was assigned a PJM number of s1563.2. Subsequently on 01/15/2021, part of the supplemental project was converted to baseline with a PJM number of b3131. This Project was included in the Company's most recent Long-Term Forecast Report on page 8 (**Appendix B**).

#### **B(3) Project Location**

The applicant shall provide the location of the project in relation to existing or proposed lines and substations shown on an area system map of sufficient scale and size to show existing and proposed transmission facilities in the Project area.

The location of the Project in relation to existing and proposed transmission lines and substations is shown on **Figure** 1.

The Project directly impacts the following existing facilities

- Rockhill Substation
- North Delphos Substation
- Lima Fort Wayne 138kV Transmission Line

#### **B(4)** Alternatives Considered

The applicant shall describe the alternatives considered and reasons why the proposed location or route is best suited for the proposed facility. The discussion shall include, but not be limited to, impacts associated with socioeconomic, ecological, construction, or engineering aspects of the project.

Reconstructing and modernizing the existing double-circuit 138 kV transmission line, primarily utilizing the existing corridor, will have significantly less impacts than constructing a replacement transmission line on a greenfield corridor. Most of the existing corridor will be utilized, but some alignment deviations are needed to avoid existing residential and commercial buildings within the existing right-of-way. By designing a majority of the transmission line within the existing, maintained corridor, the proposed Project will not incur significant socioeconomic, ecological, or construction impacts.

#### B(5) Public Information Program

#### The applicant shall describe its public information program to inform affected property owners and tenants of the nature of the project and the proposed timeframe for project construction and restoration activities.

The Company informs affected property owners and tenants about its projects through several different mediums. Within seven days of filing this LON, the Company will issue a public notice in a newspaper of general circulation in the Project area. The notice will comply with all requirements under Ohio Revised Code ("OAC") Section 4906-6-08(A) (1-6). Further, the Company will mail letters, via first class mail, to affected landowners, tenants, contiguous owners, and any other landowner the Company approached for an easement necessary for the construction, operation, or maintenance of the facility. The letter complies with all the requirements of O.A.C. Section 4906-6-08(B). The Company also maintains a website (http://aeptransmission.com/ohio/) which provides the public access to an electronic copy of this LON and the public notice for this LON. An electronic copy of the LON will be served to the public library in each political subdivision affected by this proposed Project. The Company retains ROW land agents that discuss Project timelines, construction and restoration activities and convey information to affected owners and tenants throughout the Project.

#### **B(6)** Construction Schedule

### The applicant shall provide an anticipated construction schedule and proposed in-service date of the project.

Construction of the Project is anticipated to begin in July 2022, and the anticipated in-service date is December 2024.

#### B(7) Area Map

The applicant shall provide a map of at least 1:24,000 scale clearly depicting the facility with clearly marked streets, roads, and highways, and an aerial image.

**Figure 1** in **Appendix A** provides the proposed and existing Lima-Fort Wayne 138kV Transmission Line on a map of 1:24,000-scale (1-inch equals 2,000 feet), showing the Project on a topographic map of the

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Cairo, Elida, Kalida, and Ottoville 7.5-minute quadrangles provided by the National Geographic Society. **Figure 2** shows the Project area on aerial imagery (March 2017, ESRI World Imagery), at a scale of 1:4,800 (1-inch equals 400 feet).

To visit the Project site from Columbus, Ohio take I-70 West for approximately 0.8 miles. Then take exit 17B to merge U.S. 33 W. Stay on U.S. 33 for approximately 62.4 miles. Next, take the OH-117 exit from U.S. 33 W and continue for approximately 27.1 miles till reaching the exit for I-75 N. Continue on I-75 N for approximately 1.3 miles, then take exit 127 to OH-81. Next, turn left onto Stewart Road. After approximately 2.3 miles, turn left onto E Bluelick Road, followed by a right onto S.R. 65. After approximately 0.6 miles, continue straight onto OH-115 N. Continue on OH-115 for approximately 2.7 miles before turning left to merge onto U.S. 30 W. After approximately 7.9 miles turn right on to Defiance Trail/Twp Road 23. Continue for approximately 3.3 miles until reaching OH-190 S. Turn left onto OH-190 S. The destination will be on your right after approximately 0.19 miles. The approximate address for the North Delphos Station is 19390 OH-190, Delphos, Ohio 45833, at latitude 40.896208, longitude -84.309391.

#### **B(8)** Property Agreements

The applicant shall provide a list of properties for which the applicant has obtained easements, options, and/or land use agreements necessary to construct and operate the facility and a list of the additional properties for which such agreements have not been obtained.

Please refer to the table provided in **Appendix C** for the property parcel numbers and an indication as to whether the easement/option necessary to construct and operate the facility has been obtained.

#### **B(9)** Technical Features

The applicant shall describe the following information regarding the technical features of the project:

### B(9)(a) Operating characteristics estimated number and types of structures required, and right-of-way and/or land requirements.

The transmission line construction for the North Delphos-Rockhill Transmission Line Rebuild Project is anticipated to include the following:

Voltage:	138kV
Conductors:	1033.5 kcmil 54/7 ACSR "Curlew"
Static Wire:	7#8 Alumoweld
Insulators:	Polymer
ROW Width:	Varies between 80, 90, 100, and 130 Feet. The typical ROW Width is 130 Feet.
Structure Types:	Sixty (60) Double circuit steel pole tangent suspension structure.
•••	Sixteen (16) Double circuit steel pole angle suspension structure.
	Eleven (11) Double circuit steel pole deadend structure.
	One (1) Single circuit steel pole deadend structure.

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#### B(9)(b) Electric and Magnetic Fields

For electric power transmission lines that are within one hundred feet of an occupied residence or institution, the production of electric and magnetic fields during the operation of the proposed electric power transmission line.

#### B(9)(b)(i) Calculated Electric and Magnetic Field Strength Levels

#### i) Calculated Electric and Magnetic Field Levels

EMF level was evaluated at two locations. (1) North Delphos – Sterling line with East Lima - Haviland line (2) North Delphos – Sterling line with Rockhill - West Lima (via Eastown Road). For both cases EMF levels were computed at the ROW width at 130 feet and 80 feet.

Three loading conditions were examined: (1) Normal Maximum Loading, (2) Emergency Loading, and (3) Winter Normal Conductor Rating, consistent with the OPSB requirements. Normal Maximum Loading represents the peak flow expected with all system facilities in service; daily/hourly flows fluctuate below this level. Emergency loading is the maximum current flow during unusual (contingency) conditions, which exist only for short periods of time. Winter normal (WN) conductor rating represents the maximum current flow that a line, including its terminal equipment, can carry during winter conditions. It is not anticipated that this circuit of this line would operate at its WN rating in the foreseeable future.

1) EMF levels were computed one meter above ground under the line and at the ROW edges (65/65 feet, left/right, of centerline). Our results calculated using EPRI's EMF Workstation 2015 software are summarized below.

North Delphos – Sterling 138kV and East Lima -Haviland 138kV Circuits EMF Calculations – 130ft ROW							
	Condition	Circuit Load (A)	Ground Clearance (feet)	Electric Field (kV/m)*	Magnetic Field (mG)*		
(1)	Normal Maximum Loading^	139.92/118.25	34.3	0.11/0.72/0.11	2.4/10.94/1.63		
(2)	Emergency Line Loading^^	145.25/298.27	32.7	0.11/0.80/0.11	2.07/24.7/6.93		
(3)	Winter Normal Conductor Rating^^^	1566.56/1566.56	34.3	0.11/0.72/0.11	23.7/131.32/24.44		

\* Phasing Arrangements are A-B-C/C-B-A for the calculated EMF presented in this table.

\* EMF levels (left ROW edge/maximum/right ROW edge) computed one meter above ground at the point of minimum ground clearance, assuming balanced phase currents and 1.0 P.U. Voltages. ROW width is 65 feet (left) and 65 feet (right) of centerline, respectively.

• Peak line flow expected with all system facilities in service

^^ Maximum flow during a critical system contingency

^^^ Maximum continuous flow that the line, including its terminal equipment, can withstand during winter Conditions.

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Lima – Fort Wayne 138kV Transmission Line Rebuild Project 2) EMF levels were computed one meter above ground under the line and at the ROW edges (40/40 feet, left/right, of centerline). Our results, calculated using EPRI's EMF Workstation 2015 software are summarized below.

North Delphos – Sterling 138kV and Rockhill - West Lima 138kV Circuits EMF Calculations – 80 ft ROW							
Condition	Circuit Load (A)	Ground Clearance (feet)	Electric Field (kV/m)*	Magnetic Field (mG)*			
(1) Normal Maximum Loading^	139.92/118.25	34.3	0.325/0.72/0.325	5.21/10.94/4.03			
(2) Emergency Line Loading^^	145.25/298.27	32.7	0.337/0.80/0.337	5.7/24.7/13.96			
(3) Winter Normal Conductor Rating^^^	1566.56/1566.56	34.3	0.325/0.72/0.325	54.93/131.32/56.03			

\* Phasing Arrangements are A-B-C/C-B-A for the calculated EMF presented in this table.

\* EMF levels (left ROW edge/maximum/right ROW edge) computed one meter above ground at the point of minimum ground clearance, assuming balanced phase currents and 1.0 P.U. Voltages. ROW width is 40 feet (left) and 40 feet (right) of centerline, respectively.

^ Peak line flow expected with all system facilities in service

^^ Maximum flow during a critical system contingency

^^^ Maximum continuous flow that the line, including its terminal equipment, can withstand during winter Conditions.

For power-frequency EMF, IEEE Standard C95.6TM-2002 recommends the following limits:

	General Public	Controlled Environment
Electric Field Limit (kV/m) Magnetic Field Limit (mG)	5.0 9040	20.0 27,100

The above EMF levels are well within the limits specified in IEEE Standard C95.6TM-2002. Those limits have been established to "prevent harmful effects in human beings exposed to electromagnetic fields in the frequency range of 0-3 kHz."

#### B(9)(b)(ii) Design Alternatives

A discussion of the applicant's consideration of design alternatives with respect to electric and magnetic fields and their strength levels, including alternate conductor configuration and phasing, tower height, corridor location, and right-of-way width.

Design alternatives were not considered due to EMF strength levels. Transmission lines, when energized, generate EMF. Laboratory studies have failed to establish a strong correlation between exposure to EMF

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and effects on human health. However, some people are concerned that EMF have impacts on human health. Due to these concerns, EMF associated with the new circuits was calculated and set forth in the table above. The EMF was computed assuming the highest possible EMF values that could exist along the proposed transmission line rebuild. Normal daily EMF levels will operate below these maximum load conditions. Based on studies from the National Institutes of Health, the magnetic field (measured in milliGauss, or mG) associated with emergency loading at the highest EMF value for this transmission line is lower than those associated with normal household appliances like microwaves, electric shavers and hair dryers. For additional information regarding EMF, the National Institutes of Health has posted information on their website: http://www.niehs.nih.gov/health/topics/agents/emf/. Additionally, information on magnetic fields available AEP Ohio's electric and is on website: https://www.aepohio.com/info/projects/emf/OurPosition.aspx. The information found on AEP Ohio's website describes the basics of electromagnetic field theory, scientific research activities, and EMF exposures encountered in everyday life. Similar material will be made available for those affected by the construction activities for this Project.

#### B(9)(c) Project Cost

#### The estimated capital cost of the project.

The capital cost estimate for the proposed Project, which is comprised of applicable tangible and capital costs, is approximately \$56,000,000 from a Class 4 estimate.

#### B(10) Social and Economic Impacts

#### The applicant shall describe the social and ecological impacts of the project:

#### B(10)(a) Land Use Characteristics

## Provide a brief, general description of land use within the vicinity of the proposed project, including a list of municipalities, townships, and counties affected.

An aerial photograph of the Project vicinity is provided as **Figure 2**, in **Appendix A**. The Project location and vicinity have historically been primarily agricultural land, forested land, and mixed residential and commercial use. The Project is located within American, Bath, and Sugar Creek Townships in Allen County as well as Jennings and Sugar Creek Townships in Putnam County, Ohio. The Project vicinity is rural in nature and is comprised primarily of maintained agricultural land used for row crops, and less amounts of old fields, forested land, landscaped areas, scattered residences, and commercial areas. Minor tree clearing may be required, and in-water work is not planned for the Project.

One cemetery, four churches, one local municipality park, and Allen County's Sanitary Plant are located within 1,000 feet of the Lima-Fort Wayne 138kV Transmission Line. Of these areas within 1,000 feet, the cemetery, one of the four churches, and Allen County's Sanitary Plant are located along portions of the route proposed to be rebuilt. The remaining three churches and one local municipality park are located within 700 feet of the Project. Due to the nature of the Project, the Company does not anticipate a significant effect to these existing areas.

#### B(10)(b) Agricultural Land Information

# Provide the acreage and a general description of all agricultural land, and separately all agricultural district land, existing at least sixty days prior to submission of the application within the potential disturbance area of the project.

The Allen and Putnam County Auditors provided a list of parcels registered as Agricultural District Land in January 2022. The proposed North Delphos-Rockhill Transmission Line intersects ten (10) parcels in Allen County and 2 parcels in Putnam County that were identified as Agricultural District Land Parcels for a total of 12 parcels crossed. Approximately, 2.8-miles of the Project crosses Agricultural District Land. As the Project is a rebuild within existing ROW, impacts to agricultural land uses, including Agricultural District Land, are expected to be minimal and limited to the small footprint of the poles within the agricultural land.

Of the proposed line adjustment, 442 feet of Agricultural District Land are proposed to be crossed within new easements. Construction of the transmission line will likely cause a minor temporary disturbance to the agricultural land uses, including agricultural district lands, and following construction the land use would return to agricultural use within the ROW besides the small footprint of the poles.

#### B(10)(c) Archaeological and Cultural Resources

Provide a description of the applicant's investigation concerning the presence or absence of significant archaeological or cultural resources that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.

Phase I Archaeological Investigations and separate History/Architecture Investigations for the Project occurred in July 2017. One (1) Ohio Archaeological Inventory ("OAI") site was identified by the Company's consultant and it was recommended that the site is not eligible for listing in the National Register of Historic Places ("NRHP"). Additionally, one hundred and forty-six (146) properties were investigated during the historic architecture investigation and eight (8) structures were deemed necessary for advanced detail study. The Company's consultant recommended due to the location of the structures and nature of the Project, and type of historic structures identified, the Project would not likely affect historic properties. Consultation from the Ohio State Historic Preservation Office ("SHPO") was received in August 2017. The SHPO concurred with the results of the Company's Consultant and stated that the Project will have no effect on historic properties, and that no further investigations or consultation with SHPO is necessary.

Due to line adjustments from the original coordination, an additional Phase I Archaeological Investigations and separate History/Architecture Investigations for the Project occurred in December 2021. No new archaeological or historic properties were identified as eligible for listing in the NHRP. Consultation from SHPO was received in January 2022 and SHPO stated that the Project will have no effect on historic properties or archeological resources. Copies of the concurrence letters from the August 2017 and January 2022 SHPO response have been included within **Appendix D**.

#### B(10)(d) Local, State, and Federal Agency Correspondence

#### Provide a list of the local, state, and federal governmental agencies known to have requirements that must be met in connection with the construction of the project, and a list of documents that have been or are being filed with those agencies in connection with siting and constructing the project.

A Notice of Intent will be filed with the Ohio Environmental Protection Agency for authorization of construction storm water discharges under General Permit OHCD000005. AEP Ohio Transco will also coordinate storm water permitting needs with local government agencies, as necessary. AEP Ohio Transco will implement and maintain best management practices as outlined in the Project-specific Storm Water Pollution Prevention Plan to minimize erosion control sediment to protect surface water quality during storm events. Additionally, the Company intends to file a Pre-Construction Notification (PCN) under Nationwide Permit 57 with the United States Army Core of Engineers. Furthermore, the Company is also coordinating with Allen County Floodplain Development office for exemption for permitting activities within regulated floodways. Per coordination with Putnam County Floodplain Development office, no permit is required for the Project.

There are no other known local, state, or federal requirements that must be met prior to commencement of the proposed Project.

#### B(10)(e) Threatened, Endangered, and Rare Species

Provide a description of the applicant's investigation concerning the presence or absence of federal and state designated species (including endangered species, threatened species, rare species, species proposed for listing, species under review for listing, and species of special interest) that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.

On July 26, 2021, coordination letters were sent to United States Fish and Wildlife Service (USFWS) and the Ohio Department of Natural Resources (ODNR) Ohio Natural Heritage Program (OHNP) and Division of Wildlife (DOW), seeking an environmental review for the Project for potential impacts to threatened and endangered species.

Responses were received from the USFWS on August 3, 2021 and from the ODNR on September 1, 2021. According to a response letter received by the USFWS on August 3, 2021, the Project area is within the range of the state and federally listed Indiana bat (*Myotis sodalis*) and Northern long-eared bat (*Myotis septentrionalis*). With regard to state threatened and endangered species that may occur within the Project vicinity, nine species were listed by the ODNR DOW. These species include: Indiana bat, little brown bat (*Myotis lucifugus*), tricolored bat (*Perimyotis subflavus*), clubshell (*Pleurobema clava*), northern riffleshell (*Epioblasma torulosa rangiana*), pondhorn (*Uniomerus tetralasmus*), pirate perch (*Aphredoderus sayanus*), greater redhorse (*Moxostoma valenciennesi*), and upland sandpiper (*Bartramia longicauda*).

Based on general observations during the ecological survey, portions of the Project survey corridor contained potential summer habitat for the listed bat species. The Company intends to adhere to the ODNR and USFWS recommendation of seasonal tree cutting (between October 1<sup>st</sup> and March 31<sup>st</sup>), to avoid impacts to these bat species' summer habitat. A desktop assessment for features potentially suitable as bat hibernacula was conducted and Portal searches within the Project's Area of Investigation occurred and no features potentially suitable for hibernating bats have been documented. Furthermore, the potential presence of the mussel species (clubshell, northern riffleshell, and pondhorn) as well as the listed fish species (pirate perch and greater redhorse) are unlikely to be significantly affected by the Project due to avoidance of in-stream work proposed for the Project. Lastly, the Company's consultant completed a habitat assessment for the upland sandpiper and submitted the results of the survey to the ODNR indicating the absence of habitat for the listed species on January 14, 2022. The ODNR responded on January 14, 2022 and concurred with the assessment completed. Copies of the coordination for the Project is included within **Appendix D**.

#### B(10)(f) Areas of Ecological Concern

Provide a description of the applicant's investigation concerning the presence or absence of areas of ecological concern (including national and state forests and parks, floodplains, wetlands, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, and wildlife sanctuaries) that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.

The Company's consultant prepared a Wetland Delineation and Stream Assessment Report, which is provided in **Appendix E**. The survey of the Project area identified a total of 62 wetlands totaling 10.71acres, 27 stream segments, and 2 ponds within the area of investigation (AOI). Of these wetlands identified, 43 were classified as palustrine emergent (PEM), 8 were classified as palustrine shrub-scrub (PSS), and 12 were classified as palustrine forested (PFO). Of the streams identified, 6 were ephemeral, 5 were intermittent, and 16 were perennial. No impacts to streams are anticipated, however temporary disturbances are anticipated to occur for equipment access across the delineated wetlands.

Based on the results of the wetland delineation and stream assessment, the Project activities are likely applicable to the non-reporting conditions of the Nationwide Permit 57. If disturbances to wetlands and/or streams require authorization from the USACE via PCN authorization, the Company intends to obtain the certification prior to commencement of construction activities.

#### B(10)(g) Unusual Conditions

## Provide any known additional information that will describe any unusual conditions resulting in significant environmental, social, health, or safety impacts.

To the best of the Company's knowledge, no unusual conditions exist that would result in significant environmental, social, health, or safety impacts.

### **Appendix A Project Figures**






















































- Parcel Boundary
- Municipality Boundary
- Township Boundary
- County Boundary











## Appendix B PJM

PUCO FORM FE-T9 AEP OHIO TRANSMISSION COMPANY SPECIFICATIONS OF PLANNED TRANSMISSION LINES

1.	LINE NAME AND NUMBER:	North Delphos - Rockhill (s1563)
2.	POINTS OF ORIGIN AND TERMINATION	North Delphos, Rockhill
3.	RIGHTS-OF-WAY: LENGTH / WIDTH / CIRCUITS	15.4 miles (rebuild) / double circuit
4.	VOLTAGE: DESIGN / OPERATE	138kV / 138 kV
5.	APPLICATION FOR CERTIFICATE:	8/10/2021
6.	CONSTRUCTION:	2021-2024
7.	CAPITAL INVESTMENT:	\$24.5M
8.	PLANNED SUBSTATION:	N/A
9.	SUPPORTING STRUCTURES:	Steel
10.	PARTICIPATION WITH OTHER UTILITIES	N/A
11.	PURPOSE OF THE PLANNED TRANSMISSION LINE	Rebuild of existing line to address asset renewal concerns.
12.	CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR TERMINATION	Unable to address concerns on line. Line continues to deteriorate and result in continued poor performance
13.	MISCELLANEOUS:	NIA

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## AEP Transmission Zone: Supplemental East Lima – Haviland 138kV

### Previously presented on 2/14/2018 SRRTEP

### **Problem Statement:**

### Equipment Material/Condition/Performance/Risk:

The East Lima - Haviland 138kV line was originally constructed in 1925 with lattice towers and 397 ACSR conductor (167 MVA rating). The double circuit sectios of the line being rebuilt is approximately 30 miles long on the path from Haviland - North Delphos - Rockhill. There are 99 total open conditions along the line. There are numerous issues with the conductor and conductor hardware on this line. Armor grip suspension assemblies were installed during routine maintenance periods in an attempt to restore the strength of the conductor. However, crews have found many cases of broken conductor strands under these armor grip assemblies. In addition, the conductors' steel core has been found to be deteriorated in sections due to corrosion, which is a cause for concern as the mechanical strength of the wire can be compromised. Many insulators have lost their outer glaze, allowing contaminant buildup, compromised electrical integrity and growing risk of electrical failure. As this line was originally built in 1925, its design standards do not meet modern standards for strength, resilience, galloping and horizontal and vertical clearances for safety. Also, the easement conditions present sections with undefined width and have several encroachments.

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## AEP Transmission Zone: Supplemental East Lima – Haviland 138kV

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### Selected Solution:

Haviland – North Delphos 138kV: Rebuild 15.6 miles of double circuit 138kV line utilizing 1033 ACSR conductor (296 MVA rating) (S1563.1)

Estimated Cost: \$24.3M

North Delphos – Rockhill 138kV: Rebuild 15.4 miles of double circuit 138kV line utilizing 1033 ACSR 1033 ACSR conductor (296 MVA rating) (S1563.2) Estimated Cost: \$24.5M

## Total Estimated Cost: \$48.8M

Projected In-service: 12/18/2020

Project Status: Engineering





# AEP Transmission Zone: Baseline Project

## Previously Presented: 8/31/2018 SRRTEP

Generator Deliverability and Common Mode Outage (Winter) Below 200 kV

## Problem Statement:

 The Logtown – North Delphos 138 kV line is overloaded for multiple contingencies in the winter case. (FG# GD-W290, GD-W291, GD-W39 and GD-W40)

## **Recommended Solution:**

- Convert S1563.2 into baseline (B3036)
- S1563.2: North Delphos Rockhill 138 kV: Rebuild 15.4 miles of double circuit 138 kV line utilizing 1033 ACSR 1033 ACSR conductor (296 MVA rating)

## Estimated Project Cost : \$24.5 M

Required IS Date: 12/1/2023

Projected IS date: 12/18/2020

Status: Engineering



## **Appendix C Property Agreements**

#### LETTER OF NOTIFICATION FOR LIMA-FORT WAYNE 138KV TRANSMISSION LINE REBUILD PROJECT

Parcel ID	Agreement Type	Easement Obtained
26-1900-01-001.000	Supplement Existing Easement	Yes
26-2000-01-002.000	Supplement Existing Easement	Yes
26-2000-02-001.000	Supplement Existing Easement	Yes
26-2000-04-001.000	Supplement Existing Easement	Yes
26-2100-03-001.000	Supplement Existing Easement	Yes
26-2100-03-003.001	Supplement Existing Easement	Yes
26-2800-01-002.000	New Easement	Yes
26-2800-01-004.000	New Easement	Yes
26-2800-01-005.000	New Easement	Yes
26-2800-01-011.002	New Easement	Yes
26-2800-01-011.003	New Easement	Yes
26-2800-02-002.000	Supplement Existing Easement	Yes
26-2800-03-001.000	Supplement Existing Easement	Yes
26-2800-04-002.000	Supplement Existing Easement	Yes
26-2806-01-001.000	Supplement Existing Easement	Yes
26-3300-01-001.000	Supplement Existing Easement	Yes
26-3300-01-002.000	Supplement Existing Easement	Yes
26-3300-01-004.000	Supplement Existing Easement	Yes
26-3400-02-003.000	Supplement Existing Easement	Yes
26-3400-02-003.002	Supplement Existing Easement	Yes
26-3400-03-001.000	Supplement Existing Easement	Yes
26-3400-03-005.000	Supplement Existing Easement	Yes
36-0200-03-001.000	Supplement Existing Easement	Yes
36-0200-03-002.000	Supplement Existing Easement	Yes
36-0300-01-001.000	Supplement Existing Easement	Yes
36-1100-01-007.001	Supplement Existing Easement	Yes
36-1100-01-007.003	Supplement Existing Easement	Yes
36-1100-01-007.007	Supplement Existing Easement	Yes
36-1100-02-002.000	New Easement	Yes
36-1100-04-001.001	Supplement Existing Easement	Yes
36-1100-04-002.000	Supplement Existing Easement	Yes
36-1100-04-005.000	Supplement Existing Easement	Yes
36-1100-04-006.000	Supplement Existing Easement	Yes
36-1200-03-002.000	Supplement Existing Easement	Yes
36-1200-03-003.000	Supplement Existing Easement	Yes
36-1200-03-008.000	Supplement Existing Easement	Yes
36-1200-03-008.001	Supplement Existing Easement	Yes
36-1302-03-005.000	Supplement Existing Easement	Yes

AEP Ohio Transmission Company, Inc.

#### LETTER OF NOTIFICATION FOR LIMA-FORT WAYNE 138KV TRANSMISSION LINE REBUILD PROJECT

Parcel ID	Agreement Type	Easement Obtained
36-1302-03-010.000	Company Owned	N/A
36-1302-05-001.000	Supplement Existing Easement	Yes
36-1304-01-002.000	Supplement Existing Easement	Yes
36-1304-07-016.000	Supplement Existing Easement	Yes
36-1304-07-017.000	Supplement Existing Easement	Yes
36-1304-08-013.000	Supplement Existing Easement	Yes
36-2405-01-002.000	Supplement Existing Easement	Yes
36-2405-01-003.000	Supplement Existing Easement	Yes
36-2405-02-001.000	Supplement Existing Easement	Yes
36-2405-02-004.000	Supplement Existing Easement	Yes
36-2405-02-007.000	Supplement Existing Easement	Yes
37-1900-02-004.000	Company Owned	N/A
37-1900-03-001.000	Rebuild on Existing Rights	Yes
37-1900-03-001.001	Supplement Existing Easement	Yes
37-1900-03-004.000	Supplement Existing Easement	Yes
37-1900-04-001.000	Supplement Existing Easement	Yes
37-1900-04-003.000	Supplement Existing Easement	Yes
37-1912-05-002.000	New Easement	Yes
37-1912-09-001.000	Supplement Existing Easement	Yes
37-1912-09-002.000	Supplement Existing Easement	Yes
37-1912-09-005.000	Company Owned	N/A
37-1912-09-008.000	Supplement Existing Easement	Yes
37-1912-10-001.000	Supplement Existing Easement	Yes
37-1912-14-001.000	Company Owned	N/A
37-2000-03-003.000	Company Owned	Yes
140050500200	Supplement Existing Easement	Yes
140050700000	Supplement Existing Easement	Yes
140050710000	Supplement Existing Easement	Yes
140050920000	Supplement Existing Easement	Yes
140050930000	Supplement Existing Easement	Yes
140050940000	Supplement Existing Easement	Yes
140051700000	Supplement Existing Easement	Yes
140051900000	Supplement Existing Easement	Yes
140052000000	Supplement Existing Easement	Yes
140060410000	New Easement	Yes
140061040000	New Easement	Yes
140061500000	Company Owned	N/A
140061600000	Supplement Existing Easement	Yes

AEP Ohio Transmission Company, Inc.

#### LETTER OF NOTIFICATION FOR LIMA-FORT WAYNE 138KV TRANSMISSION LINE REBUILD PROJECT

Parcel ID	Agreement Type	<b>Easement Obtained</b>
140070800000	Supplement Existing Easement	Yes
140070901500	Supplement Existing Easement	Yes
140071200000	Supplement Existing Easement	Yes
140110400000	Rebuild on Existing Rights	Yes
140121200000	Supplement Existing Easement	Yes
140121200100	Supplement Existing Easement	No
140121500000	Supplement Existing Easement	Yes
140121600000	Supplement Existing Easement	Yes
140121700000	Supplement Existing Easement	Yes
140131700000	Supplement Existing Easement	Yes
140131800000	Supplement Existing Easement	Yes
160360600400	Supplement Existing Easement	Yes
160360600500	Supplement Existing Easement	Yes
160361300000	Supplement Existing Easement	Yes
160370900000	Supplement Existing Easement	Yes
160371100000	Supplement Existing Easement	Yes
160371200000	Supplement Existing Easement	Yes
160371200200	Supplement Existing Easement	Yes
160371300100	Supplement Existing Easement	Yes
160371300200	Supplement Existing Easement	Yes
160371300300	Supplement Existing Easement	Yes
160371310000	Supplement Existing Easement	Yes
160371500000	Supplement Existing Easement	Yes
500221500000	Supplement Existing Easement	Yes
500222000000	Rebuild on Existing Rights	Yes
500230100000	Rebuild on Existing Rights	Yes
500230200100	Supplement Existing Easement	Yes

## **Appendix D Agency Coordination**



In reply refer to 2017-PUT-39505

August 23, 2017

Mr. Ryan J. Weller Weller & Associates, Inc. 1395 West Fifth Avenue Columbus, Ohio 43212

#### RE: North Delphos-Rockhill 139kV Rebuild Project in Jennings and Sugar Creek Townships, Putnam County, and Sugar Creek, American, and Bath Townships, Allen County, Ohio

Dear Mr. Weller:

This letter is in response to the correspondence received on July 26, 2017 regarding the proposed North Delphos-Rockhill 138kV Line Rebuild Project in Putnam and Allen Counties, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C.470 [36 CFR 800]).

The following comments pertain to the *Phase I Archaeological Investigations for the Approximately* 32.1 km (20 mi) North Delphos-Rockhill 138 kV Line Rebuild Project in Putnam and Allen Counties, Ohio by Weller & Associates, Inc. (2017).

A literature review, visual inspection, surface collection, shovel probe excavation, and shovel test unit excavation was completed as part of the investigations. One (1) Ohio Archaeological Inventory (OAI) site was identified during this investigation. OAI#33AL0232 is a prehistoric isolated find consisting of utilized flake of Upper Mercer chert found during shovel test unit excavation. Based on the information provided, we agree the archaeological site is not eligible for listing in the National Register of Historic Places (NRHP) and no further archaeological work is necessary.

The following comments pertain to the History/Architecture Survey for the 32.1 km (20 mi) North Delphos-Rockhill 138 kV Rebuild Project in Jennings and Sugar Creek Townships, Putnam County, and Sugar Creek, American, and Bath Townships in Allen County, Ohio by Weller & Associates, Inc. (2017).

The investigations included a background literature review and systematic survey of all properties 50 years of age or older that are situated within 1,000' of the centerline of the proposed project. In total, one hundred and forty-six (146) individual properties of fifty years of age or older were identified within the survey APE that may have a direct line-of-sight to the project. Out of the one hundred and five properties that were identified, eight were advanced to detailed study. Two DOE properties, ALL0045602 and ALL0049002, two previously recorded resources, ALL0045102 and ALL0054002, and six properties identified in the field, ALL0069702, ALL0069802, ALL0069902, ALL0070510, ALL0070602, and ALL0070702.

Weller recommends ALL0045102 and ALL0069702 as eligible for inclusion in the National Register of Historic Places (NRHP) under Criterion C, and ALL0069802 as eligible for inclusion in the NRHP under Criterion A. Our office agrees that these properties are NRHP-eligible.

Weller has provided documentation to support their contention that the proposed transmission line upgrade will not diminish the historic characteristics that may contribute to the above-referenced

RPR Serial No: 1069755, 1069756

Mr. Ryan Weller Page 2 August 23, 2017

properties' NRHP eligibility. Therefore, we agree that the project as proposed will have no indirect adverse effect on historic properties.

Based on the information provided, we agree the project will not affect historic properties. No further coordination with this office is necessary, unless the project changes or unless new or additional historic properties are discovered during implementation of this project. In such a situation, this office should be contacted.

If you have any questions, please contact me at (614) 298-2022, or by e-mail at <u>khorrocks@ohiohistory.org</u>. Thank you for your cooperation.

Sincerely,

Krista Horrocks, Project Reviews Manager Resource Protection and Review

cc: Ron Howard, AEP (rmhoward@aep.com)

RPR Serial No: 1069755, 1069756

#### **OHIO HISTORY CONNECTION**

800 E. 17th Ave., Columbus, OH 43211-2474 • 614.297.2300 • ohiohistory.org



In reply, refer to 2021-ALL-53500

January 3, 2022

Mr. Ryan J. Weller Weller & Associates, Inc. 1395 West Fifth Avenue Columbus, Ohio 43212

## RE: Lima-Fort Wayne 138kV Transmission Line Baseline Project and Supplemental Project in Jennings/Sugar Creek Townships, Putnam County and Sugar Creek/American/Bath Townships, Allen County, Ohio

Dear Mr. Weller:

This letter is in response to the correspondence received on December 29, 2021 regarding the proposed Lima-Fort Wayne 138kV Transmission Line Baseline Project and Supplemental Project in Jennings/Sugar Creek Townships, Putnam County and Sugar Creek/American/Bath Townships, Allen County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code and the Ohio Power Siting Board rules for siting this project (OAC 4906-5). The comments of the Ohio SHPO are also submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

A majority of the project's alignment is located within the previously surveyed North Delphos-Rockhill 138kV Line Rebuild Project (Weller & Associates, Inc. 2017). The following comments pertain to the *Phase I Archaeological Investigations for the Lima-Fort Wayne 138kV Transmission Line Baseline Project and Supplemental Project in Jennings/Sugar Creek Townships, Putnam County and Sugar Creek/American/Bath Townships, Allen County, Ohio* by Ryan J. Weller (Weller & Associates, Inc. 2021).

A literature review, visual inspection, surface collection, shovel probe, and shovel test unit excavation was completed as part of the investigations. No previously identified archaeological sites are located within the revised project area and no new archaeological sites were identified during survey. Our office agrees no additional archeological investigation is needed. No additional history/architecture resources were identified that were not already addressed from previous surveys along this alignment. Ohio Historic Inventory (OHI)# ALL0070702 is located within the project area but was previously determined to be not eligible for listing in the National Register of Historic Places (NRHP).

Based on the information provided, we agree that the project as proposed will have no effect on historic properties. No further coordination with this office is necessary, unless the project changes or unless new or additional historic properties are discovered during implementation of this project. In such a situation, this office should be contacted. If you have any questions, please contact me at (614) 298-2022, or by e-mail at <u>khorrocks@ohiohistory.org</u>. Thank you for your cooperation.

Sincerely,

Krista Horrocks, Project Reviews Manager Resource Protection and Review

RPR Serial No: 1091442

### Miller, Brian

From: Sent: To:	Mia R Hall <mrhall@aep.com> Friday, January 14, 2022 1:42 PM Miller, Brian</mrhall@aep.com>
CC: Subject:	Kevin M Stotts
Subject.	Rebuild Project
Follow Up Flag:	Follow up
Flag Status:	Flagged
Categories:	Blue category

Brian,

ODNR was very speedy. Here is additional T&E info.



MIA R HALL | ENVIRONMENTAL SPECIALIST SR MRHALL@AEP.COM | D:380.205.5239 | C:614.561.3590 8600 SMITHS MILL ROAD, NEW ALBANY, OH 43054

From: Nathan.Reardon@dnr.ohio.gov <Nathan.Reardon@dnr.ohio.gov>

Sent: Friday, January 14, 2022 1:40 PM

To: Valerie Clarkston <VClarkston@envsi.com>

Cc: Mia R Hall <mrhall@aep.com>; Michael Wellman <mwellman@envsi.com>

Subject: [EXTERNAL] RE: 21-0715; AEP's North Delphos-Rockhill 138kV Transmission Line Rebuild Project

This is an **EXTERNAL** email. **STOP**. **THINK** before you CLICK links or OPEN attachments. If suspicious please click the '**Report to Incidents**' button in Outlook or forward to <u>incidents@aep.com</u> from a mobile device.

Hello Valerie,

Thank you for providing the upland sandpiper assessment. The DOW concurs that suitable habitat is not present within project area, and therefore, impacts to the upland sandpiper are not likely.

Thank you, Nathan



Nathan Reardon Compliance Coordinator ODNR Division of Wildlife 2045 Morse Road Columbus, OH 43229 Phone: 614-265-6741 Email: nathan.reardon@dnr.ohio.gov

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Please consider the environment before printing this email.

From: Valerie Clarkston <<u>VClarkston@envsi.com</u>>
Sent: Friday, January 14, 2022 8:52 AM
To: Reardon, Nathan <<u>Nathan.Reardon@dnr.ohio.gov</u>>
Cc: mrhall@aep.com; Michael Wellman <<u>mwellman@envsi.com</u>>
Subject: 21-0715; AEP's North Delphos-Rockhill 138kV Transmission Line Rebuild Project

Good morning Mr. Reardon,

American Electric Power's (AEP's) North Delphos-Rockhill 138kV Transmission Line Rebuild Project (Project) is within the range of the upland sandpiper (*Bartramia longicauda*), a state endangered bird. The ODNR-Division of Wildlife (DOW) indicated construction should be avoided in upland sandpiper habitat during the species' nesting period of 15 April to 31 July (ER letter attached). Upland sandpipers prefer to nest within larger, 123.5 to 494.2-acre (50 – 200 ha), open tracts of native grasslands, prairies, meadows to lightly grazed pastures and hayfields (Vickery et al. 1994, Mong 2005). Studies conducted in the Midwest and northeast also noted upland sandpipers avoid uniform, tall grasses and prefer to nest in areas with a variety of vegetation heights (Ailes 1980, Buhnerkempe and Westemeier 1988, Vickery et al. 1994). In Ohio, airport habitats support the majority (74%) of nesting upland sandpipers (Osborne and Peterson 1984). Biologists did not observe potentially suitable habitat for the upland sandpiper within the Project's AOI. Instead, most of the open-tract habitats observed included row crops and heavily grazed livestock pastures (see link below to access Project maps). Roadside tracts of grassland do exist but are likely too small and fragmented to support a breeding population of upland sandpipers. Based on current proposed Project activity, recommendations within ODNR's environmental review letter, and the above review of the Project area, no conflicts with upland sandpipers are anticipated.

Mapping - North Delphos-Rockhill 138kV Transmission Line Rebuild Project

On behalf of AEP, ESI is requesting concurrence from ODNR on the above assessment of upland sandpipers with regards to the North Delphos-Rockhill 138kV Transmission Line Rebuild Project. Please reach out to us with any questions or requests for additional information.

Thank you,

Valerie



#### Literature Cited Above:

Ailes, I. W. 1980. Breeding biology and habitat use of the upland sandpiper in central Wisconsin. Passenger Pigeon 42:53-63.

Buhnerkempe, J. E., and R. L. Westemeier. 1988. Breeding biology and habitat of upland sandpipers on prairie-chicken sanctuaries in Illinois. Transactions of the Illinois Academy of Science 81:153-162.

Mong, T. W. 2005. Using radio-telemetry to determine range and resource requirements of upland sandpipers at an experimentally managed prairie landscape. Master's Thesis. Kansas State University, Manhattan, Kansas. 74 pp.

Osborne, D. R., and A. T. Peterson. 1984. Decline of the upland sandpiper (Bartramia, Longicauda) in Ohio: An endangered species. Ohio Journal of Science 84:8-10.

Vickery, P. D., M. L. Hunter, and S. M. Melvin. 1994. Effects of habitat area on the distribution of grassland birds in Maine. Conservation Biology 8:1087-1097.

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### Miller, Brian

To:Mia R HallCc:Kevin M StottsSubject:RE: 21-0715; AEP's North Delphos-Rockhill 138kV Transmission Line Rebuild Project

From: Nathan.Reardon@dnr.ohio.gov <Nathan.Reardon@dnr.ohio.gov>

Sent: Friday, January 14, 2022 1:40 PM

To: Valerie Clarkston <<u>VClarkston@envsi.com</u>>

Cc: Mia R Hall <<u>mrhall@aep.com</u>>; Michael Wellman <<u>mwellman@envsi.com</u>>

Subject: [EXTERNAL] RE: 21-0715; AEP's North Delphos-Rockhill 138kV Transmission Line Rebuild Project

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Hello Valerie,

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Thank you, Nathan



Nathan Reardon Compliance Coordinator ODNR Division of Wildlife 2045 Morse Road Columbus, OH 43229 Phone: 614-265-6741 Email: nathan.reardon@dnr.ohio.gov

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Please consider the environment before printing this email.

From: Valerie Clarkston <<u>VClarkston@envsi.com</u>> Sent: Friday, January 14, 2022 8:52 AM To: Reardon, Nathan <<u>Nathan.Reardon@dnr.ohio.gov</u>>

### Cc: <u>mrhall@aep.com</u>; Michael Wellman <<u>mwellman@envsi.com</u>> Subject: 21-0715; AEP's North Delphos-Rockhill 138kV Transmission Line Rebuild Project

Good morning Mr. Reardon,

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### Mapping - North Delphos-Rockhill 138kV Transmission Line Rebuild Project

On behalf of AEP, ESI is requesting concurrence from ODNR on the above assessment of upland sandpipers with regards to the North Delphos-Rockhill 138kV Transmission Line Rebuild Project. Please reach out to us with any questions or requests for additional information.

Thank you,

Valerie



### Literature Cited Above:

Ailes, I. W. 1980. Breeding biology and habitat use of the upland sandpiper in central Wisconsin. Passenger Pigeon 42:53-63.

Buhnerkempe, J. E., and R. L. Westemeier. 1988. Breeding biology and habitat of upland sandpipers on prairie-chicken sanctuaries in Illinois. Transactions of the Illinois Academy of Science 81:153-162.

Mong, T. W. 2005. Using radio-telemetry to determine range and resource requirements of upland sandpipers at an experimentally managed prairie landscape. Master's Thesis. Kansas State University, Manhattan, Kansas. 74 pp.

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Vickery, P. D., M. L. Hunter, and S. M. Melvin. 1994. Effects of habitat area on the distribution of grassland birds in Maine. Conservation Biology 8:1087-1097.

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### Miller, Brian

From:	Ohio, FW3 <ohio@fws.gov></ohio@fws.gov>
Sent:	Tuesday, August 03, 2021 10:19 AM
То:	Lubbers, Jake
Cc:	nathan.reardon@dnr.state.oh.us; Parsons, Kate; Wilburn, Beth; rachanderson@easi.com; mrhall@aep.com; Lipp, Thomas
Subject:	[EXTERNAL] AEP North Delphos-Rockhill 138 kV Transmission Line Rebuild Project, Allen and Putnam Counties, Ohio



UNITED STATES DEPARTMENT OF THE INTERIOR U.S. Fish and Wildlife Service Ecological Services Office 4625 Morse Road, Suite 104 Columbus, Ohio 43230 (614) 416-8993 / Fax (614) 416-8994



TAILS# 03E15000-2021-TA-1839

Dear Mr. Lubbers,

The U.S Fish and Wildlife Service (Service) has received your recent correspondence requesting information about the subject proposal. We offer the following comments and recommendations to assist you in minimizing and avoiding adverse impacts to threatened and endangered species pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq), as amended (ESA).

<u>Federally Threatened and Endangered Species</u>: The endangered Indiana bat (*Myotis sodalis*) and threatened northern long-eared bat (*Myotis septentrionalis*) occur throughout the State of Ohio. The Indiana bat and northern long-eared bat may be found wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and breed that may also include adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, woodlots, fallow fields, and pastures. Roost trees for both species include live and standing dead trees  $\geq 3$  inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities. These roost trees may be located in forested habitats as well as linear features such as fencerows, riparian forests, and other wooded corridors. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves, rock crevices and abandoned mines.

Seasonal Tree Clearing for Federally Listed Bat Species: Should the proposed project site contain trees  $\geq 3$  inches dbh, we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees  $\geq 3$  inches dbh cannot be avoided, we recommend removal of any trees  $\geq 3$  inches dbh only occur between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to Indiana bats and northern long-eared bats. While incidental take of northern long-eared bats from most tree clearing is exempted by a 4(d) rule (see http://www.fws.gov/midwest/endangered/mammals/nleb/index.html), incidental take of Indiana bats is still

prohibited without a project-specific exemption. Thus, seasonal clearing is recommended where Indiana bats are assumed present.

If implementation of this seasonal tree cutting recommendation is not possible, a summer presence/absence survey may be conducted for Indiana bats. If Indiana bats are not detected during the survey, then tree clearing may occur at any time of the year. Surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Ohio Field Office. Surveyors must have a valid federal permit. Please note that in Ohio summer mist net surveys may only be conducted between June 1 and August 15.

<u>Section 7 Coordination</u>: If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), then no tree clearing should occur on any portion of the project area until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. We recommend the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence. This letter provides technical assistance only and does not serve as a completed section 7 consultation document.

<u>Stream and Wetland Avoidance</u>: Over 90% of the wetlands in Ohio have been drained, filled, or modified by human activities, thus is it important to conserve the functions and values of the remaining wetlands in Ohio (<u>https://epa.ohio.gov/portals/47/facts/ohio\_wetlands.pdf</u>). We recommend avoiding and minimizing project impacts to all wetland habitats (e.g., forests, streams, vernal pools) to the maximum extent possible in order to benefit water quality and fish and wildlife habitat. Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the U.S. Army Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required. Best management practices should be used to minimize erosion, especially on slopes. Disturbed areas should be mulched and revegetated with native plant species. In addition, prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat. Should the project design change, or additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, coordination with the Service should be initiated to assess any potential impacts.

Thank you for your efforts to conserve listed species and sensitive habitats in Ohio. We recommend coordinating with the Ohio Department of Natural Resources due to the potential for the proposed project to affect state listed species and/or state lands. Contact Mike Pettegrew, Acting Environmental Services Administrator, at (614) 265-6387 or at <u>mike.pettegrew@dnr.state.oh.us</u>.

If you have questions, or if we can be of further assistance in this matter, please contact our office at (614) 416-8993 or <u>ohio@fws.gov</u>.

Sincerely,

Salfel

Patrice Ashfield

Field Office Supervisor

cc: Nathan Reardon, ODNR-DOW Kate Parsons, ODNR-DOW



MIKE DEWINE, GOVERNOR

MARY MERTZ, DIRECTOR

Office of Real Estate John Kessler, Chief 2045 Morse Road – Bldg. E-2 Columbus, OH 43229 Phone: (614) 265-6621 Fax: (614) 267-4764

September 1, 2021

Jake Lubbers AECOM 525 Vine Street, Suite 1800 Cincinnati, Ohio 45202

Re: 21-0715; AEP North Delphos-Rockhill 138 kV Transmission Line Rebuild Project

**Project:** The proposed project involves rebuilding approximately 15 miles of transmission line between North Delphos Substation and Rock Hill Substation.

Location: The proposed project is located in Allen and Putnam Counties, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

**Natural Heritage Database:** The Natural Heritage Database has the following data at or within a one mile radius of the project area:

Purple wartyback (*Cyclonaias tuberculata*), SC Wavy-rayed lampmussel (*Lampsilis fasciola*), SC Creek heelsplitter (*Lasmigona compressa*), SC Clubshell (*Pleurobema clava*), E, FE Purple lilliput (*Toxolasma lividus*), E Deertoe (*Truncilla truncata*), SC Greater redhorse (*Moxostoma valenciennesi*), T

The review was performed on the project area specified in the request as well as an additional one mile radius. Records searched date from 1980. This information is provided to inform you of features present within your project area and vicinity. Additional comments on some of the features may be found in pertinent sections below.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. Although all types of plant communities have been surveyed, we only maintain records on the highest quality areas.

Statuses are defined as: E = state endangered; T = state threatened; P = state potentially threatened; SC = state species of concern; SI = state special interest; U = state status under review; X = presumed extirpated in Ohio; FE = federal endangered, and FT = federal threatened.

Fish and Wildlife: The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that Best Management Practices be utilized to minimize erosion and sedimentation.

The entire state of Ohio is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (Myotis septentrionalis), a state endangered and federally threatened species, the little brown bat (Myotis lucifugus), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer (April 1 through September 30), these species of bats predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. However, these species are also dependent on the forest structure surrounding roost trees. If trees are present within the project area, and trees must be cut, the DOW recommends cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with  $DBH \ge 20$  if possible. If trees are present within the project area, and trees must be cut during the summer months, the DOW recommends a mist net survey or acoustic survey be conducted from June 1 through August 15, prior to any cutting. Mist net and acoustic surveys should be conducted in accordance with the most recent version of the "OHIO DIVISION OF WILDLIFE GUIDANCE FOR BAT SURVEYS AND TREE *CLEARING*". If state listed bats are documented, DOW recommends cutting only occur from October 1 through March 31. However, limited summer tree cutting may be acceptable after consultation with the DOW (contact Erin Hazelton at Erin.hazelton@dnr.ohio.gov).

The DOW also recommends that a desktop habitat assessment is conducted, followed by a field assessment if needed, to determine if a potential hibernaculum is present within the project area. Direction on how to conduct habitat assessments can be found in the current USFWS "*Range-wide Indiana Bat Survey Guidelines*." If a habitat assessment finds that a potential hibernaculum is present within 0.25 miles of the project area, please send this information to Erin Hazelton for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance, however, limited summer or winter tree cutting may be acceptable after consultation with the DOW. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

The project is within the range of the clubshell (*Pleurobema clava*), a state endangered and federally endangered mussel, the northern riffleshell (*Epioblasma torulosa rangiana*), a state endangered and federally endangered mussel, and the pondhorn (*Uniomerus tetralasmus*), a state threatened mussel. This project must not have an impact on freshwater native mussels at the project site. This applies to both listed and non-listed species. Per the Ohio Mussel Survey Protocol (2020), all Group 2, 3, and 4 streams (Appendix A) require a mussel survey. Per the Ohio Mussel Survey Protocol, Group 1 streams (Appendix A) and unlisted streams with a watershed of 5 square miles or larger above the point of impact should be assessed using the Reconnaissance Survey for Unionid Mussels (Appendix B) to determine if mussels are present. Mussel surveys may be recommended for these streams as well. This is further explained within the Ohio Mussel Survey Protocol. Therefore, if in-water work is planned in any stream that

meets any of the above criteria, the DOW recommends the applicant provide information to indicate no mussel impacts will occur. If this is not possible, the DOW recommends a professional malacologist conduct a mussel survey in the project area. If mussels that cannot be avoided are found in the project area, as a last resort, the DOW recommends a professional malacologist collect and relocate the mussels to suitable and similar habitat upstream of the project site. Mussel surveys and any subsequent mussel relocation should be done in accordance with the Ohio Mussel Survey Protocol. The Ohio Mussel Survey Protocol (2020) can be found at:

https://ohiodnr.gov/static/documents/wildlife/permits/dow-protocol-ohio-mussel-survey.pdf

The project is within the range of the pirate perch (*Aphredoderus sayanus*), a state endangered fish, and the greater redhorse (*Moxostoma valenciennesi*), a state threatened fish. The DOW recommends no in-water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species.

The project is within the range of the upland sandpiper (*Bartramia longicauda*), a state endangered bird. Nesting upland sandpipers utilize dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program (CRP). If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the US Fish & Wildlife Service.

Water Resources: The Division of Water Resources has the following comment.

The local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals for this project. Your local floodplain administrator contact information can be found at the website below.

http://water.ohiodnr.gov/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community %20Contact%20List\_8\_16.pdf

ODNR appreciates the opportunity to provide these comments. Please contact Mike Pettegrew at <u>mike.pettegrew@dnr.ohio.gov</u> if you have questions about these comments or need additional information.

Mike Pettegrew Environmental Services Administrator (Acting)

## Appendix E Ecological Resources Inventory Report

### ECOLOGICAL SURVEY REPORT LIMA TO FORT WAYNE 138 KV REBUILD PROJECT AMERICAN, BATH, JENNINGS, AND SUGAR CREEK TOWNSHIPS ALLEN AND PUTNAM COUNTIES, OHIO

10 February 2022



BOUNDLESS ENERGY<sup>\*\*</sup> American Electric Power 8500 Smith's Mill Road New Albany, OH 43054

Prepared by:



Environmental Solutions & Innovations, Inc.

4525 Este Avenue Cincinnati, Ohio 45232 Phone: (513) 451-1777 Fax: (513) 451-3321 Ravenna, OH • Indianapolis, IN • Orlando, FL • Springfield, MO • Pittsburgh, PA • Teays Valley, WV

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## 1.0 Introduction

American Electric Power (AEP) retained Environmental Solutions & Innovations, Inc. (ESI) to perform an ecological survey for the Lima to Fort Wayne (formerly North Delphos to Rockhill) 138 kV Transmission Line Rebuild Project in American, Bath, Jennings, and Sugar Creek Townships, Allen and Putnam counties, Ohio within the project's proposed Area of Investigation (AOI; Appendix A, Figures 1 and 2). ESI completed a field review of the AOI on 28, 29, and 30 June, 1 July, 2 September, and 9 December 2021. This report outlines review of published resource materials, existing site conditions, agency coordination, and results of the field investigation.

# 2.0 Methods

#### 2.1 Desktop Evaluation

Prior to visiting the site, available topographic, aerial, soils, flood, and National Wetlands Inventory (NWI) mapping is reviewed to determine onsite areas that may contain aquatic resources. State stream designations, navigability, and other criteria that would determine agency jurisdiction are also reviewed.

## 2.2 Threatened and Endangered Species

To assist with Endangered Species Act (ESA), Bald and Golden Eagle Protection Act (BGEPA), and Migratory Bird Treaty Act (MBTA) compliance, a project review was requested, and a response was received 3 August 2021 from U.S. Fish and Wildlife Service (USFWS) Ohio Field Office (Appendix B). To identify potential conflicts with state-listed species and appropriately complete Ohio Rapid Assessment Methods (ORAMs), a request was submitted to Ohio Department of Natural Resources (ODNR) and a response was received on 1 September 2021 (Appendix B).

#### 2.3 Aquatic Resource Delineations

Wetland delineation procedures follow the 2012 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region ERDC/EL TR-12-1, Version 2.0 (USACE 2012), Midwest Region ERDC/EL TR-10-16, Version 2.0 (USACE 2010), and the 1987 Corps of Engineers Wetland Delineation Manual (USACE 1987). The federally regulated Ordinary High Water Mark (OHWM) of streams is delineated using the USACE Regulatory Guidance Letter 05-05 – Guidance on Ordinary High Water Mark Identification. Each stream is categorized in regard to its flow regime as perennial, intermittent, or ephemeral, as defined by the USACE. Delineated aquatic resources are classified according to the Classification of Wetland

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and Deepwater Habitats of the United States (Cowardin et al. 1979). Each wetland identified is evaluated consistent with the Ohio Rapid Assessment Method (ORAM, Version 5.0), developed by the Ohio Environmental Protection Agency (OEPA). Streams with drainage areas less than one square mile are evaluated using the Field evaluation manual for Ohio's primary headwater habitat streams (OEPA 2020). Aquatic resource boundaries and sample points are surveyed using a GPS with sub-meter accuracy.

## 3.0 Results

#### 3.1 Desktop Evaluation

#### 3.1.1 Topography and Drainage

The project appears on the Cairo, Elida, Kalida, and Ottoville, Ohio U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle maps (Appendix A, Figure 1). The AOI consists of rolling hills ranging from approximately 735 feet to 880 feet. The site drains to the Auglaize and Ottawa rivers, and active quarries are within 3 miles of the project.

#### 3.1.2 Soil Survey

The Natural Resources Conservation Service (NRCS) maps 35 soil series considered hydric or partially hydric within the AOI. The NRCS soil map and hydric soils list is provided in Appendix C.

#### 3.1.3 National Wetlands Inventory

Twenty-nine NWI mapped resources (PEM1A, PEM1Ad, PEM1C, PFO1A, PFO1C, PSS1A, R2UBH, R4SBC, and R5UBH) were identified within the AOI. Note that NWI maps are derived from aerial photo interpretation and are suitable for general planning purposes only; they typically do not show all the wetland or watercourse resources within any given area. All areas were field reviewed. A table summarizing mapped NWI resources within the AOI is provided in Appendix D.

#### 3.1.4 Aerial Imagery

Aerial mapping from 1995 through 2021 shows the site as dominated by mixed mesophytic forest, agricultural fields, and urban/suburban areas. Aerial representation of the site is provided in Appendix A, Figure 2.

## 3.2 Threatened and Endangered Species

Suitable habitat exists within the AOI for state and federal listed bat species with agency-recommended tree clearing dates of 1 October to 31 March, if required. A



desktop assessment for features potentially suitable as bat hibernacula revealed 13 active and historic stone quarries within 3 miles of the North Delphos to Rockhill Rebuild Project (Appendix B). It is presumed these quarries entail only surface mining techniques and no underground voids were developed for stone or mineral extraction. Portal searches within the Project's AOI occurred concurrent with wetland and stream delineations, and no features potentially suitable for hibernating bats have been documented.

The project is within the range of the upland sandpiper (*Bartramia longicauda*), a state endangered bird. The ODNR-Division of Wildlife (DOW) indicates avoiding construction in upland sandpiper habitat during the species' nesting period of 15 April to 31 July. Upland sandpipers prefer to nest within larger (123.5 to 494 acres), open tracts of native grasslands, prairies, meadows to lightly grazed pastures and hayfields (Vickery et al. 1994, Mong 2005). Studies conducted in the Midwest and Northeast also noted upland sandpipers avoid uniform, tall grasses and prefer to nest in areas with a variety of vegetation heights (Ailes 1980, Buhnerkempe and Westemeier 1988, Vickery et al. 1994). In Ohio, airport habitats support the majority (74%) of nesting upland sandpipers (Osborne and Peterson 1984). Suitable upland sandpiper habitat was not documented within the project's AOI. Instead, most open-tract habitats observed included row crops and heavily grazed livestock pastures. Roadside tracts of grassland exist but are likely too small and fragmented to support a breeding population of upland sandpipers. ODNR-DOW concurred with absence of suitable habitat findings on 14 January 2022 (Appendix B).

To reduce impacts to indigenous aquatic species and habitat, the ODNR-DOW recommends avoiding in-water work in perennial streams from 15 April to 30 June. Furthermore, if in-stream work is anticipated in streams considered suitable for freshwater mussels, the ODNR-DOW recommends completion of a mussel survey in the project area by a professional malacologist. A summary table of rare, threatened, and endangered species potentially occurring within the AOI is provided in Appendix E.

#### **3.3 Aquatic Resource Delineations**

Sixty-two wetlands, 27 stream segments, and 2 ponds were identified and delineated within the AOI and are summarized in Appendix F. Representative photographs of aquatic resources are provided in Appendix G. Field data sheets for wetland and upland sample points, ORAM, and HHEI forms are provided in Appendix H. The aquatic resource delineation map depicting resource locations is provided in Appendix A, Figure 2.



## 4.0 Conclusion

Desktop review and field investigations completed 28, 29, and 30 June, 1 July, 2 September, and 9 December 2021 identified 62 wetlands, 27 stream segments, and 2 ponds within the AOI (Appendix A, Figure 2). Temporary or permanent impacts to these resources may require permits from the USACE and or OEPA.

ODNR and USFWS recommend seasonal tree clearing to avoid impacts to state and federally listed bat species. ODNR has recommendations regarding in-water work to avoid impacts to state-listed fish and mussel species. If construction cannot adhere to seasonal tree clearing dates or requires in-water work, additional coordination with the agencies and/or surveys may be needed.

## 5.0 Literature Cited

- Ailes, I. W. 1980. Breeding biology and habitat use of the upland sandpiper in central Wisconsin. Passenger Pigeon 42:53-63.
- Buhnerkempe, J. E., and R. L. Westemeier. 1988. Breeding biology and habitat of upland sandpipers on prairie-chicken sanctuaries in Illinois. Transactions of the Illinois Academy of Science 81:153-162.
- Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. FWSOBS 79/31, December 1979. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. 79 pp.
- Mong, T. W. 2005. Using radio-telemetry to determine range and resource requirements of upland sandpipers at an experimentally managed prairie landscape. Master's Thesis. Kansas State University, Manhattan, Kansas. 74 pp.
- OEPA. 2020. Field methods for evaluating primary headwater streams in Ohio. Version 4.1. Ohio Environmental Protection Agency, Division of Surface Water, Columbus, Ohio. 130 pp.
- Osborne, D. R., and A. T. Peterson. 1984. Decline of the upland sandpiper (*Bartramia, Longicauda*) in Ohio: An endangered species. Ohio Journal of Science 84:8-10.
- USACE. 1987. Corps of Engineers Wetlands Delineation Manual. Final Report. Wetlands Research Program Technical Report Y-87-1 (on-line edition), Waterways Experiment Station, Environmental Laboratory, Vicksburg, Mississippi. 143 pp.



- 2010. Regional supplement to the Corps of Engineers wetland delineation manual: Midwest Region (Version 2.0). ERDC/EL TR-10-16, U.S. Army Engineer Research and Development Center, Vicksburg, Mississippi. 154 pp.
  2012. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, ERDC/EL TR-12-1 (Version 2.0).
  - U.S. Army Engineer Research and Development Center, Vicksburg, Mississippi.
- Vickery, P. D., M. L. Hunter, and S. M. Melvin. 1994. Effects of habitat area on the distribution of grassland birds in Maine. Conservation Biology 8:1087-1097.



#### APPENDIX A FIGURES





































Figure 2. Ecological Survey on the AEP Lima - Fort Wayne 138kV Transmission Line Rebuild Project in Allen and Putnam Counties, Ohio.

Map 8 of 46

Culvert Location

- --- Resource Continues Off-Site
- Field-Delineated Stream
- National Hydrography Dataset (NHD) Stream
- Area of Investigation (AOI)
  - Soils

#### National Wetland Inventory (NWI)

//// Freshwater Forested/Shrub Wetland

Riverine
























































































Figure 2. Ecological Survey on the AEP Lima - Fort Wayne 138kV Transmission Line Rebuild Project in Allen and Putnam Counties, Ohio.















200 Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Esri, HERE, Garmin, (c) OpenStreetMap contributors Sources: Esri, HERE, Garmin, Intermap, increment P Corp.,



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ENVIRONMENTAL SOLUTIONS & INNOVATIONS, INC.

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Project No. 1730









































## APPENDIX B AGENCY CORRESPONDENCE/DESKTOP ASSESMENT

Note: Formerly called North Delphos to Rockhill 138 kV Transmission Line Rebuild



### **Valerie Clarkston**

Subject:

FW: AEP North Delphos-Rockhill 138 kV Transmission Line Rebuild Project, Allen and Putnam Counties, Ohio

From: Ohio, FW3 <<u>ohio@fws.gov</u>>

Sent: Tuesday, August 3, 2021 10:19 AM

To: jake.lubbers@aecom.com

**Cc:** <u>nathan.reardon@dnr.state.oh.us</u>; Parsons, Kate <<u>kate.parsons@dnr.state.oh.us</u>>; <u>beth.wilburn@aecom.com</u>; <u>rachanderson@easi.com</u>; <u>Mia R Hall <<u>mrhall@aep.com</u>>; <u>thomas.lipp@aecom.com</u></u>

**Subject:** [EXTERNAL] AEP North Delphos-Rockhill 138 kV Transmission Line Rebuild Project, Allen and Putnam Counties, Ohio

This is an **EXTERNAL** email. **STOP**. **THINK** before you CLICK links or OPEN attachments. If suspicious please click the '**Report to Incidents**' button in Outlook or forward to <u>incidents@aep.com</u> from a mobile device.



UNITED STATES DEPARTMENT OF THE INTERIOR U.S. Fish and Wildlife Service Ecological Services Office 4625 Morse Road, Suite 104 Columbus, Ohio 43230 (614) 416-8993 / Fax (614) 416-8994



TAILS# 03E15000-2021-TA-1839

Dear Mr. Lubbers,

The U.S Fish and Wildlife Service (Service) has received your recent correspondence requesting information about the subject proposal. We offer the following comments and recommendations to assist you in minimizing and avoiding adverse impacts to threatened and endangered species pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq), as amended (ESA).

<u>Federally Threatened and Endangered Species</u>: The endangered Indiana bat (*Myotis sodalis*) and threatened northern long-eared bat (*Myotis septentrionalis*) occur throughout the State of Ohio. The Indiana bat and northern long-eared bat may be found wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and breed that may also include adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, woodlots, fallow fields, and pastures. Roost trees for both species include live and standing dead trees  $\geq 3$  inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities. These roost trees may be located in forested habitats as well as linear features such as fencerows, riparian forests, and other wooded corridors. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves, rock crevices and abandoned mines. Seasonal Tree Clearing for Federally Listed Bat Species: Should the proposed project site contain trees  $\geq 3$  inches dbh, we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees  $\geq 3$  inches dbh cannot be avoided, we recommend removal of any trees  $\geq 3$  inches dbh only occur between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to Indiana bats and northern long-eared bats. While incidental take of northern long-eared bats from most tree clearing is exempted by a 4(d) rule

(see <u>http://www.fws.gov/midwest/endangered/mammals/nleb/index.html</u>), incidental take of Indiana bats is still prohibited without a project-specific exemption. Thus, seasonal clearing is recommended where Indiana bats are assumed present.

If implementation of this seasonal tree cutting recommendation is not possible, a summer presence/absence survey may be conducted for Indiana bats. If Indiana bats are not detected during the survey, then tree clearing may occur at any time of the year. Surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Ohio Field Office. Surveyors must have a valid federal permit. Please note that in Ohio summer mist net surveys may only be conducted between June 1 and August 15.

<u>Section 7 Coordination</u>: If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), then no tree clearing should occur on any portion of the project area until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. We recommend the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence. This letter provides technical assistance only and does not serve as a completed section 7 consultation document.

<u>Stream and Wetland Avoidance</u>: Over 90% of the wetlands in Ohio have been drained, filled, or modified by human activities, thus is it important to conserve the functions and values of the remaining wetlands in Ohio (<u>https://epa.ohio.gov/portals/47/facts/ohio\_wetlands.pdf</u>). We recommend avoiding and minimizing project impacts to all wetland habitats (e.g., forests, streams, vernal pools) to the maximum extent possible in order to benefit water quality and fish and wildlife habitat. Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the U.S. Army Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required. Best management practices should be used to minimize erosion, especially on slopes. Disturbed areas should be mulched and revegetated with native plant species. In addition, prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat. Should the project design change, or additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, coordination with the Service should be initiated to assess any potential impacts.

Thank you for your efforts to conserve listed species and sensitive habitats in Ohio. We recommend coordinating with the Ohio Department of Natural Resources due to the potential for the proposed project to affect state listed species and/or state lands. Contact Mike Pettegrew, Acting Environmental Services Administrator, at (614) 265-6387 or at <u>mike.pettegrew@dnr.state.oh.us</u>.

If you have questions, or if we can be of further assistance in this matter, please contact our office at (614) 416-8993 or <u>ohio@fws.gov</u>.

Sincerely,

Patrice Ashfield Field Office Supervisor

cc: Nathan Reardon, ODNR-DOW Kate Parsons, ODNR-DOW



# Ohio Department of Natural Resources

MIKE DEWINE, GOVERNOR

MARY MERTZ, DIRECTOR

Office of Real Estate John Kessler, Chief 2045 Morse Road – Bldg. E-2 Columbus, OH 43229 Phone: (614) 265-6621 Fax: (614) 267-4764

September 1, 2021

Jake Lubbers AECOM 525 Vine Street, Suite 1800 Cincinnati, Ohio 45202

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The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that Best Management Practices be utilized to minimize erosion and sedimentation.

The entire state of Ohio is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (Myotis septentrionalis), a state endangered and federally threatened species, the little brown bat (Myotis lucifugus), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer (April 1 through September 30), these species of bats predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. However, these species are also dependent on the forest structure surrounding roost trees. If trees are present within the project area, and trees must be cut, the DOW recommends cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with  $DBH \ge 20$  if possible. If trees are present within the project area, and trees must be cut during the summer months, the DOW recommends a mist net survey or acoustic survey be conducted from June 1 through August 15, prior to any cutting. Mist net and acoustic surveys should be conducted in accordance with the most recent version of the "OHIO DIVISION OF WILDLIFE GUIDANCE FOR BAT SURVEYS AND TREE *CLEARING*". If state listed bats are documented, DOW recommends cutting only occur from October 1 through March 31. However, limited summer tree cutting may be acceptable after consultation with the DOW (contact Erin Hazelton at Erin.hazelton@dnr.ohio.gov).

The DOW also recommends that a desktop habitat assessment is conducted, followed by a field assessment if needed, to determine if a potential hibernaculum is present within the project area. Direction on how to conduct habitat assessments can be found in the current USFWS "*Range-wide Indiana Bat Survey Guidelines*." If a habitat assessment finds that a potential hibernaculum is present within 0.25 miles of the project area, please send this information to Erin Hazelton for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance, however, limited summer or winter tree cutting may be acceptable after consultation with the DOW. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

The project is within the range of the clubshell (*Pleurobema clava*), a state endangered and federally endangered mussel, the northern riffleshell (*Epioblasma torulosa rangiana*), a state endangered and federally endangered mussel, and the pondhorn (*Uniomerus tetralasmus*), a state threatened mussel. This project must not have an impact on freshwater native mussels at the project site. This applies to both listed and non-listed species. Per the Ohio Mussel Survey Protocol (2020), all Group 2, 3, and 4 streams (Appendix A) require a mussel survey. Per the Ohio Mussel Survey Protocol, Group 1 streams (Appendix A) and unlisted streams with a watershed of 5 square miles or larger above the point of impact should be assessed using the Reconnaissance Survey for Unionid Mussels (Appendix B) to determine if mussels are present. Mussel surveys may be recommended for these streams as well. This is further explained within the Ohio Mussel Survey Protocol. Therefore, if in-water work is planned in any stream that

meets any of the above criteria, the DOW recommends the applicant provide information to indicate no mussel impacts will occur. If this is not possible, the DOW recommends a professional malacologist conduct a mussel survey in the project area. If mussels that cannot be avoided are found in the project area, as a last resort, the DOW recommends a professional malacologist collect and relocate the mussels to suitable and similar habitat upstream of the project site. Mussel surveys and any subsequent mussel relocation should be done in accordance with the Ohio Mussel Survey Protocol. The Ohio Mussel Survey Protocol (2020) can be found at:

https://ohiodnr.gov/static/documents/wildlife/permits/dow-protocol-ohio-mussel-survey.pdf

The project is within the range of the pirate perch (*Aphredoderus sayanus*), a state endangered fish, and the greater redhorse (*Moxostoma valenciennesi*), a state threatened fish. The DOW recommends no in-water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species.

The project is within the range of the upland sandpiper (*Bartramia longicauda*), a state endangered bird. Nesting upland sandpipers utilize dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program (CRP). If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the US Fish & Wildlife Service.

Water Resources: The Division of Water Resources has the following comment.

The local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals for this project. Your local floodplain administrator contact information can be found at the website below.

http://water.ohiodnr.gov/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community %20Contact%20List\_8\_16.pdf

ODNR appreciates the opportunity to provide these comments. Please contact Mike Pettegrew at <u>mike.pettegrew@dnr.ohio.gov</u> if you have questions about these comments or need additional information.

Mike Pettegrew Environmental Services Administrator (Acting)

### **Valerie Clarkston**

From:	Nathan.Reardon@dnr.ohio.gov
Sent:	Friday, January 14, 2022 1:40 PM
То:	Valerie Clarkston
Cc:	mrhall@aep.com; Michael Wellman
Subject:	RE: 21-0715; AEP's North Delphos-Rockhill 138kV Transmission Line Rebuild Project

**CAUTION:** This email originated from outside of our organization. DO NOT click links or open attachments unless you recognize the sender and know the content is safe!

Hello Valerie,

Thank you for providing the upland sandpiper assessment. The DOW concurs that suitable habitat is not present within project area, and therefore, impacts to the upland sandpiper are not likely.

Thank you, Nathan



Nathan Reardon Compliance Coordinator ODNR Division of Wildlife 2045 Morse Road Columbus, OH 43229 Phone: 614-265-6741 Email: nathan.reardon@dnr.ohio.gov

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Please consider the environment before printing this email.

From: Valerie Clarkston <VClarkston@envsi.com>
Sent: Friday, January 14, 2022 8:52 AM
To: Reardon, Nathan <Nathan.Reardon@dnr.ohio.gov>
Cc: mrhall@aep.com; Michael Wellman <mwellman@envsi.com>
Subject: 21-0715; AEP's North Delphos-Rockhill 138kV Transmission Line Rebuild Project

Good morning Mr. Reardon,

American Electric Power's (AEP's) North Delphos-Rockhill 138kV Transmission Line Rebuild Project (Project) is within the range of the upland sandpiper (*Bartramia longicauda*), a state endangered bird. The ODNR-Division of Wildlife (DOW) indicated construction should be avoided in upland sandpiper habitat during the species' nesting period of 15 April to 31 July (ER letter attached). Upland sandpipers prefer to nest within larger, 123.5 to 494.2-acre (50 – 200 ha), open tracts of native grasslands, prairies, meadows to lightly grazed pastures and hayfields (Vickery et al. 1994, Mong 2005). Studies conducted in the Midwest and northeast also noted upland sandpipers avoid uniform, tall grasses and prefer to nest in areas with a variety of vegetation heights (Ailes 1980, Buhnerkempe and Westemeier 1988, Vickery et al. 1994). In Ohio, airport habitats support the majority (74%) of nesting upland sandpipers (Osborne and Peterson 1984). Biologists did not observe potentially suitable habitat for the upland sandpiper within the Project's AOI. Instead, most of the open-tract habitats observed included row crops and heavily grazed livestock pastures (see link below to access Project maps). Roadside tracts of grassland do exist but are likely too small and fragmented to support a breeding population of upland sandpipers. Based on current proposed Project activity, recommendations within ODNR's environmental review letter, and the above review of the Project area, no conflicts with upland sandpipers are anticipated.

#### Mapping - North Delphos-Rockhill 138kV Transmission Line Rebuild Project

On behalf of AEP, ESI is requesting concurrence from ODNR on the above assessment of upland sandpipers with regards to the North Delphos-Rockhill 138kV Transmission Line Rebuild Project. Please reach out to us with any questions or requests for additional information.

Thank you,

Valerie



#### Literature Cited Above:

Ailes, I. W. 1980. Breeding biology and habitat use of the upland sandpiper in central Wisconsin. Passenger Pigeon 42:53-63.

Buhnerkempe, J. E., and R. L. Westemeier. 1988. Breeding biology and habitat of upland sandpipers on prairie-chicken sanctuaries in Illinois. Transactions of the Illinois Academy of Science 81:153-162.

Mong, T. W. 2005. Using radio-telemetry to determine range and resource requirements of upland sandpipers at an experimentally managed prairie landscape. Master's Thesis. Kansas State University, Manhattan, Kansas. 74 pp.

Osborne, D. R., and A. T. Peterson. 1984. Decline of the upland sandpiper (Bartramia, Longicauda) in Ohio: An endangered species. Ohio Journal of Science 84:8-10.

Vickery, P. D., M. L. Hunter, and S. M. Melvin. 1994. Effects of habitat area on the distribution of grassland birds in Maine. Conservation Biology 8:1087-1097.















## APPENDIX C SOIL REPORT





USDA Natural Resources



USDA

# Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AkA	Alvada loam, 0 to 1 percent slopes	90	10.5	3.6%
AmA	Alvada silty clay loam, 0 to 1 percent slopes	90	0.8	0.3%
AuA	Aurand loam, 0 to 3 percent slopes	14	0.7	0.2%
AxA	Aurand silt loam, 0 to 3 percent slopes	6	0.6	0.2%
Ble1A1	Blount silt loam, end moraine, 0 to 2 percent slopes	6	7.6	2.6%
Ble1B1	Blount silt loam, end moraine, 2 to 4 percent slopes	6	1.6	0.6%
Blg1A1	Blount silt loam, ground moraine, 0 to 2 percent slopes	9	22.8	7.9%
Blg1B1	Blount silt loam, ground moraine, 2 to 4 percent slopes	9	15.1	5.2%
BsA	Blount-Urban land complex, 0 to 2 percent slopes	9	7.1	2.5%
СуА	Cygnet loam, 0 to 3 percent slopes	10	7.2	2.5%
GkB	Glynwood loam, 2 to 6 percent slopes	4	0.0	0.0%
GuB	Glynwood-Urban land complex, 2 to 6 percent slopes	0	11.1	3.8%
Gwg1B1	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	6	3.8	1.3%
Gwg5B2	Glynwood clay loam, ground moraine, 2 to 6 percent slopes, eroded	6	1.7	0.6%
Gwg5C2	Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded	7	0.6	0.2%
HcA	Hoytville silty clay loam, 0 to 1 percent slopes	90	2.1	0.7%
НрВ	Houcktown sandy loam, 2 to 4 percent slopes	5	1.1	0.4%

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
HrA	Houcktown loam, 0 to 2 percent slopes	4	1.7	0.6%
HrB	Houcktown loam, 2 to 6 percent slopes	5	2.7	0.9%
HsA	Houcktown silt loam, 0 to 2 percent slopes	5	8.0	2.8%
HtA	Hoytville silty clay, 0 to 1 percent slopes	90	5.7	2.0%
KnA	Knoxdale silt loam, 0 to 2 percent slopes, occasionally flooded	5	3.5	1.2%
NpA	Nappanee clay loam, 0 to 2 percent slopes	5	0.7	0.3%
PmA	Pewamo silty clay loam, 0 to 1 percent slopes	91	45.2	15.7%
РоА	Pewamo-Urban land complex, 0 to 2 percent slopes	59	0.3	0.1%
RgA	Rensselaer silt loam, 0 to 1 percent slopes	90	7.2	2.5%
SbA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	93	1.7	0.6%
SfB	Shawtown loam, 2 to 6 percent slopes	0	3.5	1.2%
SgC2	Shinrock clay loam, 6 to 12 percent slopes, eroded	0	0.2	0.1%
SkA	Shoals silt loam, till substratum, 0 to 1 percent slopes, occasionally flooded	0	2.6	0.9%
SrA	Sloan silty clay loam, till substratum, 0 to 1 percent slopes, frequently flooded	90	6.7	2.3%
UdD	Udorthents, loamy, 12 to 25 percent slopes	10	0.5	0.2%
UrB	Urban land, undulating	0	0.4	0.1%
W	Water	0	0.6	0.2%
Subtotals for Soil Survey Area			185.7	64.3%
Totals for Area of Interest			288.6	100.0%

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Df	Defiance silty clay loam	5	2.6	0.9%
DnA	Digby loam, 0 to 2 percent slopes	10	0.6	0.2%
		<b>–</b> <i>i</i>		
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Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
HcA	Hoytville silty clay loam, 0 to 1 percent slopes	90	1.1	0.4%
HnA	Haskins loam, 0 to 2 percent slopes	10	1.0	0.3%
HnB	Haskins loam, 2 to 6 percent slopes	15	0.4	0.2%
HtA	Hoytville silty clay, 0 to 1 percent slopes	90	71.2	24.7%
Ls	Lenawee silty clay loam, 0 to 1 percent slopes	93	0.7	0.2%
Md	Mermill loam	95	2.2	0.8%
NaA	Nappanee loam, 0 to 2 percent slopes	10	3.4	1.2%
NpA	Nappanee silt loam, 0 to 2 percent slopes	10	8.1	2.8%
NpB	Nappanee silt loam, 2 to 6 percent slopes	10	1.7	0.6%
RmB	Rawson loam, 2 to 6 percent slopes	0	1.6	0.5%
ScB	St. Clair silt loam, 2 to 6 percent slopes	0	0.8	0.3%
ScC2	St. Clair silt loam, 6 to 12 percent slopes, moderately eroded	0	1.7	0.6%
So	Sloan silty clay loam	95	5.0	1.7%
W	Water	0	0.8	0.3%
Subtotals for Soil Surve	ey Area	102.9	35.7%	
Totals for Area of Intere	est		288.6	100.0%



# Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

#### References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States. Federal Register. September 18, 2002. Hydric soils of the United States. Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

## **Rating Options**

Aggregation Method: Percent Present Component Percent Cutoff: None Specified Tie-break Rule: Lower

## APPENDIX D NWI TABLE



#### Lima - Fort Wayne 138 kV Transmission Line Rebuild Project NWI DISPOSITION SUMMARY TABLE

NWI Code	NWI Description	Figure 2	Related Field Inventoried Resource (Wetland ID / Stream ID)	Comments
PFO1C	Palustrine, broad-leaved deciduous, seasonally flooded	2-1, 2-2	Wetland 1-A	Wetland 1-A extends outside project survey area. NWI boundary depicted on map differs from field verified boundary.
R2UBH	Riverine, lower perennial, unconsolidated bottom,permanently flooded	2-1, 2-2	Stream 1-001 (Jennings Creek)	Stream 1-001 extends outside project survey area. NWI boundary depicted on map differs from field verified boundary.
R2UBH	Riverine, lower perennial, unconsolidated bottom,permanently flooded	2-3	Stream 1-002 (Auglaize River)	Stream 1-002 extends outside project survey area.
PFO1A	Palustrine, broad-leaved deciduous, temporarily flooded	2-3	Wetland 1-B	Wetland 1-B extends outside project survey area. NWI boundary depicted on map differs from field verified boundary.
PFO1A	Palustrine, broad-leaved deciduous, temporarily flooded	2-4, 2-5	n/a	NWI boundary depicted on map was field verified and does not extend into project survey area.
R4SBC	Riverine, intermittent, streambed, seasonally flooded	2-5	Stream 1-003	Stream 1-003 extends outside project survey area. NWI boundary depicted on map differs from field verified boundary.
R4SBC	Riverine, intermittent, streambed, seasonally flooded	2-5	n/a	NWI feature depicted on map was field verified and does not exist within project survey area.
R5UBH	Riverine, unknown perennial, unconsolidated bottom, permanently flooded	2-7, 2-8	Stream 1-004 (Big Run)	Stream 1-004 extends outside project survey area. NWI boundary depicted on map differs from field verified boundary.
R4SBC	Riverine, intermittent, streambed, seasonally flooded	2-9	n/a	NWI feature depicted on map was field verified and does not exist within project survey area.
R4SBC	Riverine, intermittent, streambed, seasonally flooded	2-10	Stream 1-005	Stream 1-005 extends outside project survey area. NWI boundary depicted on map differs from field verified boundary.
R5UBH	Riverine, unknown perennial, unconsolidated bottom, permanently flooded	2-12	Stream 1-006	Stream 1-006 extends outside project survey area. NWI boundary depicted on map differs from field verified boundary.
PEM1A	Palustrine, emergent, persistent, temporarily flooded	2-14	Wetland 1-C	NWI boundary and classification depicted on map differs from field verification. May extend outside project survey area.
R4SBC	Riverine, intermittent, streambed, seasonally flooded	2-14	Stream 1-007	Stream 1-007 extends outside project survey area. NWI boundary depicted on map differs from field verified boundary.
R2UBH	Riverine, lower perennial, unconsolidated bottom,permanently flooded	2-18, 2-19	Stream 1-011 (Ottawa River)	Stream 1-011 extends outside project survey area. NWI boundary depicted on map differs from field verified boundary.
R2UBH	Riverine, lower perennial, unconsolidated bottom,permanently flooded	2-23	Stream 1-012 (Pike Run)	Stream 1-012 extends outside project survey area. NWI boundary depicted on map differs from field verified boundary.

#### Lima - Fort Wayne 138 kV Transmission Line Rebuild Project NWI DISPOSITION SUMMARY TABLE

PEM1C	Palustrine, emergent, persistent, seasonally flooded	2-30, 2-31	Wetland 1-F	Wetland 1-F extends outside project survey area. NWI boundary depicted on map differs from field verified boundary.
R5UBH	Riverine, unknown perennial, unconsolidated bottom, permanently flooded	2-31, 2-32	Stream 1-013 (Pike Run)	Stream 1-013 extends outside project survey area. NWI boundary depicted on map differs from field verified boundary.
PEM1Ad	Palustrine, emergent, persistent, temporarily flooded, partly drained/ditched	2-32, 2-33	n/a	NWI boundary depicted on map was field verified and does not extend into project survey area.
PUBGx	Palustrine, unconsolidated bottom, intermittently exposed, excavated	2-35	1-P-002	Pond 1-P-002 extends outside project survey area. NWI boundary depicted on map differs from field verified boundary.
R5UBH	Riverine, unknown perennial, unconsolidated bottom, permanently flooded	2-35, 2-36	Stream 1-016 (Pike Run)	Stream 1-016 extends outside project survey area. NWI boundary depicted on map differs from field verified boundary.
R4SBC	Riverine, intermittent, streambed, seasonally flooded	2-37, 2-38	Stream 2-002 (Pike Run)	Stream 2-002 extends outside project survey area. NWI boundary and classification depicted on map differs from field verified boundary and classification.
R5UBH	Riverine, unknown perennial, unconsolidated bottom, permanently flooded	2-37	Stream 2-003 (Pike Run)	Stream 2-003 extends outside project survey area. NWI boundary depicted on map differs from field verified boundary.
R5UBH	Riverine, unknown perennial, unconsolidated bottom, permanently flooded	2-37	Stream 2-004 (Pike Run)	Stream 2-004 extends outside project survey area. NWI boundary depicted on map differs from field verified boundary.
PFO1A	Palustrine, broad-leaved deciduous, temporarily flooded	2-39, 2-40	Wetland 1-O	NWI boundary and classification depicted on map differs from field verification.
PFO1A	Palustrine, broad-leaved deciduous, temporarily flooded	2-42, 2-43	n/a	NWI boundary depicted on map was field verified and does not extend into project survey area.
R4SBC	Riverine, intermittent, streambed, seasonally flooded	2-44	Stream 1-018	Stream 1-018 extends outside project survey area. NWI boundary depicted on map differs from field verified boundary.
PEM1A	Palustrine, emergent, persistent, temporarily flooded	2-44	Wetland 4-D	Wetland 4-D extends outside project survey area. NWI boundary and classification depicted on map differs from field verification.
PEM1A	Palustrine, emergent, persistent, temporarily flooded	2-44	Wetland 1-AF	Wetland 1-AF extends outside project survey area. NWI boundary depicted on map differs from field verification.
PSS1A	Palustrine, scrub-shrub, persistent, temporarily flooded	2-46	Wetland 4-E (PEM)	Wetland 4-E (PEM) extends outside project survey area. NWI boundary and classification depicted on map differs from field verification.

## APPENDIX E RTE TABLE



ECOLOGICAL RESOURCES INVENTORY REPORT, LIMA - FORT WAYNE 138 KV TRANSMISSION LINE REBUILD PROJECT, ALLEN AND PUTNAM COUNTIES, OHIO

Results September 1, 2021

#### RARE, THREATENED, OR ENDANGERED SPECIES HABITAT

Summary of Potential Ohio State-Listed Species within the Lima - Fort Wayne 138 kV Transmission Line Rebuild Project Area, Allen and Putnam Counties, Ohio

Common Name	Scientific Name	State Listing <sup>1</sup>	Known to Occur Within Counties? <sup>2</sup>	Known Within One Mile of Project Area? <sup>3</sup>	Habitat Preference		ODNR Comments/Recommendations
					Birds		
Upland Sandpiper	Bartramia longicauda	E	Yes	No	Nesting upland sandpipers utilize dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program (CRP).	No	ODNR-DOW concurred with absence of suitable habitat findings on 14 January 2022
					Mammals		
Indiana Bat	Myofis sodalis	E	No	No	The Indiana bat is likely distributed over the entire State of Ohio, though not uniformly. This species generally forages in openings and edge habitats within upland and floadplain forest, but they also forage over old fields and pastures (Brack et al. 2010). Natural roost structures include trees (live or dead) with exfoliating bark, and exposure to solar radiation. Other important factors for roost frees include relative location to other trees, a permanent water source and foraging areas; Dead trees are preferred as matemity roosts; however, live trees are often used as secondary roosts depending on microclimate conditions (USFWS 2007a; USFWS 2017). Roosts have also accasionally been found to consist of cracks and hollows in trees, utility poles, buildings, and bat boxes. Primarily use caves for hibernacula, although are also known to hibernate in abandoned underground mines (Brack et al. 2010).	Yes	If suitable habitat occurs within the project area, the DOW recommends trees be conserved. If suitable habitat occurs within the project area and trees must be cut, the DOW recommends cutting occur between October 1 and March 31. If suitable trees must be cut during summer months, the DOW recommends a mist net or acoustic survey be conducted between June 1 and August 15, prior to any cutting. If no tree removal is proposed, this project is not likely to impact this species. A desktop assessment for features potentially suitable as bat hibernacula was conducted and Portal searches within the Project's AOI occurred and no features potentially suitable for hibernating bats have been documented.
Northern Long-eared Bat	Myostis septentrionalis	E	No	No	The northern long-eared bat is found throughout Ohio. This species generally forages in forested habitat and openings in forested habitat and utilizes cracks, cavities, and loose bark within live and dead trees, as well as buildings as roosting habitat (Brack et al. 2010; USFWS 2016). The species utilizes caves and abandoned mines as winter hibernacula. Various sized caves are used providing they have a constant temperature. high humidity, and little to no air current (Brack et al. 2010).	Yes	Same as above for Indiana Bat.
Little Brown Bat	Myotis lucifugus	E	Yes	No	During the spring and summer (April 1 through September 30), this species of bat predominately roosts in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. However, the species is also dependent on the forest structure surrounding roost trees.	Yes	Same as above for Indiana Bat.
Tricolored Bat	Perimyotis subflavus	E	No	No	During the spring and summer (April 1 through September 30), this species of bat predominately roosts in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. However, the species is also dependent on the forest structure surrounding roost trees.	Yes	Same as above for Indiana Bat.
				-	Freshwater Mussels		
Clubshell	Pleurobema clava	E	Yes	Yes	Freshwater streams as defined in the Ohio Mussel Survey Protocol (2020)	Yes	Conduct mussel survey if in-stream impacts are anticipated in listed streams. Relocate any mussels found prior to in- stream construction.

Northern Riffleshell	Epioblasma torulosa rangiana	E	Yes	No	Freshwater streams as defined in the Ohio Mussel Survey Protocol (2020)	Yes	Same as above for Clubshell.				
Pondhorn	Uniomerus tetralasmus	т	Yes	No	Freshwater streams as defined in the Ohio Mussel Survey Protocol (2020)	Yes	Same as above for Clubshell.				
Fish											
Pirate Perch	Aphredoderus sayanus	E	Yes	No	Found in perennial streams, especially very slow moving heavily vegetated streams, oxbows, or marshes.	Yes	The DOW recommends no in-water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in- water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species.				
Greater Redhorse	Moxostoma valenciennesi	T	Yes	Yes	Found in medium to large rivers in the Lake Erie drainage system of Ohio, specifically in pools with a clean sand or gravel substrate.	Yes	Same comment as above for Pirate Perch.				
E=Endangered; T=Threatened According to Ohio Department of Natural Resources, State Listed Wildlife Species by County (March 2020). According to Ohio Natural Heritage Program (Appendix B).											

Results August 3, 2021

Summary of Potential Federally-Listed Species within the Lima - Fort Wayne 138 kV Transmission Line Rebuild Project Area, Allen and Putnam Counties, Ohio

Common Name	Scientific Name	Federal Listing <sup>1</sup>	Known to Occur in Counties? <sup>2</sup>	Habitat Preference	Potential Habitat Observed in Project Area?	USFWS Comments/ Recommendations	
				Mammals			
Indiana Bat	Myotis sodalis	E	No	The Indiana bat is likely distributed over the entire State of Ohio, though not uniformly. This species generally forages in openings and edge habitats within upland and floodplain forest, but they also forage over old fields and pastures (Brack et al. 2010). Natural roost structures include trees (live or decal) with exfoliating bark, and exposure to solar radiation. Other important factors for roost trees include relative location to other frees, a permanent water source and foraging areas; Dead trees are preferred as maternity roosts; however, live trees are often used as secondary roosts depending on microclimate conditions (USFWS 2007; USFWS 2017). Roosts have also occasionally been found to consist of cracks and hollows in trees, utility poles, buildings, and bat boxes. Primarily use caves for hibernacula, although are also known to hibernate in abandoned underground mines (Brack et al. 2010).	Yes	Should the project site contain trees ≥3 inches dbh, USFWS recommends trees be saved whenever possible. If any caves or abandoned mines may be disturbed, further coordination is requested. If no caves or abandoned mines are present and trees ≥3 inches dbh cannot be avoided, USFWS recommends that removal of trees ≥3 inches dbh adverse effects to this species. A desktop assessment for features potentially suitable as bat hibernacula was conducted and Portal searches within the Project's ACI occurred and no features potentially suitable for hibernating bats have been documented.	
Northern Long-eared Bat	Myotis septentrionalis	T	No	The northern long-eared bat is found throughout Ohio. This species generally forages in forested habitat and openings in forested habitat and utilizes cracks, cavities, and loose bark within live and dead trees, as well as buildings as roosting habitat (Brack et al. 2010; USFWS 2016). The species utilizes caves and abandoned mines as winter hibernacula. Various sized caves are used providing they have a constant temperature, high humidity, and little to no air current (Brack et al. 2010).	Yes	Same comment as above for Indiana bat.	
<sup>1</sup> E=Endangered; T=Threa	tened						

<sup>2</sup>According to Ohio Department of Natural Resources, State Listed Wildlife Species by County (March 2020).

APPENDIX F WETLAND, STREAM, AND POND TABLES



#### Lima - Fort Wayne 138 kV Transmission Line Rebuild Project POND TABLE

	Locat	ion	Delineated	
Pond ID	Latitude	Longitude	Area (acre)	
1-P-001	40.8688	-84.2288	0.037	
1-P-002	40.7936	-84.1317	0.016	
		Total:	0.053	

#### Lima - Fort Wayne 138 kV Transmission Line Rebuild Project STREAM TABLE

	Location				Delinested	Bonkfull		Field Evaluation			
Stream ID	Latitude	Longitude	Stream Type	Stream Name	Length (feet)	Width (feet)	Width (feet)	Method	Score	Category / Rating / OAC Designation	
1-001	40.89494	-84.30426	Perennial	Jennings Creek	377	36	30	Chapter 3745-1	N/A	WWH	
1-002	40.89249	-84.29443	Perennial	Auglaize River	145	100	85	Chapter 3745-1	N/A	WWH	
1-003	40.88741	-84.28098	Perennial	UNT	148	9	4	HHEI	52	Class II	
1-004	40.88197	-84.26838	Perennial	Big Run	930	9	4	Chapter 3745-1	N/A	WWH	
1-005	40.87787	-84.25336	Perennial	UNT	139	9	4	HHEI	59	Class II	
1-006	40.87286	-84.2383	Perennial	UNT	132	13	8.5	HHEI	N/A	WWH	
1-007	40.8670	-84.22486	Perennial	UNT	155	10	6	HHEI	54	Class II	
1-008	40.8630	-84.2164	Intermittent	UNT	241	10	6	HHEI	45	Modified Class II	
1-009	40.85567	-84.19791	Intermittent	UNT	103	6	3	HHEI	10	Modified Class II	
1-010	40.85569	-84.1980	Ephemeral	UNT	35	1	0.25	HHEI	44	Class I	
1-011	40.85563	-84.19754	Perennial	Ottawa River	149	135	126	Chapter 3745-1	N/A	WWH	
1-012	40.84094	-84.17529	Perennial	Pike Run	193	17	4	Chapter 3745-1	N/A	MWH	
1-013	40.8096	-84.1489	Perennial	Pike Run	137	24	18	Chapter 3745-1	N/A	MWH	
1-014	40.8095	-84.1488	Ephemeral	UNT	45	3	1	HHEI	10	Class I	
1-015	40.8010	-84.1398	Ephemeral	UNT	817	10	6	HHEI	41	Modified Class II	

#### Lima - Fort Wayne 138 kV Transmission Line Rebuild Project STREAM TABLE

1-016	40.7921	-84.13065	Perennial	Pike Run	400	60	45	Chapter 3745-1	N/A	MWH
1-017	40.78143	-84.1190	Ephemeral	UNT	97	2.5	1.5	HHEI	18	Class I
1-018	40.76351	-84.09991	Intermittent	UNT	362	3	2.5	HHEI	33	Class I
1-019	40.7690	-84.10576	Ephemeral	UNT	123	3	2	HHEI	16	Class I
2-001	40.78344	-84.11935	Intermittent	UNT	100	5	3.5	HHEI	30	Modified Class II
2-002	40.78352	-84.1226	Perennial	Pike Run	51	16	12	Chapter 3745-1	N/A	MWH
2-002	40.7844	-84.1222	Perennial	Pike Run	150	15	12	Chapter 3745-2	N/A	MWH
2-003	40.78621	-84.12389	Perennial	Pike Run	304	15	10	Chapter 3745-3	N/A	MWH
2-004	40.7871	-84.1250	Perennial	Pike Run	177	16	10	Chapter 3745-4	N/A	MWH
4-001	40.7654	-84.0884	Intermittent	UNT	509	5	3	HHEI	29	Class I
4-002	40.7654	-84.0875	Perennial	UNT	265	8	5	HHEI	52	Modified Class II
5-001	40.8413	-84.1761	Ephemeral	UNT	10	5	3	HHEI	27	Class I
				Total:	6,295					

	Location				Dolinostod	ORAM		
Wetland ID	Latitude	Longitude	Isolated?	Habitat Type	Area (acre)	Score	Category	
1-A	40.8948	-84.3051	No	PFO	0.017	26	1	
1-B	40.8925	-84.2953	No	PFO	0.446	19	1	
1-C	40.8685	-84.2281	No	PSS	1.079	20	1	
1-D	40.8558	-84.1981	No	PSS	0.130	31	2	
1-E	40.8407	-84.1754	No	PFO	0.262	21	1	
1-F	40.8146	-84.1541	No	PEM	0.377	22	1	
1-G	40.8111	-84.1505	No	PEM	0.024	14	1	
1-H	40.8102	-84.1495	No	PEM	0.067	14	1	
1-1	40.8087	-84.1479	No	PEM	0.338	25	1	
1-J	40.8348	-84.1756	No	PEM	0.061	11	1	
1-К	40.7986	-84.1374	No	PSS	0.073	10.5	1	
1-L	40.7993	-84.1379	No	PEM	0.037	19	1	
1-M	40.7935	-84.1319	No	PSS	0.145	15.5	1	
1-N	40.7935	-84.1321	No	PSS	0.060	15.5	1	
1-0	40.7783	-84.1160	No	PEM	0.031	19	1	
1-P	40.7927	-84.1310	No	PEM	0.090	10	1	

1-Q	40.7915	-84.1300	No	PEM	0.018	16.5	1
1-R	40.7782	-84.1151	No	PEM	1.145	24	1
1-S	40.7791	-84.1168	No	PEM	0.070	19	1
1-T	40.7804	-84.1182	No	PEM	0.221	27	1
1-U	40.7814	-84.1190	No	PEM	0.047	22	1
1-V	40.7816	-84.1193	No	PEM	0.012	21	1
1-W	40.7819	-84.1194	No	PEM	0.005	20	1
1-X	40.7819	-84.1196	No	PEM	0.018	20	1
1-Y	40.7822	-84.1197	No	PEM	0.036	22	1
1-Z	40.7759	-84.1134	No	PEM	0.119	17	1
1-AA	40.7773	-84.1149	No	PEM	0.036	14.5	1
1-AB	40.7631	-84.0932	No	PEM	0.008	14	1
1-AC	40.7631	-84.0938	No	PEM	0.050	17	1
1-AD	40.7626	-84.0864	No	PEM	0.143	13	1
1-AE (PEM)	40.7633	-84.0873	No	PEM	0.309	19.5	1
1-AE (PFO)	40.7633	-84.0869	No	PFO	0.427	19.5	1
1-AE (PSS)	40.7633	-84.0880	No	PSS	0.235	19.5	1

1-AF	40.7628	-84.0976	No	PEM	0.084	13	1
1-AG	40.7648	-84.1014	No	PEM	0.183	16	1
1-AH (PSS)	40.7628	-84.0999	No	PSS	0.128	27	1
1-AH (PEM)	40.7627	-84.0998	No	PEM	0.032	27	1
1-AH (PFO)	40.7631	-84.0998	No	PFO	0.252	27	1
1-AI	40.7631	-84.1001	No	PEM	0.003	19	1
1-AJ	40.7787	-84.1119	No	PFO	0.021	22	1
1-AK	40.7787	-84.1131	No	PFO	0.081	27	1
1-AL	40.8930	-84.2939	No	PEM	0.166	19	1
2-A	40.7859	-84.1238	No	PEM	0.521	25	1
2-В	40.7866	-84.1248	No	PEM	0.022	32	2
2-C	40.7748	-84.1122	No	PEM	0.419	25	1
2-D	40.7654	-84.1023	No	PEM	0.381	25	1
2-E	40.7686	-84.1056	No	PEM	0.676	23	1
2-F	40.7691	-84.1059	No	PEM	0.001	25	1
3-A	40.79054	-84.12936	No	PEM	0.044	10	1
4-A	40.76407	-84.10059	No	PEM	0.066	12	1

4-B (PEM)	40.76382	-84.10002	No	PEM	0.11	18	1
4-B (PFO)	40.76354	-84.1001	No	PFO	0.05	18	1
4-C	40.76361	-84.09965	No	PEM	0.26	14	1
4-D	40.76323	-84.09769	No	PFO	0.04	21	1
4-E (PFO)	40.7642	-84.08784	No	PFO	0.49	21	1
4-E (PEM)	40.76451	-84.08739	No	PEM	0.24	21	1
4-F	40.76511	-84.0891	No	PEM	0.13	17	1
4-G	40.76534	-84.08733	No	PEM	0.07	35	Modified 2
4-H	40.76552	-84.08765	No	PFO	0.08	37	Modified 2
4-1	40.76343	-84.08982	No	PFO	0.01	25	1
5-A	40.835409	-84.175686	No	PEM	0.02	11	1
5-B	40.84182	-84.17609	No	PEM	0.00	29	1
5-C	40.84106	-84.17609	No	PSS	0.00	29	1
Total:					10.710		

## APPENDIX G SITE PHOTOS



#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 1-A PFO (North)

Wetland 1-A PFO (East)



Wetland 1-A PFO (South)

Wetland 1-A PFO (West)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### **Site Location:** Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-B PFO (North)

Wetland 1-B PFO (East)



Wetland 1-B PFO (South)

Wetland 1-B PFO (West)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH



Wetland 1-C PSS (North)

Wetland 1-C PSS (East)



Wetland 1-C PSS (South)

Wetland 1-C PSS (West)

## **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH



Wetland 1-D PSS (North)

Wetland 1-D PSS (East)



Wetland 1-D PSS (South)

Wetland 1-D PSS (West)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### **Site Location:** Allen and Putnam Cos., OH



Wetland 1-E PFO (North)

Wetland 1-E PFO (East)



Wetland 1-E PFO (South)

Wetland 1-E PFO (West)

## **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

Site Location: Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-F PEM (North)

Wetland 1-F PEM (East)



Wetland 1-F PEM (South)

Wetland 1-F PEM (West)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-G PEM (North)

Wetland 1-G PEM (East)



Wetland 1-G PEM (South)

Wetland 1-G PEM (West)

#### Client/Site Name:

AEP Lima to Fort Wayne 138 kV Rebuild Project

Site Location: Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-H PEM (North)



Wetland 1-H PEM (East)



Wetland 1-H PEM (South)



Wetland 1-H PEM (West)

## **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-I PEM (North)

Wetland 1-I PEM (East)



Wetland 1-I PEM (South)

Wetland 1-I PEM (West)

## **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

# Site Location:ProAllen and Putnam Cos., OH

Project #: 1730



Wetland 1-J PEM (North)

Wetland 1-J PEM (East)



Wetland 1-J PEM (South)

Wetland 1-J PEM (West)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH



Wetland 1-K PSS (North)

Wetland 1-K PSS (East)





Wetland 1-K PSS (South)

Wetland 1-K PSS (West)

## Client/Site Name:

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH



Wetland 1-L PEM (North)

Wetland 1-L PEM (East)



Wetland 1-L PEM (South)

Wetland 1-L PEM (West)

#### Client/Site Name:

AEP Lima to Fort Wayne 138 kV Rebuild Project

### Site Location: Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-M PSS (North)

Wetland 1-M PSS (East)



Wetland 1-M PSS (South)

Wetland 1-M PSS (West)

### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH



Wetland 1-N PSS (North)

Wetland 1-N PSS (East)



Wetland 1-N PSS (South)

Wetland 1-N PSS (West)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-O PEM (North)

Wetland 1-O PEM (East)



Wetland 1-O PEM (South)

Wetland 1-O PEM (West)

## **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH



Wetland 1-P PEM (North)

Wetland 1-P PEM (East)



Wetland 1-P PEM (South)

Wetland 1-P PEM (West)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 1-Q PEM (North)

Wetland 1-Q PEM (East)



Wetland 1-Q PEM (South)

Wetland 1-Q PEM (West)

## **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

Site Location: Allen and Putnam Cos., OH Project #: 1730



Wetland 1-R PEM (North)

Wetland 1-R PEM (East)



Wetland 1-R PEM (South)

Wetland 1-R PEM (West)
# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

# **Site Location:** Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-S PEM (North)

Wetland 1-S PEM (East)



Wetland 1-S PEM (South)

Wetland 1-S PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

# **Site Location:** Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-T PEM (North)

Wetland 1-T PEM (East)



Wetland 1-T PEM (South)

Wetland 1-T PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 1-U PEM (North)

Wetland 1-U PEM (East)



Wetland 1-U PEM (South)

Wetland 1-U PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

Site Location: Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-V PEM (North)

Wetland 1-V PEM (East)



Wetland 1-V PEM (South)

Wetland 1-V PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

# **Site Location:** Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-W PEM (North)

Wetland 1-W PEM (East)



Wetland 1-W PEM (South)

Wetland 1-W PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

# **Site Location:** Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-X PEM (North)

Wetland 1-X PEM (East)



Wetland 1-X PEM (South)

Wetland 1-X PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

# **Site Location:** Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-Y PEM (North)

Wetland 1-Y PEM (East)



Wetland 1-Y PEM (South)

Wetland 1-Y PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 1-Z PEM (North)

Wetland 1-Z PEM (East)



Wetland 1-Z PEM (South)

Wetland 1-Z PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 1-AA PEM (North)

Wetland 1-AA PEM (East)



Wetland 1-AA PEM (South)

Wetland 1-AA PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

## **Site Location:** Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-AB PEM (North)

Wetland 1-AB PEM (East)



Wetland 1-AB PEM (South)

Wetland 1-AB PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

# **Site Location:** Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-AC PEM (North)

Wetland 1-AC PEM (East)



Wetland 1-AC PEM (South)

Wetland 1-AC PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 1-AD PEM (North)

Wetland 1-AD PEM (East)



Wetland 1-AD PEM (South)

Wetland 1-AD PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 1-AE PEM (North)

Wetland 1-AE PEM (East)



Wetland 1-AE PEM (South)

Wetland 1-AE PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

Site Location: Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-AE PFO (North)

Wetland 1-AE PFO (East)



Wetland 1-AE PFO (South)

Wetland 1-AE PFO (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 1-AE PSS (North)

Wetland 1-AE PSS (East)



Wetland 1-AE PSS (South)

Wetland 1-AE PSS (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

Site Location: Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-AF PEM (North)

Wetland 1-AF PEM (East)



Wetland 1-AF PEM (South)

Wetland 1-AF PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

Site Location: Allen and Putnam Cos., OH Project #: 1730



Wetland 1-AG PEM (North)

Wetland 1-AG PEM (East)



Wetland 1-AG PEM (South)

Wetland 1-AG PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### **Site Location:** Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-AH PEM (North)

Wetland 1-AH PEM (East)



Wetland 1-AH PEM (South)

Wetland 1-AH PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

## Site Location: Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-AH PSS (North)

Wetland 1-AH PSS (East)







Wetland 1-AH PSS (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-AH PFO (North)



Wetland 1-AH PFO (East)



Wetland 1-AH PFO (South)



Wetland 1-AH PFO (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 1-AI PEM (North)

Wetland 1-AI PEM (East)



Wetland 1-AI PEM (South)

Wetland 1-AI PEM (West)

# Client/Site Name:

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 1-AJ PFO (North)

Wetland 1-AJ PFO (East)



Wetland 1-AJ PFO (South)

Wetland 1-AJ PFO (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

# Site Location: Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-AK PFO (North)

Wetland 1-AK PFO (East)



Wetland 1-AK PFO (South)

Wetland 1-AK PFO (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

## **Site Location:** Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-AL PEM (North)

Wetland 1-AL PEM (East)



Wetland 1-AL PEM (South)

Wetland 1-AL PEM (West)

## **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### **Site Location:** Allen and Putnam Cos., OH

Project #: 1730



Wetland 2-A PEM (North)

Wetland 2-A PEM (East)



Wetland 2-A PEM (South)

Wetland 2-A PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH

Project #: 1730



Wetland 2-B PEM (North)

Wetland 2-B PEM (East)



Wetland 2-B PEM (South)

Wetland 2-B PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

# **Site Location:** Allen and Putnam Cos., OH

Project #: 1730



Wetland 2-C PEM (North)

Wetland 2-C PEM (East)



Wetland 2-C PEM (South)

Wetland 2-C PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 2-D PEM (North)

Wetland 2-D PEM (East)



Wetland 2-D PEM (South)

Wetland 2-D PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH

Project #: 1730



Wetland 2-E PEM (North)

Wetland 2-E PEM (East)



Wetland 2-E PEM (South)

Wetland 2-E PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 2-F PEM (North)

Wetland 2-F PEM (East)



Wetland 2-F PEM (South)

Wetland 2-F PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH

Project #: 1730



Wetland 3-A PEM (North)

Wetland 3-A PEM (East)



Wetland 3-A PEM (South)

Wetland 3-A PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 4-A PEM (North)

Wetland 4-A PEM (East)



Wetland 4-A PEM (South)

Wetland 4-A PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 4-B PEM (North)

Wetland 4-B PEM (East)



Wetland 4-B PEM (South)

Wetland 4-B PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 4-B PFO (North)

Wetland 4-B PFO (East)



Wetland 4-B PFO (South)

Wetland 4-B PFO (West)

## Client/Site Name:

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 4-C PEM (North)

Wetland 4-C PEM (East)



Wetland 4-C PEM (South)

Wetland 4-C PEM (West)

## **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

Site Location: Allen and Putnam Cos., OH Project #: 1730



Wetland 4-D PFO (North)

Wetland 4-D PFO (East)



Wetland 4-D PFO (South)

Wetland 4-D PFO (West)
# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

Site Location: Allen and Putnam Cos., OH

Project #: 1730



Wetland 4-E PFO (North)

Wetland 4-E PFO (East)



Wetland 4-E PFO (South)

Wetland 4-E PFO (West)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 4-E PEM (North)

Wetland 4-E PEM (East)



Wetland 4-E PEM (South)

Wetland 4-E PEM (West)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### **Site Location:** Allen and Putnam Cos., OH

Project #: 1730



Wetland 4-F PEM (North)

Wetland 4-F PEM (East)



Wetland 4-F PEM (South)

Wetland 4-F PEM (West)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: F Allen and Putnam Cos., OH

Project #: 1730



Wetland 4-G PEM (North)

Wetland 4-G PEM (East)



Wetland 4-G PEM (South)

Wetland 4-G PEM (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH

Project #: 1730



Wetland 4-H PFO (North)

Wetland 4-H PFO (East)



Wetland 4-H PFO (South)

Wetland 4-H PFO (West)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 4-I PFO (North)

Wetland 4-I PFO (East)



Wetland 4-I PFO (South)

Wetland 4-I PFO (West)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

Site Location: Allen and Putnam Cos., OH Project #: 1730



Wetland 5-A PEM (North)

Wetland 5-A PEM (East)





Wetland 5-A PEM (South)

Wetland 5-A PEM (West)

#### Client/Site Name:

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 5-B PEM (North)

Wetland 5-B PEM (East)



Wetland 5-B PEM (South)

Wetland 5-B PEM (West)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

Site Location: Allen and Putnam Cos., OH Project #: 1730



Wetland 5-C PSS (North)

Wetland 5-C PSS (East)



Wetland 5-C PSS (South)

Wetland 5-C PSS (West)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 1-A PFO (Soil)



Wetland 1-B PFO (Soil)



Wetland 1-C PSS (Soil)

Wetland 1-D PSS (Soil)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 1-E PFO (Soil)

Wetland 1-F PEM (Soil)



Wetland 1-G PEM (Soil)

Wetland 1-I PEM (Soil)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-J PEM (Soil)

Wetland 1-K PSS (Soil)





Wetland 1-L PEM (Soil)

Wetland 1-M PSS (Soil)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-N PSS (Soil)

Wetland 1-O PEM (Soil)



Wetland 1-P PEM (Soil)



Wetland 1-Q PEM (Soil)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 1-R PEM (Soil)

Wetland 1-S PEM (Soil)





Wetland 1-T PEM (Soil)

Wetland 1-V PEM (Soil)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### **Site Location:** Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-H PEM (Soil)

Wetland 1-U PEM (Soil)



Wetland 1-W PEM (Soil)



Wetland 1-Z PEM (Soil)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-X PEM (Soil)

Wetland 1-Y PEM (Soil)



Wetland 1-AC PEM (Soil)



Wetland 1-AE PEM (Soil)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 1-AE PFO (Soil)

Wetland 1-AE PSS (Soil)



Wetland 1-AF PEM (Soil)



Wetland 1-AG PEM (Soil)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-AH PEM (Soil)

Wetland 1-AH PSS (Soil)



Wetland 1-AH PFO (Soil)



Wetland 1-AI PEM (Soil)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 1-AJ PFO (Soil)



Wetland 1-AK PFO (Soil)



Wetland 1-AL PEM (Soil)



Wetland 2-A PEM (Soil)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

Site Location: Allen and Putnam Cos., OH

Project #: 1730



Wetland 1-AA PEM (Soil)



Wetland 1-AB PEM (Soil)



Wetland 1-AD PEM (Soil)



Wetland 1-AF PEM (Soil)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

Site Location: Allen and Putnam Cos., OH

Project #: 1730



Wetland 2-B PEM (Soil)



Wetland 2-C PEM (Soil)







Wetland 2-E PEM (Soil)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 2-F PEM (Soil)



Wetland 3-A PEM (Soil)



Wetland 4-A PEM (Soil)



Wetland 4-B PEM (Soil)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 4-B PFO (Soil)



Wetland 4-C PEM (Soil)



Wetland 4-D PFO (Soil)



Wetland 4-E PFO (Soil)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Wetland 4-E PEM (Soil)



Wetland 4-F PEM (Soil)



Wetland 4-G PEM (Soil)

Wetland 4-H PFO (Soil)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

Site Location: Allen and Putnam Cos., OH Project #: 1730



Wetland 4-I PFO (Soil)



Wetland 5-A PEM (Soil)



Wetland 5-B PEM (Soil)



Wetland 5-C PSS (Soil)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730







Upland 1-A





Upland 1-B/AL

Upland 1-B/AL

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

Site Location: F Allen and Putnam Cos., OH

Project #: 1730



Upland 1-C



Upland 1-C





Upland 1-D

Upland 1-D

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH

Project #: 1730







Upland 1-E





Upland 1-F

Upland 1-F

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

Site Location: Allen and Putnam Cos., OH Project #: 1730



Upland 1-G/H



Upland 1-G/H





Upland 1-I

Upland 1-I

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

# Site Location:Project #:Allen and Putnam Cos., OH1730



Upland 1-J



Upland 1-J





Upland 1-K/L

Upland 1-K/L

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH

Project #: 1730



Upland 1-M/N



Upland 1-M/N





Upland 1-O/R/S

Upland 1-O/R/S

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH

Project #: 1730



Upland 1-P/Q



Upland 1-P/Q





Upland 1-T/U

Upland 1-T/U

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

# Site Location:PrAllen and Putnam Cos., OH

Project #: 1730



Upland 1-V/W/X



Upland 1-V/W/X





Upland 1-Y

Upland 1-Y

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH

Project #: 1730



Upland 1-AA/Z



Upland 1-AA/Z





Upland 1-AB/AC

Upland 1-AB/AC

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

Site Location: Allen and Putnam Cos., OH

Project #: 1730



Upland 1-AD



Upland 1-AD





Upland 1-AE

Upland 1-AE

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH

Project #: 1730



Upland 1-AF/4-D



Upland 1-AF/4-D



Upland 1-AH/AI

Upland 1-AH/AI
#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Upland 1-AJ/AK



Upland 1-AJ/AK





Upland 2-A/B

Upland 2-A/B

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH

Project #: 1730



Upland 2-C



Upland 2-C





Upland 2-D/1-AG

Upland 2-D/1-AG

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Upland 2-E/F



Upland 2-E/F





Upland 3-A

Upland 3-A

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Upland 4-A/B/C



Upland 4-A/B/C





Upland 4-E

Upland 4-E

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

# Site Location:FAllen and Putnam Cos., OH

Project #: 1730







Upland 4-F





Upland 4-G/H

Upland 4-G/H

# Client/Site Name:

AEP Lima to Fort Wayne 138 kV Rebuild Project **Site Location:** Allen and Putnam Cos., OH Project #: 1730



Upland 4-I



Upland 4-I





Upland 5-A

Upland 5-A

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

Site Location: Allen and Putnam Cos., OH

Project #: 1730



Upland 5-B/C



Upland 5-B/C





Upland 1-SP-001

Upland 1-SP-001

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

# Site Location:PrAllen and Putnam Cos., OH

Project #: 1730



Upland 1-SP-002



Upland 1-SP-002





Upland 1-SP-003

Upland 1-SP-003

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

# Site Location:PAllen and Putnam Cos., OH



Upland 1-SP-004



Upland 1-SP-004





Upland 1-SP-005

Upland 1-SP-005

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH



Upland 1-SP-006



Upland 1-SP-006



Upland 1-SP-007



Upland 1-SP-007

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

# Site Location: Allen and Putnam Cos., OH

Project #: 1730



Upland 1-SP-008



Upland 1-SP-008





Upland 1-SP-009

Upland 1-SP-009

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Upland 1-SP-010



Upland 1-SP-010





Upland 3-SP-001

Upland 3-SP-001

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### **Site Location:** Allen and Putnam Cos., OH

Project #: 1730



Upland 5-SP-006



Upland 5-SP-006



Upland 5-SP-007

Upland 5-SP-007

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

# Site Location: Allen and Putnam Cos., OH

Project #: 1730





Upland 5-SP-008

Upland 5-SP-008

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

# Site Location:FAllen and Putnam Cos., OH



Stream 1-001 (Upstream)

Stream 1-001 (Downstream)





Stream 1-001 (Substrate)

Stream 1-002 (Upstream)

#### Client/Site Name:

AEP Lima to Fort Wayne 138 kV Rebuild Project

Site Location: Allen and Putnam Cos., OH



Stream 1-002 (Downstream)

Stream 1-002 (Substrate)



Stream 1-003 (Upstream)

Stream 1-003 (Downstream)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH

Project #: 1730



Stream 1-003 (Substrate)

Stream 1-004 (Upstream)



Stream 1-004 (Downstream)

Stream 1-004 (Substrate)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

# Site Location:ProAllen and Putnam Cos., OH

Project #: 1730



Stream 1-005 (Upstream)

Stream 1-005 (Downstream)



Stream 1-005 (Substrate)

Stream 1-006 (Upstream)

#### Client/Site Name:

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH



Stream 1-006 (Downstream)

Stream 1-006 (Substrate)



Stream 1-007 (Upstream)

Stream 1-007 (Downstream)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

# Site Location:PrAllen and Putnam Cos., OH



Stream 1-007 (Substrate)



Stream 1-008 (Upstream)





Stream 1-008 (Downstream)

Stream 1-008 (Substrate)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

Site Location: Allen and Putnam Cos., OH Project #: 1730



Stream 1-009 (Upstream)

Stream 1-009 (Downstream)



Stream 1-009 (Substrate)

Stream 1-010 (Upstream)

#### Client/Site Name:

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### **Site Location:** Allen and Putnam Cos., OH



Stream 1-010 (Downstream)

Stream 1-010 (Substrate)



Stream 1-011 (Upstream)

Stream 1-011 (Downstream)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: I Allen and Putnam Cos., OH

Project #: 1730



Stream 1-011 (Substrate)

Stream 1-012 (Upstream)



Stream 1-012 (Downstream)

Stream 1-012 (Substrate)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

# Site Location: Allen and Putnam Cos., OH



Stream 1-013 (Upstream)

Stream 1-013 (Downstream)





Stream 1-013 (Substrate)

Stream 1-014 (Upstream)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH



Stream 1-014 (Downstream)

Stream 1-014 (Substrate)



Stream 1-015 (Upstream)

Stream 1-015 (Downstream)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

Site Location: Allen and Putnam Cos., OH



Stream 1-015 (Substrate)

Stream 1-016 (Upstream)



Stream 1-016 (Downstream)

Stream 1-016 (Substrate)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH



Stream 1-017 (Upstream)

Stream 1-017 (Downstream)



Stream 1-017 (Substrate)

Stream 1-018 (Upstream)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH Project #: 1730



Stream 1-018 (Downstream)

Stream 1-018 (Substrate)



Stream 1-019 (Upstream)

Stream 1-019 (Downstream)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

# Site Location:PrAllen and Putnam Cos., OH



Stream 1-019 (Substrate)

Stream 2-001 (Upstream)



Stream 2-001 (Downstream)

Stream 2-001 (Substrate)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH

Project #: 1730



Stream 2-002 (Upstream)

Stream 2-002 (Downstream)





Stream 2-002 (Substrate)

Stream 2-003 (Upstream)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH



Stream 2-003 (Downstream)

Stream 2-003 (Substrate)



Stream 2-004 (Upstream)

Stream 2-004 (Downstream)

#### **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

**Site Location:** Allen and Putnam Cos., OH



Stream 2-004 (Substrate)

Stream 4-001 (Upstream))





Stream 4-001 (Downstream)

Stream 4-001 (Substrate)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

Site Location: Allen and Putnam Cos., OH



Stream 4-002 (Upstream)

Stream 4-002 (Downstream)





Stream 4-002 (Substrate)

Stream 5-001 (Upstream)

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

#### Site Location: Allen and Putnam Cos., OH

Project #: 1730



Stream 5-001 (Downstream)

Stream 5-001 (Substrate)





Pond 1-P-001

Pond 1-P-002

# **Client/Site Name:**

AEP Lima to Fort Wayne 138 kV Rebuild Project

# Site Location:PrAllen and Putnam Cos., OH

Project #: 1730





Pond 1-P-002

Pond 1-P-002

APPENDIX H WETLAND AND STREAM DATASHEETS


Project/Site: AEP North Delphos - Rockhil	I City	/County: Fort Jenning	<sub>s</sub> / Putnam	_ Sampling Date: 2021-06-28
Applicant/Owner: AEP			<sub>State:</sub> Ohio	Sampling Point: 1-A
Investigator(s): J. Holmes E. Wilson	Se	tion, Township, Range:	S005, T002,	R005
Landform (hillslope, terrace, etc.): Depression	Local	elief (concave, convex, no	one): Concave	Slope (%): 2
Subregion (I RR or MI RA): A	Lat: 40.894800	Long: <b>-8</b> 4	4.305147	Datum: WGS 84
Soil Map Unit Name: So			NWI classifi	ication: PFO1C
Are climatic / bydrologic conditions on the site to	voical for this time of year?	Yes V No	(If no, explain in l	Remarks )
Are Vegetation Soil or Hydrologic	av significantly dis	urbod? Aro "Norm	(if fic, explain if i	procent? Voc 🖌 No
Are vegetation, Sol, or Hydrolog	gy significantly dis	urbed? Are Norma		
Are Vegetation, Soil, or Hydrolog	gy naturally proble	matic? (If needed,	explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS - Attach	site map showing sa	mpling point locati	ons, transect	s, important features, etc.
Hydrophytic Vagatation Procent?		Is the Sampled Area		
Hydric Soil Present? Yes	<u> </u>	within a Wetland?	Yes 🔽	No
Wetland Hydrology Present? Yes	✓ No	If ves ontional Wetlan	d Site ID:	
Dementer (Europia elternetive recordures her				
Wetland Hydrology Indicators:			Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of one is required	t check all that apply)		Surface Soi	Cracks (B6)
Surface Water (A1)	Water-Stained Lea	ves (B9)	Drainage Pa	atterns (B10)
High Water Table (A2)	Aquatic Fauna (B1	3)	Moss Trim I	Lines (B16)
Saturation (A3)	Marl Deposits (B15	)	Dry-Seasor	Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide (	Ddor (C1)	Crayfish Bu	rrows (C8)
Sediment Deposits (B2)	Oxidized Rhizosph	eres on Living Roots (C3)	Saturation \	/is ble on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduc	ed Iron (C4)	Stunted or S	Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduct	tion in Tilled Soils (C6)	Geomorphic	c Position (D2)
Iron Deposits (B5)	Thin Muck Surface	(C7)	Shallow Aq	uitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in R	emarks)	Microtopogi	raphic Relief (D4)
Eield Observations:	1			ai iesi (Do)
Field Observations.	Dopth (inchas):			
Water Table Present? Yes No	Depth (inches):			
Saturation Present? Yes No	Depth (inches)	Wetland	Hydrology Prese	nt? Yes 🖌 No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

#### Remarks:

Multiple wetland hydrology indicators were present at the time of sampling.

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft r</u> )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1. Celtis occidentalis	20	<u> </u>	FAC	That Are OBL, FACW, or FAC: $5$ (A)
2. Ulmus americana	10	<u> </u>	FACW	Total Number of Dominant
3. Acer negundo	5		FAC	Species Across All Strata: <u>5</u> (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	35%	= Total Cov	/er	OBL species 0 x 1 = 0
Sapling/Shrub Stratum (Plot size: 15 ft r )				FACW species $55$ x 2 = $110$
1. Acer negundo	5	~	FAC	FAC species <u>45</u> x 3 = <u>135</u>
2. Celtis occidentalis	5	~	FAC	FACU species $0$ $x 4 = 0$
3				UPL species $\frac{0}{100}$ x 5 = $\frac{0}{245}$
0				Column Totals: 100 (A) 245 (B)
45				Prevalence Index = $B/A = 2.45$
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
/:	10%			✓ 2 - Dominance Test is >50%
<b>E f t r</b>	10 %	= I otal Cov	/er	✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
Herb Stratum (Plot size: 511)	40			4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Sanicula odorata	10			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Verbeeine elternifelie				
4			FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5.				Definitions of Vogetation Strata:
6.				Deminions of Vegetation Strata.
7				<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter
8				a breast height (bbh), regardless of height.
0				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
5				
				<b>Herb</b> – All nerbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
				Woody vines All woody vines greater than 3.28 ft in
12				height.
00 (	55%	= Total Cov	/er	
Woody Vine Stratum (Plot size: 30 ft r )				
1				
2		. <u> </u>		
3		·		Hydrophytic
4				Vegetation Present? Yes V No
		= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate	sheet.)			
A preponderance of hydrophytic veg	getatior	n is pres	sent.	
		•		

SOIL	
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Profile Desc	cription: (Describe	to the dep	oth needed to docur	nent the i	ndicator	or confirm	the absence of indica	tors.)	
Depth	Matrix	0/	Redo	x Feature	S Trum a <sup>1</sup>	1 2	Tautura	Demerica	
<u>(incnes)</u> 0 - 5	10YR 3/1	100	Color (moist)	%	<u> </u>	LOC	Silt Loam	Remarks	
5 - 20	10YR 4/2	95	10YR 5/6	5	С	M	Silt Loam		
		·							
		·							
		·					·		
		·							
		·							
		·					·		
		·					··		
		·		<u> </u>					
		·		<u></u>					
$\frac{-}{1}$		lation BM	- Roduced Metrix M		- Cr		<sup>2</sup> Logotion: DL-Dor	a Lining M-Matrix	
Hydric Soil	Indicators:						Indicators for Probl	ematic Hydric Soils <sup>3</sup> :	
Histosol	(A1)		Polyvalue Belov	w Surface	(S8) ( <b>LRI</b>	RR,	2 cm Muck (A10	) (LRR K, L, MLRA 149B)	
Histic Ep Black Hi	oipedon (A2) istic (A3)		MLRA 149B) Thin Dark Surfa	) ace (S9) ( <b>I</b>	RR R. M	LRA 149B)	Coast Prairie Re	dox (A16) ( <b>LRR K, L, R</b> ) it or Peat (S3) ( <b>LRR K, L, R</b> )	
Hydroge	en Sulfide (A4)		Loamy Mucky N	Aineral (F	1) ( <b>LRR K</b>	, L)	Dark Surface (S7) (LRR K, L)		
Stratified	d Layers (A5) d Balaw Dark Surfaa	o (A11)	Loamy Gleyed	Matrix (F2	2)		Polyvalue Below	Surface (S8) (LRR K, L)	
Thick Da	ark Surface (A12)	e (ATT)	Redox Dark Su	rface (F6)			Iron-Manganese	Masses (F12) (LRR K, L, R)	
Sandy M	lucky Mineral (S1)		Depleted Dark \$	Surface (F	7)		Piedmont Flood	blain Soils (F19) ( <b>MLRA 149B</b> )	
Sandy G	Bleyed Matrix (S4)		Redox Depress	ions (F8)			Mesic Spodic (T.	A6) ( <b>MLRA 144A, 145, 149B</b> )	
Sandy R Stripped	I Matrix (S6)						Very Shallow Dark Surface (TF12)		
Dark Su	rface (S7) (LRR R, N	/LRA 1491	<b>B</b> )				Other (Explain in	n Remarks)	
<sup>3</sup> Indicators of	f hydrophytic vegetat	tion and we	etland hydrology mus	st be prese	ent, unles	s disturbed	or problematic.		
Restrictive I	Layer (if observed):								
Type:							Hydric Soil Present?		
Depth (ind Remarks:	ches):								
	nrofile meet	s tha c	ritoria for hav	vina a	donloi	od ma	triv		
1110 301	prome meet.	s the c		ang a	ucpici	eu ma			

Project/Site: AEP North Delphos - Rockhill	City/County: Fort Jennings/	Putnam <sub>Sa</sub>	mpling Date: 20	21-06-2	28
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-A UPL	-
Investigator(s): J. Holmes E. Wilson	Section, Township, Range:	S005, T002, R0	005		
Landform (hillslope, terrace, etc.): Upland, Flat	ocal relief (concave, convex, none)	: None	Slope	(%): <u>1</u>	
Subregion (LRR or MLRA): Lat: 40.894814	Long: -84.3	04987	Datum:	WGS 84	1
Soil Map Unit Name: So		NWI classificatio	n: PFO1C		
Are climatic / hydrologic conditions on the site typical for this time of y	ear?YesNo (If	no, explain in Rema	arks.)		
Are Vegetation, Soil, or Hydrology significantly	/ disturbed? Are "Normal C	ircumstances" pres	ent? Yes	No	~
Are Vegetation, Soil, or Hydrology naturally p	oblematic? (If needed, exp	olain any answers in	n Remarks.)		

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No <u>v</u> No <u>v</u> No <u>v</u>	Is the Sampled Area within a Wetland? Yes No If yes, optional Wetland Site ID:
Remarks: (Explain alternative proced	dures here or in a	a separate report.)	
Flat bank outside wetla	nd.		

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)       Water-Stained Leaves (B9)         High Water Table (A2)       Aquatic Fauna (B13)         Saturation (A3)       Marl Deposits (B15)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living         Drift Deposits (B3)       Presence of Reduced Iron (C4)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled So         Iron Deposits (B5)       Thin Muck Surface (C7)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)         Sparsely Vegetated Concave Surface (B8)       Sparsely Vegetated Concave Surface (B8)				
Field Observations:				
Surface Water Present? Yes No 🖌 Depth (inches):				
Water Table Present? Yes No 🖌 Depth (inches):				
Saturation Present? Yes No <u>&lt;</u> Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:			
Remarks:				
No primary and or secondary wetland hydrology indica sampling	tors were present at the time of			

Tree Charter (Plat size: 30 ft r	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft f</u> )	% Cover	<u>Species</u> ?	Status	Number of Dominant Species
1			·	That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>2</u> (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 50 (A/B)
6				Prevalence Index worksheet:
7			·	Total % Cover of: Multiply by:
		= Total Co	ver	OBL species 0 x 1 = 0
Sapling/Shrub Stratum (Plot size: 15 ft r )				FACW species $55$ $x_2 = 110$
1.				FAC species $0   x 3 = 0$
2				FACU species $40$ x 4 = $160$
Z			·	UPL species $0   x 5 = 0$
3				Column Totals: <u>95</u> (A) <u>270</u> (B)
4				2.8
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
		Tetal Ca		2 - Dominance Test is >50%
E ft r			ver	3 - Prevalence Index is ≤3.0 <sup>1</sup>
Herb Stratum (Plot size: 51(1))				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
1. Phalaris arundinacea	55	~	FACW	data in Remarks or on a separate sheet)
2. Phleum pratense	25	~	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3. Ipomoea purpurea	15		FACU	1
4.				Indicators of hydric soil and wetland hydrology must
			·	
				Definitions of Vegetation Strata:
6			·	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10.				Herb – All berbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
···				Weedy vince All weedy vince greater than 2.28 ft in
12			·	height.
	95%	= Total Co	ver	
Woody Vine Stratum (Plot size: 30 ft r )				
1				
2.				
3				Underschaffe
				Vegetation
4			·	Present? Yes No V
		= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			

Profile Desc	ription: (Describe	to the depth	needed to docur	ment the i	ndicator	or confirm	n the absence of in	dicators.)	
Depth	Matrix		Redo	x Feature	s				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remark	(S
0 - 20	10YR 4/3	100					Silt Loam		
-									
							·		
_									
-									
·		- <u> </u>					······································		
-									
-									
							·		
-									
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM=R	educed Matrix, M	S=Masked	Sand Gr	ains.	<sup>2</sup> Location: PL=	=Pore Lining, M=N	Matrix.
Hydric Soil I	ndicators:						Indicators for P	roblematic Hydr	ric Soils <sup>3</sup> :
Histosol	(A1)	_	Polyvalue Belo	w Surface	(S8) (LRI	RR,	2 cm Muck	(A10) ( <b>LRR K, L,</b>	MLRA 149B)
Histic Ep	pipedon (A2)		MLRA 149B	)			Coast Prairi	e Redox (A16) (L	.RR K, L, R)
Black Hi	stic (A3)	—	_ Thin Dark Suffa	ace (S9) (L		LRA 149B) (	) 5 cm Mucky	Peat or Peat (S3	3) (LRR K, L, R)
Hydroge Stratified	n Suinde (A4)		Loamy Mucky I Loamy Gleved	Matrix (F2	1) ( <b>LKK K</b> 1)	., L)	Dark Surrac	e (S7) (LRR K, L	
Oralined	Below Dark Surfac	e (A11)	Depleted Matrix	(F3)	.)		Thin Dark S	urface (S9) (I RR	
Thick Da	ark Surface (A12)	o (/ (/ / )	Redox Dark Su	rface (F6)			Iron-Mangar	nese Masses (F1)	2) (LRR K. L. R)
Sandy M	lucky Mineral (S1)	_	Depleted Dark	Surface (F	7)		Piedmont Fl	oodplain Soils (F	19) ( <b>MLRA 149B</b> )
Sandy G	leyed Matrix (S4)	_	_ Redox Depress	sions (F8)			Mesic Spod	ic (TA6) ( <b>MLRA 1</b>	44A, 145, 149B)
Sandy R	edox (S5)						Red Parent	Material (F21)	
Stripped	Matrix (S6)						Very Shallov	N Dark Surface (7	TF12)
Dark Su	rface (S7) (LRR R, N	<b>ILRA 149B</b> )					Other (Expla	ain in Remarks)	
<sup>3</sup> Indiantora of	budrophutia vogata	tion and water	nd hydrology my	at he proc	ont unlock	a diaturbad	l or problematic		
Restrictive I	aver (if observed):		ina nyarology mu:	st be prese	ent, unies:	saisturbea	i or problematic.		
Turner	Layer (il observeu).								
Type.							Undria Sail Drea	ant2 Vac	
Depth (inc	ches):						Hydric Soli Pres	ent? res	NO
Remarks:									
The soil	profile does	not mee	t the criteri	ia for a	nv hv	dric so	il indicators		
1110 001							in interest of e		

Project/Site: 1730 AEP North Delphos - Rockhill Delineation Citv/C	ounty: Fort Jennings/ Putnam Sampling Date: 2021-06-29
Applicant/Owner: AEP	State: Ohio Sampling Point: 1-B
Investigator(s): E. Wilson, J. Holmes	S004, T002, R005
Lendform (hillolone terrace etc.), Floodplain	$\frac{1}{1000}$ ( $\frac{1}{1000}$ ), $\frac{1}{1000}$
Subregion (LRR or MLRA): <u>L 99</u> Lat: <u>40.8924511</u>	Long: <u>-84.2946921</u> Datum: <u>WG5 84</u>
Soil Map Unit Name: So	NWI classification: PFO1A
Are climatic / hydrologic conditions on the site typical for this time of year? $\ \ Y$	es No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly distur	bed? Are "Normal Circumstances" present? Yes <u>/</u> No
Are Vegetation, Soil, or Hydrology naturally problema	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects, important features, etc.
	Is the Sampled Area
Hydroc Soil Present? Yes V No	within a Wetland? Yes 🖌 No
Wetland Hydrology Present? Yes V No	If ves, ontional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
PFO wetland that abuts to large perennial strea	im (Augiaize River).
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves	s (B9)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odd	or (C1) Crayfish Burrows (C8)
Sediment Deposits (B2)	es on Living Roots (C3) Saturation Vis ble on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced	Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction	n in Tilled Soils (C6) <u> Geomorphic Position (D2)</u>
Iron Deposits (B5) In Muck Surface (C	(7) Shallow Aquitard (D3)
Sparsely Vegetated Concave Surface (B8)	✓ Microlopographic Relier (D4)
Field Observations:	
Surface Water Present? Ves No V Depth (inches):	
Water Table Present? Vec No Pepth (inches):	
Saturation Present? Ves No V Depth (inches):	Wetland Hydrology Present? Yes 🗸 No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre-	vious inspections), if available:
Remarks:	
Hydrology indicators are present.	

\_\_\_\_\_

T 0	Absolute	Dominant	Indicator	Dominance Test worksheet:
Acer pequado	<u>% Cover</u> 15	<u>Species</u> ?	<u>Status</u>	Number of Dominant Species
	10		EAC	That Are OBL, FACW, or FAC: / (A)
2. Centis occidentalis	10			Total Number of Dominant
	<u> </u>			Species Across All Strata: _/ (B)
4. Quercus macrocarpa	5		FACU	Percent of Dominant Species
5				
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	40%	= Total Cov	ver	OBL species $\frac{10}{22}$ x 1 = $\frac{10}{122}$
Sapling/Shrub Stratum (Plot size: 15 ft r )				FACW species $\frac{60}{100}$ x 2 = $\frac{120}{100}$
1. Acer negundo	10	~	FAC	FAC species $\frac{40}{5}$ $x_3 = \frac{120}{20}$
2. Platanus occidentalis	5	~	FACW	FACU species $5$ $x 4 = 20$
3.				UPL species $0$ $x 5 = 0$
4				Column Totals: $(A) = (A) = (B)$
5				Prevalence Index = $B/A = 2.3$
		·		Hydrophytic Vegetation Indicators:
o				1 - Rapid Test for Hydrophytic Vegetation
7	15%			✓ 2 - Dominance Test is >50%
5.4 -	15%	= Total Cov	/er	✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
Herb Stratum (Plot size: 5 ft r )				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
1. Verbesina alternifolia	20	<u> </u>	FACW	data in Remarks or on a separate sheet)
2. <u>Solidago gigantea</u>	15	<ul> <li>✓</li> </ul>	FACW	Problematic Hydrophytic Vegetation' (Explain)
3. Boehmeria cylindrica	10		OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. Carex grayi	10		FACW	be present, unless disturbed or problematic.
5. Toxicodendron radicans	5		FAC	Definitions of Vegetation Strata:
6				
7				at breast height (DBH), regardless of height.
8.				Sanling/abruh Weady plants loss than 2 in DPH
9.				and greater than or equal to 3.28 ft (1 m) tall.
10.				Herb - All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
10		·	·	Woody vines – All woody vines greater than 3.28 ft in
12	60%			height.
20 ft r	0070		/er	
Woody Vine Stratum (Plot size: 30 rth )				
1				
2				
3		. <u></u>		Hydrophytic
4			. <u></u>	Present? Yes <u>V</u> No
		= Total Cov	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			
Hydrophytic vegetation is present				

SOIL	
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Profile Desc	ription: (Describe	to the dep	oth needed to docur	nent the	indicator	or confirm	the absence	of indicators.)
Depth (in shas)	Matrix	0/	Redo	x Featur	es Turne <sup>1</sup>	L a a <sup>2</sup>	Tautuna	Demeric
(incnes)		<u>%</u>						Remarks
0 - 20	7.5YR 3/2	92	10YR 4/4	8	<u> </u>	IVI	Sandy Clay	
-								
						. <u> </u>		
						·		
				·		·		
-								
_								
				·				
-						<u> </u>		
-								
						·		
<sup>1</sup> Turne: C-C		lation PM	-Reduced Matrix M				<sup>2</sup> l contion	- DL-Doro Liping M-Motrix
Hydric Soil	Indicators:			S=IVIASKE	u Sanu Gi	aii 15.	Indicators	for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Polyvalue Belov	w Surfac	e (S8) ( <b>LR</b>	R R,	2 cm N	/luck (A10) ( <b>LRR K, L, MLRA 149B</b> )
Histic Er	pipedon (A2)		MLRA 149B				Coast	Prairie Redox (A16) (LRR K, L, R)
Black Hi	stic (A3)		Thin Dark Surfa	ice (S9)	(LRR R, M	LRA 149B)	5 cm N	Aucky Peat or Peat (S3) (LRR K, L, R)
Hydroge Stratifie	n Suinde (A4)		Loamy Mucky Mucky	/iinerai (r Matrix (F	-1) ( <b>LRR r</b> 2)	<b>Λ, L</b> )	Dark S Polyva	lue Below Surface (S8) (I RR K. I.)
Depleter	d Below Dark Surfac	e (A11)	<ul> <li>Depleted Matrix</li> </ul>	(F3)	_)		Thin D	ark Surface (S9) (LRR K, L)
Thick Da	ark Surface (A12)		Redox Dark Su	rface (F6	5)		Iron-M	anganese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)		Depleted Dark	Surface (	(F7)		Piedmo	ont Floodplain Soils (F19) ( <b>MLRA 149B</b> )
Sandy G	Bleyed Matrix (S4)		Redox Depress	ions (F8)	)		Mesic	Spodic (TA6) ( <b>MLRA 144A, 145, 149B</b> )
Sanuy P	Matrix (S6)						Verv S	hallow Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, M	MLRA 149	<b>B</b> )				Other (	(Explain in Remarks)
<sup>3</sup> Indicators of	f hydrophytic vegeta	tion and w	etland hydrology mus	st be pres	sent, unles	s disturbed	or problematio	<u>.</u>
	Layer (if observed): 'A							
Type: 14/	<u>A</u>						Uudria Sail	
Depth (in	ches):						Hydric Soll	
Remarks:								
Hydric s	oils are pres	ent						

Project/Site: AEP North Delphos - Rockhill		City/County:	Fort Jenni	ngs <b>/ Putnam</b>	_ Sampling Date: 2021-06-28
Applicant/Owner: AEP				State: Ohio	Sampling Point: 1-B/AL UPL
Investigator(s): J. Holmes E. Wilson		Section, Town	nship, Range	e: <b>S004, T</b>	002, R005
Landform (hillslope, terrace, etc.): Upland, Flat	Lo	ocal relief (cond	ave, convex	, none): None	Slope (%): <u>1</u>
Subregion (LRR or MLRA): L99	at: 40.892662		Long:	-84.294972	Datum: WGS 84
Soil Map Unit Name: <u>So</u>				NWI classifi	cation: N/A
Are climatic / hydrologic conditions on the site typical	for this time of y	rear? Yes	No	, (If no, explain in I	Remarks.)
Are Vegetation, Soil, or Hydrology	significantly	y disturbed?	Are "No	ormal Circumstances"	present? Yes No
Are Vegetation, Soil, or Hydrology	naturally p	roblematic?	(If need	ed, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site	map showing	g sampling	point loc	ations, transects	s, important features, etc.
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes Wetland Hydrology Present? Yes Remarks: (Explain alternative procedures here or in Flat existing row outside wetland	No No No n a separate repo No No No No No No No No No No No No No	Is the within If yes, ort.)	Sampled Ar a Wetland? optional We	rea ? Yes tland Site ID: th invasive sp	v Decies present.

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living	Roots (C3) Saturation Vis ble on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled S	oils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes No V Depth (inches):	
Saturation Present? Yes No V Depth (inches):	Wetland Hydrology Present? Yes No
Saturation Present? Yes No V Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	Wetland Hydrology Present?       Yes       No         ctions), if available:
Saturation Present? Yes No V Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Recorded Data (stream gauge, monitoring well, aerial photos, photogauge, monitoring well, aerial photogauge, mo	Wetland Hydrology Present? Yes No
Saturation Present?       Yes       No       ✓       Depth (inches):	Wetland Hydrology Present? Yes No
Saturation Present? Yes No Concern Depth (inches): Concern Con	Wetland Hydrology Present? Yes <u>No</u> ctions), if available:

## Sampling Point: <u>1-B/AL UPL</u>

Trop Stratum (Blot aize: 30 ft r )	Absolute	Dominan Species 2	t Indicator	Dominance Test worksheet:
1	% Cover	<u>Species</u> ?	Status	Number of Dominant Species
2			- <u></u>	That are OBL, FACW, of FAC: (A)
2				Total Number of Dominant Species Across All Strata: 2 (B)
3				
4				Percent of Dominant Species That Are OBL_FACW_or FAC: 50 (A/B)
5				
6				Prevalence Index worksheet:
7				Total % Cover of:Multiply by:
		= Total Co	over	OBL species $\frac{0}{55}$ $x = \frac{0}{110}$
Sapling/Shrub Stratum (Plot size: 15 ft r )				FACW species $\frac{55}{0}$ $x_2 = \frac{110}{0}$
1				FAC species $0$ $x_3 = 0$
2				FACU species $43$ $x = 100$
3				$\begin{array}{c} \text{UPL species}  \underline{0} \\ \text{Orbury Table}  \underline{100} \\ \text{Orbury Table}  \underline{100} \\ \text{Orbury Table}  \underline{100} \\ \text{Orbury Table}  \underline{100} \\ \text{Orbury Table} \\ \text{Orbury Table}  \underline{100} \\ \text{Orbury Table} \\ Orbury$
4.				Column Totals: $(A)$ $(B)$
5			<u> </u>	Prevalence Index = $B/A = 2.9$
3				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7			·	2 - Dominance Test is >50%
		= Total Co	ver	$\checkmark$ 3 - Prevalence Index is $\leq 3.0^1$
Herb Stratum (Plot size: 5 ft r )				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
1. Phalaris arundinacea	55	~	FACW	data in Remarks or on a separate sheet)
2. Solidago canadensis	35	~	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3. Ipomoea purpurea	10		FACU	
4.				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5				
6				Definitions of vegetation Strata:
				<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter
/				at breast height (DBH), regardless of height.
8				<b>Sapling/shrub</b> – Woody plants less than 3 in. DBH
9		. <u></u>		and greater than or equal to 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12				<b>Woody vines</b> – All woody vines greater than 3.28 ft in
	100%	= Total Co	ver	neight.
Woody Vine Stratum (Plot size: 30 ft r )				
1.				
2			<u> </u>	
2			·	
				Hydropnytic Vegetation
4				Present? Yes Vo No
		= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			
A preponderance of hydrophytic veg	getatior	n is pre	sent.	

Profile Desc	ription: (Describe	to the depth	needed to docur	nent the i	ndicator	or confirn	m the absence of indicators.)	
Depth	Matrix		Redo	x Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture Remarks	
0 - 20	10YR 4/3	100					Silt Loam	
	· · ·							
-								
-								
				<u> </u>				
-								
				<u> </u>				
-								
				<u> </u>				
-								
				·				
-								
-								
-								
				<u> </u>				
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM=R	Reduced Matrix, MS	S=Maskec	Sand Gr	ains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.	
Hydric Soil I	ndicators:						Indicators for Problematic Hydric Soils <sup>3</sup> :	
Histosol	(A1)		Polvvalue Belov	w Surface	(S8) ( <b>LR</b>	R.	2 cm Muck (A10) (LRR K. L. MLRA 149B)	
Histic Er	vipedon (A2)		MLRA 149B		()(	,	Coast Prairie Redox (A16) (LRR K. L. R)	
Black His	stic (A3)		Thin Dark Surfa	, ice (S9) (I		I RA 149B	3) 5 cm Mucky Peat or Peat (S3) (I BR K. I. B	)
Hydroge	n Sulfide (A4)	_	Loamy Mucky M	/lineral (F	1) (I RR K		Dark Surface (S7) (I RR K. I.)	.)
Stratified			Loamy Gleved	Matrix (F2	') ( <b>E</b> IVIVI)	, –/	Polyvalue Below Surface (S8) (I RR K I)	
	Below Dark Surfac	o (A11)	Depleted Matrix	(F3)	)		Thin Dark Surface (S9) (I PR K I)	
Depleted	rk Surfood (A12)		_ Depieted Math	(13) rfaaa (E6)			Iron Mongonogo Moggoo (E12) (LBB K L B	<b>)</b>
	lik Sullace (A12)	_	_ Redux Dark Su	nace (FO) Surfage (F	-7)		IIOII-Marigariese Masses (F12) (LRR R, L, F	ג) מו
Sandy M	lucky Mineral (S1)		_ Depleted Dark :	Sunace (F	•7)			<b>9</b> B)
Sandy G	leyed Matrix (54)		_ Redox Depress	ions (F8)			Mesic Spoalc (1A6) (MLRA 144A, 145, 149	B)
Sandy R	edox (S5)						Red Parent Material (F21)	
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)	
Dark Su	face (S7) ( <b>LRR R, I</b>	<b>ILRA 149B</b> )					Other (Explain in Remarks)	
<sup>3</sup> Indicators of	hydrophytic vegeta	tion and wetla	and hydrology mus	st be prese	ent, unless	s disturbed	d or problematic.	
Restrictive L	ayer (if observed):							
Type:								
Danth (inc	<b>)</b> -						Hydric Soil Present? Yes No V	
Depth (Inc	nes):							_
Remarks:								
	profile doop	not moo	+ the oritori	o for o	ny hy	dria aa	ail indiantara	
The soli	prome does	not mee	et the chiten	a 101 a	IIIY IIY	une so		

Project/Site: 1730 AEP North Delphos - Rockhill Delineation City/Cour	nty: <b>Rimer/</b> Putnam Sampling Date: 2021-06-29
Applicant/Owner: AEP	State: Ohio Sampling Point: 1-C
Investigator(s): E. Wilson, J. Holmes	Townshin Bange: S013, T002, R005
Landform (hillologo torrago etc.): Depression	concerve convex none Stone (%): 0
Subregion (LRR or MLRA): L 99 Lat: 40.8080729	Long:04.2201099 Datum: _W03.04
Soil Map Unit Name: HtA	NWI classification: PFOTA/ PEMTA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed	? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic?	? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sample	ing point locations, transects, important features, etc.
Hydrophytic Vegetation Present?     Yes     V     No     Is       Hydric Soil Present?     Yes     V     No     with	the Sampled Area thin a Wetland? Yes _ ✔ No
Wetland Hydrology Present? Yes <u>Ves</u> No If	yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (E	39) <u> </u> Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres c	on Living Roots (C3) Saturation Vis ble on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iro	Tilled Sails (C6) Stunted or Stressed Plants (D1)
Algal Mat of Crust (B4) Recent from Reduction in Iron Doposits (B5) Thin Muck Surface (C7)	Theorem Solis (C6) Ceolifornic Position (D2)
Inundation Visible on Aerial Imagery (B7) Other (Evolution of Evolution Contract (Cr)	(s) V Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	✓ FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Cepth (inches):	
Water Table Present? Yes No V Depth (inches):	
Saturation Present? Yes No V Depth (inches):	Wetland Hydrology Present? Yes <u></u> No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previou	us inspections), if available:

Hydrology indicators are present.

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft r</u> )	<u>% Cover</u>	<u>Species?</u>	Status	Number of Dominant Species
1			·	That Are OBL, FACW, or FAC: 5 (A)
2			·	Total Number of Dominant
3				Species Across All Strata: 5 (B)
4				Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: <u>100</u> (A/B)
6				
7				Prevalence Index worksheet:
/			·	Total % Cover of: Multiply by:
45.6		= Total Co	ver	OBL species $10$ $x_1 = 10$ $140$
Sapling/Shrub Stratum (Plot size: 15 ft r )				FACW species $\frac{70}{25}$ $x^2 = \frac{140}{75}$
1. Fraxinus pennsylvanica	25	<ul> <li>✓</li> </ul>	FACW	FAC species $\frac{20}{5}$ $x_3 = \frac{70}{20}$
2. Acer saccharinum	10	~	FACW	FACU species $3$ $x = 20$
3. Cephalanthus occidentalis	10	~	OBL	UPL species $0$ $x = 0$ x = 245 (D)
4. Fraxinus americana	5		FACU	Column Totals: $(A) \xrightarrow{2+3} (B)$
··			·	Prevalence Index = $B/A = 2.2$
5			·	Hudronhytia Vagatatian Indiastora
6			·	1 Panid Test for Hydrophytic Vegetation
7	- <u> </u>		·	1 - Rapid Test for Hydrophytic Vegetation
	50%	= Total Co	ver	$\checkmark$ 2 - Dominance Test is >50%
Herb Stratum (Plot size: 5 ft r )				S - Prevalence index is 25.0
1. Carex cristatella	25	~	FACW	data in Remarks or on a separate sheet)
2. Euthamia graminifolia	20	~	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3 Lysimachia ciliata	10		FACW	
4 Toxicodendron radicans	5		FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
		-		be present, unless disturbed of problematic.
5			·	Definitions of Vegetation Strata:
6			·	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7			·	at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9			·	and greater than or equal to 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12.				Woody vines – All woody vines greater than 3.28 ft in
	60%	- Total Co	ver	height.
Weedy Vine Stratum (Plat aize: 30 ft r		- 1010100	VOI	
1			·	
2			·	
3				Hydrophytic
4			·	Vegetation Present? Yes V No
		= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			<u> </u>
Hydrophytic vegetation is present				

inches)	Matrix Color (moist)	%	Color (moist)	<u>ox Feature</u> %	<u>es</u> Type <sup>1</sup>	$loc^2$	Texture	Remarks	
0 - 20	10YR 3/2	90	10YR 6/6	10	<u></u>	PL / M	Clay Loam	Komano	
0 20	101110/2		10111070			,			
-						. <u></u>			
-									
-									
-		_		_					
-						·			
-									
-									
-									
-									
						·			
-									
ype: C=Co	ncentration, D=Dep	oletion, RM	I=Reduced Matrix, M	IS=Maske	d Sand Gr	ains.	<sup>2</sup> Location: P	L=Pore Lining, M=Matri	ix.
yaric Soli II	ndicators:		Debarelue Dela	Surface			Indicators for	Problematic Hydric S	
Histosol ( Histic En	(A1) ipedon (A2)		Polyvalue Beld	ow Surrace	e (58) (LR	κĸ,	Coast Pra	irie Redox (A16) (LRR h, L, MLR	K. L. R)
Black His	stic (A3)		Thin Dark Surf	., ace (S9) (	LRR R, M	LRA 149B)	5 cm Muc	ky Peat or Peat (S3) (LI	RR K, L, R
Hydroger	n Sulfide (A4)		Loamy Mucky	Mineral (F	1) (LRR 🖌	ί, L)	Dark Surfa	ace (S7) (LRR K, L)	
_ Stratified	Layers (A5)		Loamy Gleyed	Matrix (F	2)		Polyvalue	Below Surface (S8) (LF	RR K, L)
_ Depleted	Below Dark Surfac	ce (A11)	Depleted Matri	x (F3)	1		Thin Dark	Surface (S9) (LRR K, I	_) 
_ TRICK Da Sandy M	rk Surrace (A12)		Peoleted Dark St	Jnace (F6 Surface (	) F7)		Iron-Iviang	janese Masses (F12) (L Eloodolain Soils (F19) (	.κκ κ, l, f MI RΔ 140
Sandy G	leved Matrix (S4)		Redox Depres	sions (F8)			Mesic Spo	odic (TA6) ( <b>MLRA 144A</b>	, 145, 149
Sandy R	edox (S5)			( - )			Red Pare	nt Material (F21)	, -, -
_ Stripped	Matrix (S6)						Very Shal	low Dark Surface (TF12	2)
_ Dark Sur	face (S7) (LRR R, I	MLRA 149	<b>B</b> )				Other (Ex	plain in Remarks)	
ndicators of	hydrophytic vegeta	ation and w	etland hydrology mu	st be pres	sent unles	s disturbed	or problematic.		
estrictive L	ayer (if observed)	:		or 20 proc					
туре: <u>N//</u>	A								
Depth (inc	hes):						Hydric Soil Pro	esent? Yes 🖌	No
emarks:									
lui		<b>-</b>							
yaric se	olis are pres	ent.							
-									
-									
-									
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-									

Project/Site: 1730 AEP North Delphos - Rockhill Deline	eation City/County:	Rimer /	<sup>/</sup> Putnam	Sampling Date: 2021-06-29
Applicant/Owner: AEP			State: Ohio	Sampling Point: 1-C UPL
Investigator(s): E. Wilson, J. Holmes	Section, Towns	hip, Range:	S013, T0	002, R005
Landform (hillslope, terrace, etc.): Upland	Local relief (conca	ve, convex, no	<sub>ne):</sub> None	Slope (%): 0
Subregion (LRR or MLRA): <u>L 99</u> Lat: <u>40.80</u>	682056	Long:84	1.2272950	Datum: WGS 84
Soil Map Unit Name: <u>HtA</u>			NWI classific	cation: None
Are climatic / hydrologic conditions on the site typical for this ti	me of year? Yes	No	(If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology sign	nificantly disturbed?	Are "Norma	l Circumstances" p	oresent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology nat	urally problematic?	(If needed,	explain any answe	rs in Remarks.)
				in a stant fastures at

#### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No Yes No Yes No	Is the Sampled Area within a Wetland? Yes No If yes, optional Wetland Site ID:
Remarks: (Explain alternative proced	lures here or in a separate report	
Upland sample point for	PSS wetland 1-C.	

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living R	Roots (C3) Saturation Vis ble on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled So	ils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes No 🖌 Depth (inches):	
Saturation Present? Yes No 🖌 Depth (inches):	Wetland Hydrology Present? Yes No
Saturation Present? Yes No C Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Saturation Present?       Yes       No       ✓       Depth (inches):         (includes capillary fringe)	Wetland Hydrology Present?       Yes       No       ✓         ions), if available:
Saturation Present? Yes No Concern Depth (inches): Concern Con	Wetland Hydrology Present? Yes No
Saturation Present? Yes No Concern Depth (inches): Concern Con	Wetland Hydrology Present? Yes No
Saturation Present?       Yes       No       ✓       Depth (inches):         (includes capillary fringe)	Wetland Hydrology Present? Yes No <u>*</u>
Saturation Present? Yes No V Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect Remarks: Upland sample point for PSS wetland 1-C.	Wetland Hydrology Present? Yes No <u>*</u>
Saturation Present?       Yes No _ ✓ _ Depth (inches): (includes capillary fringe)         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect         Remarks:         Upland sample point for PSS wetland 1-C.	Wetland Hydrology Present? Yes No <u>✓</u>
Saturation Present?       Yes No _       Depth (inches):         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect         Remarks:       Upland sample point for PSS wetland 1-C.	Wetland Hydrology Present? Yes No
Saturation Present?       Yes No _ ✓ _ Depth (inches):         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect         Remarks:       Upland sample point for PSS wetland 1-C.	Wetland Hydrology Present? Yes No <u>*</u>
Saturation Present?       Yes No _ ✓ _ Depth (inches):         (includes capillary fringe)          Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect         Remarks:         Upland sample point for PSS wetland 1-C.	Wetland Hydrology Present? Yes No _ <
Saturation Present?       Yes No _ ✓ _ Depth (inches): (includes capillary fringe)         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect         Remarks:         Upland sample point for PSS wetland 1-C.	Wetland Hydrology Present? Yes No
Saturation Present? Yes No <u>v</u> Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect Remarks: Upland sample point for PSS wetland 1-C.	Wetland Hydrology Present? Yes No
Saturation Present? Yes No <u>v</u> Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect Remarks: Upland sample point for PSS wetland 1-C.	Wetland Hydrology Present? Yes No
Saturation Present? Yes No <u>v</u> Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect Remarks: Upland sample point for PSS wetland 1-C.	Wetland Hydrology Present? Yes No

Tree Stratum (Plot size: 30 ft r )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1	<u></u>	000000		Number of Dominant Species
·	<u></u>			That Are OBL, FACW, of FAC: (A)
3				Total Number of Dominant       Species Across All Strata:   (B)
4	·			Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
7				Prevalence Index worksheet:
/·	- <u> </u>			Total % Cover of: Multiply by:
45.6		= Total Co	ver	OBL species $0$ $x_1 = 0$
Sapling/Shrub Stratum (Plot size: 15 ft r )				FACW species $0$ $x 2 = 0$
1				FAC species $0$ $x^3 = 0$
2				FACU species $100$ $x 4 = 400$
3.				$\begin{array}{c} \text{UPL species}  \underline{0}  x  5 = \underline{0} \\ 100  x  5 = \underline{0} \\ 100 $
4	- <u></u>			Column Totals: $(A)$ $(A)$ $(B)$
5				Prevalence Index = $B/A = 4.0$
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
		- Total Co		2 - Dominance Test is >50%
light Organized (Distributed 5 ft r	·	- 10(a) 00	VEI	3 - Prevalence Index is ≤3.0 <sup>1</sup>
Herb Stratum (Plot size: 5101 )	40		FAOL	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
	40	V	FACU	data in Remarks or on a separate sheet)
2. Dipsacus laciniatus	25	~	FACU	Problematic Hydrophytic Vegetation' (Explain)
3. Rubus allegheniensis	20	~	FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. Rosa multiflora	15		FACU	be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				<b>Tree</b> – Woody plants 3 in (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sanling/shrub – Woody plants less than 3 in DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12				Woody vines – All woody vines greater than 3.28 ft in
	100%	= Total Co	ver	height.
Weedy Vine Stratum (Plot size: 30 ft r )		- 10101 00		
1				
2				
3				Hydrophytic
4				Vegetation Present? Yes No
		= Total Co	ver	
Remarks: (Include photo numbers here or on a separate s	sheet.)			
Upland sample point for PSS wetland	d 1-C.			

SOIL
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Profile Desc	ription: (Describe	to the dep	oth needed to docur	ment the	indicator	or confirn	n the absence of indicators.)	
Depth	Matrix		Redo	x Feature	S			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture Remarks	<u>.                                    </u>
0 - 8	10YR 4/2	100					Silt Loam	
8 - 20	10YR 5/2	95	10YR 5/6	5	С	М	Clay Loam	
-								
		<u> </u>						
				<u></u>		·		
					- <u> </u>			
-								
-						. <u> </u>		
					. <u> </u>			
					·			
-					. <u> </u>			
-								
-								
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, M	S=Masked	d Sand Gr	ains.	<sup>2</sup> Location: PL=Pore Lining, M=M	atrix.
Hydric Soil	Indicators:						Indicators for Problematic Hydrie	c Soils <sup>3</sup> :
Histosol	(A1)		Polyvalue Belov	w Surface	(S8) ( <b>LR</b>	R R,	2 cm Muck (A10) ( <b>LRR K, L, N</b>	<b>ILRA 149B</b> )
Histic Ep	oipedon (A2)		MLRA 149B)	)			Coast Prairie Redox (A16) (LR	(R K, L, R)
Black Hi	stic (A3)		Thin Dark Surfa	ace (S9) ( <b>I</b>	LRR R, M	LRA 149B	<li>5 cm Mucky Peat or Peat (S3)</li>	(LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Mucky M	Mineral (F	1) ( <b>LRR K</b>	Χ, L)	Dark Surface (S7) (LRR K, L)	
Stratified	d Layers (A5)		Loamy Gleyed	Matrix (F2	2)		Polyvalue Below Surface (S8)	(LRR K, L)
Depleted	d Below Dark Surfac	e (A11)	Depleted Matrix	k (F3)			Thin Dark Surface (S9) (LRR I	<b>K</b> , L)
Thick Da	ark Surface (A12)		✓ Redox Dark Su	rface (F6)			Iron-Manganese Masses (F12	) (LRR K, L, R)
Sandy M	lucky Mineral (S1)		Depleted Dark	Surface (F	=7)		Piedmont Floodplain Soils (F1	9) ( <b>MLRA 149B</b> )
Sandy G	Bleved Matrix (S4)		Redox Depress	sions (F8)	,		Mesic Spodic (TA6) (MLRA 14	4A. 145. 149B)
Sandy R	edox (S5)						Red Parent Material (E21)	,,,
Stripped	Matrix (S6)						Very Shallow Dark Surface (TE	-12)
Dark Su	rface (S7) (I PP P		B)				Other (Explain in Remarks)	12)
			D)					
<sup>3</sup> Indicators of	f hydrophytic vegeta	tion and w	etland hydrology mus	st be pres	ent, unles	s disturbed	d or problematic.	
Restrictive I	Layer (if observed):							
Type: 11/	<u>A</u>						Hydric Soil Procent? Voc V	No
Depth (ind	ches):							NO
Remarks.								
Hydric s	oils are pres	ent. Up	pland sample	point	for PS	S wet	and 1-C.	

Project/Site: AEP North Delphos - Ro	ockhill	City/County: Gomer/ Alle	n	Sampling Date: 2021-06-29
Applicant/Owner: AEP			<sub>State:</sub> Ohio	Sampling Point: 1-D
Investigator(s): J. Holmes E. Wilson		Section, Township, Range:	S020, T002,	R006
Landform (hillslope, terrace, etc.): Depre	ssion Lo	ocal relief (concave, convex, no	one): Concave	Slope (%): 3
Subregion (LRR or MLRA): A	Lat: 40.855717	Lona: <b>-8</b> 4	.198087	Datum: WGS 84
Soil Map Unit Name: SgC2			NWI classific	cation: N/A
Are climatic / hydrologic conditions on the	site typical for this time of y	ear? Yes 🖌 No	(If no, explain in R	emarks.)
Are Vegetation Soil or Hy	drology significantly	v disturbed? Are "Norma	Circumstances"	present? Ves 🖌 No
Are Vegetation, or h	udrology significanti	valstarbea: Are Norma		re in Demorte )
Are vegetation, Soli, or Hy	/drology naturally pr	oblematic? (If needed,	explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS - Atta	ach site map showing	g sampling point location	ons, transects	, important features, etc
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative procedure <b>Representative of a scruk</b>	Yes V Yes V Yes V No No es here or in a separate repo	If yes, optional Wetlan ort.)	Yes	No
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is re	equired; check all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)	Water-Stained	Leaves (B9)	Drainage Pa	tterns (B10)
High Water Table (A2)	Water Table (A2) Aquatic Fauna (B13)			Motor Table (C2)
Water Marks (B1)	Dry-Season	rows $(C8)$		
Sediment Deposits (B2)	Y Oxidized Rhiz	ospheres on Living Roots (C3)	Saturation V	is ble on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of R	educed Iron (C4)	Stunted or S	tressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron R	eduction in Tilled Soils (C6)	Geomorphic	Position (D2)
Iron Deposits (B5)	Thin Muck Su	face (C7)	Shallow Agu	itard (D3)

	Microtopographic Relief (D4)
~	FAC-Neutral Test (D5)

Wetland Hydrology Present? Yes

<u>·</u> 170	-si (D3)	

Surface Water Present?	Yes	No 🖌	Depth (inches):	
Water Table Present?	Yes	No 🖌	Depth (inches):	
Saturation Present?	Yes	No 🖌	Depth (inches):	
(includes capillary fringe)				
Describe Descrided Date (str	aom aouao	monitoring	all carial phatas r	rouic

\_\_\_ Inundation Visible on Aerial Imagery (B7)

Sparsely Vegetated Concave Surface (B8)

Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

#### Remarks:

Field Observations:

Multiple wetland hydrology indicators were present at the time of sampling.

\_\_\_\_ Other (Explain in Remarks)

No

Troo Stratum (Plot size: 30 ft r )	Absolute	Dominant	Indicator	Dominance Test worksheet:
	<u>/// Cover</u>	<u>-Species :</u>	<u>Status</u>	Number of Dominant Species That Are OBL EACIVL or EAC: $4$ (A)
2				That are OBL, FACW, of FAC. $\underline{-}$ (A)
3.				Total Number of Dominant Species Across All Strata: 4 (B)
4.				Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: <u>100</u> (A/B)
6.				
7.				Total % Cover of: Multiply by:
		= Total Cov	ver	$\frac{1}{\text{OBL species}} \frac{125}{x_1 = 125}$
Sapling/Shrub Stratum (Plot size: 15 ft r )				FACW species 15 x 2 = 30
1. Salix nigra	55	~	OBL	FAC species 0 x 3 = 0
2.				FACU species $\frac{0}{2}$ x 4 = $\frac{0}{2}$
3.				UPL species $0$ $x_5 = 0$
4.				Column Totals: (A) (B)
5.				Prevalence Index = $B/A = 1.11$
6.				Hydrophytic Vegetation Indicators:
7.				✓ 1 - Rapid Test for Hydrophytic Vegetation
	55%	= Total Cov	ver	✓ 2 - Dominance Test is >50%
Herb Stratum (Plot size: 5 ft r )				$\checkmark$ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
1. Asclepias incarnata	25	~	OBL	4 - Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)
2. Carex vulpinoidea	25	~	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3. Carex lurida	20	~	OBL	1
4. Leersia virginica	10		FACW	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5. Verbesina alternifolia	5		FACW	Definitions of Vegetation Strata:
6				Tree Maarta planta 2 in (7.0 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12				Woody vines – All woody vines greater than 3.28 ft in
	85%	= Total Cov	ver	neight.
Woody Vine Stratum (Plot size: 30 ft r )				
1				
2				
3				Hydrophytic
4				Vegetation Present? Yes Yo No
		= Total Cov	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			
A preponderance of hydrophytic veg	getatior	n is pres	sent.	

SOIL	
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Profile Desc	ription: (Describe	to the dep	th needed to docum	nent the	indicator	or confirm	n the absence of	of indicators.)
Depth (inchos)	Matrix	0/	Redo:	x Feature	S Turno <sup>1</sup>		Toxturo	Pomorko
		95	10VP 5/6	5		<u> </u>	Silt Loam	Remarks
	1011( 4/2		1011( 3/0		<u> </u>	101		
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-								
-		. <u> </u>						
-								
-								
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							·	
		·			·		·	
							·	
		. <u> </u>		<u> </u>	<u> </u>			
_								
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, MS	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	indicators:						Indicators f	for Problematic Hydric Soils <sup>3</sup> :
Histosol Histic Er	(A1) bipedon (A2)		Polyvalue Belov MI RA 149B	w Surface	e (S8) ( <b>LR</b>	R R,	2 cm M Coast F	uck (A10) ( <b>LRR K, L, MLRA 149B</b> ) Prairie Redox (A16) ( <b>LRR K, L, R</b> )
Black Hi	stic (A3)		Thin Dark Surfa	ace (S9) (I	LRR R, M	LRA 149B	b) 5 cm M	ucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	n Sulfide (A4)		Loamy Mucky M	/ineral (F	1) (LRR 🖌	ζ, L)	Dark Su	urface (S7) (LRR K, L)
Stratified	I Layers (A5) d Below Dark Surfac	e (A11)	Loamy Gleyed I	Matrix (F2 (F3)	2)		Polyvali Thin Da	ue Below Surface (S8) (LRR K, L) ark Surface (S9) (LRR K, L)
Thick Da	ark Surface (A12)	5 (711)	Redox Dark Su	rface (F6)	)		Iron-Ma	inganese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)		Depleted Dark S	Surface (F	=7)		Piedmo	ont Floodplain Soils (F19) ( <b>MLRA 149B</b> )
Sandy G	ileyed Matrix (S4)		Redox Depress	ions (F8)			Mesic S	Spodic (TA6) ( <b>MLRA 144A, 145, 149B</b> ) rent Material (E21)
Stripped	Matrix (S6)						Very Sh	nallow Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, M	/LRA 149	<b>B</b> )				Other (I	Explain in Remarks)
<sup>3</sup> Indicators of	f hydrophytic vegetat	tion and w	etland hydrology mus	t he nres	ent unles	s disturber	hor problematic	
Restrictive I	Layer (if observed):		stand hydrology mas					·
Туре:								
Depth (ind	ches):						Hydric Soil I	Present? Yes 🖌 No
Remarks:								
The soil	profile meets	s the c	riteria for hav	vina a	deple	ted ma	itrix.	

Project/Site: AEP North Delphos - Rockhill	City/County: Gomer/ Allen		Sampling Date: 2021-06-29
Applicant/Owner: AEP		State: Ohio	Sampling Point: 1-D UPL
Investigator(s): J. Holmes E. Wilson	_ Section, Township, Range:	S020, T002	2, R006
Landform (hillslope, terrace, etc.): Upland, Flat	ocal relief (concave, convex, nor	<sub>e):</sub> None	Slope (%): <u>1</u>
Subregion (LRR or MLRA): <b> L 99</b> Lat: <b>40.855852</b>	Long: _ <b>-84.</b>	198301	Datum: WGS 84
Soil Map Unit Name: NpA		NWI classifi	cation: N/A
Are climatic / hydrologic conditions on the site typical for this time of y	/ear?YesNo(	If no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydrology significant	ly disturbed? Are "Normal	Circumstances"	present? Yes No _
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed, e	xplain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locatio	ns, transects	s, important features, etc.
Hydrophytic Vegetation Present? Yes No _	Is the Sampled Area		
Hydric Soil Present? Yes No _	within a Wetland?	Yes	No
Wetland Hydrology Present? Yes No _	If yes, optional Wetland	Site ID:	
Remarks: (Explain alternative procedures here or in a separate rep	ort.)		
Flat existing row outside wetland. Represe	entative of row along	bean field	ledge
			5

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living	Roots (C3) Saturation Vis ble on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled So	pils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes No 🖌 Depth (inches):	
Saturation Present? Yes No V Depth (inches):	Wetland Hydrology Present? Yes No
Describe Described Deta (strange another instruction well equiples that a previous instruc-	tions), if available:
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
Remarks:	
Remarks: No primary and or secondary wetland hydrology indica	tors were present at the time of
Remarks: No primary and or secondary wetland hydrology indica sampling	tors were present at the time of
Remarks: No primary and or secondary wetland hydrology indica sampling	tors were present at the time of
Remarks: No primary and or secondary wetland hydrology indica sampling	tors were present at the time of
Remarks: No primary and or secondary wetland hydrology indica sampling	tors were present at the time of
Remarks: No primary and or secondary wetland hydrology indica sampling	tors were present at the time of
Remarks: No primary and or secondary wetland hydrology indica sampling	tors were present at the time of
Remarks: No primary and or secondary wetland hydrology indica sampling	tors were present at the time of

Tage Charters (Distring 30 ft r	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Morus alba</u>	<u>% Cover</u> 15	<u>Species</u> ?		Number of Dominant Species
1. Morus aba	15			That Are OBL, FACW, or FAC:(A)
	15		FACO	Total Number of Dominant
3			·	Species Across All Strata: <u>4</u> (B)
4		·	·	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: $23$ (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	30%	= Total Co	ver	OBL species $0$ $x = 0$
Sapling/Shrub Stratum (Plot size: 15 ft r )				FACW species <u>55</u> x 2 = <u>110</u>
1				FAC species $0$ $x_3 = 0$
2				FACU species <u>75</u> x 4 = <u>300</u>
2		·	·	UPL species $0$ $x = 0$
3		·	·	Column Totals: <u>130</u> (A) <u>410</u> (B)
4		·		$D_{revelence index}$ $D/A = 3.2$
5				
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
		= Total Co	ver	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5 ft r )				3 - Prevalence Index is ≤3.0 <sup>1</sup>
Phalaris arundinacea	55	~	FACW	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
	25			Brohlomatic Hydrophytic Vegetation <sup>1</sup> (Evaluation)
2. Solidago canadensis	35	~	FACU	
3. Ipomoea purpurea	10		FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4			·	be present, unless disturbed or problematic.
5	_			Definitions of Vegetation Strata:
6				
7.				<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8				
0				and greater than or equal to 3.28 ft (1 m) tall.
3		·	·	
10		·	·	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11		·		
12			·	Woody vines – All woody vines greater than 3.28 ft in height
	100%	= Total Co	ver	
Woody Vine Stratum (Plot size: 30 ft r )				
1				
2.				
3	_			Hydronbytic
0				Vegetation
4		Tatal Oa	·	Present? Yes No V
Demortes (Include photo pumbero horo er en e conorate	aboot)	= Total Co	ver	
Remarks. (Include photo numbers here of on a separate	sneet.)			
A preponderance of hydrophytic veg	getatior	n is not	presen	t.

Profile Desc	ription: (Describe	to the depth	needed to docur	ment the i	ndicator	or confirm	n the absence of in	dicators.)	
Depth	Matrix Redox Features								
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remark	(S
0 - 20	10YR 4/3	100					Silt Loam		
-									
							·		
_									
-									
·		- <u> </u>					······································		
-									
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							·		
-									
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM=R	educed Matrix, M	S=Masked	Sand Gr	ains.	<sup>2</sup> Location: PL=	=Pore Lining, M=N	Matrix.
Hydric Soil I	ndicators:						Indicators for P	roblematic Hydr	ric Soils <sup>3</sup> :
Histosol	(A1)	_	Polyvalue Belo	w Surface	(S8) (LRF	RR,	2 cm Muck	(A10) ( <b>LRR K, L,</b>	MLRA 149B)
Histic Ep	pipedon (A2)		MLRA 149B	)			Coast Prairi	e Redox (A16) (L	.RR K, L, R)
Black Hi	stic (A3)	—	_ Thin Dark Suffa	ace (S9) (L		LRA 149B) (	) 5 cm Mucky	Peat or Peat (S3	3) (LRR K, L, R)
Hydroge Stratified	n Suinde (A4)		Loamy Mucky I Loamy Gleved	Matrix (F2	1) ( <b>LKK K</b> 1)	., L)	Dark Surrac	e (S7) (LRR K, L	
Oralined	Below Dark Surfac	e (A11) —	Depleted Matrix	(F3)	.)		Thin Dark S	urface (S9) (I RR	
Thick Da	ark Surface (A12)	o (/ (/ / )	Redox Dark Su	rface (F6)			Iron-Mangar	nese Masses (F1)	2) (LRR K. L. R)
Sandy M	lucky Mineral (S1)	_	Depleted Dark Surface (F7)				Piedmont Fl	oodplain Soils (F	19) ( <b>MLRA 149B</b> )
Sandy G	leyed Matrix (S4)	_	_ Redox Depress	sions (F8)			Mesic Spod	ic (TA6) ( <b>MLRA 1</b>	44A, 145, 149B)
Sandy R	edox (S5)						Red Parent Material (F21)		
Stripped	Matrix (S6)						Very Shallov	N Dark Surface (7	TF12)
Dark Su	rface (S7) (LRR R, N	<b>ILRA 149B</b> )					Other (Expla	ain in Remarks)	
<sup>3</sup> Indiantora of	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.								
Restrictive I	aver (if observed):		ina nyarology mu:	st be prese	ent, unies:	saisturbea	i or problematic.		
Turner	Layer (il observeu).								
Type.							Undria Sail Drea	ant2 Vaa	
Depth (inc	ches):						Hydric Soli Pres	ent? res	
Remarks:									
The soil	profile does	not mee	t the criteri	ia for a	nv hv	dric so	il indicators		
1110 001							in interest of e		

WEILAND DETERMINATION DAT	A TORM - Northcentral and Northeast Region			
Project/Site: AEP North Delphos - Rockhill	City/County: Gomer/ Allen Sampling Date: 2021-06-29			
Applicant/Owner: AEP	State: Ohio Sampling Point: 1-E			
Investigator(s): J. Holmes E. Wilson	_ Section, Township, Range: S028, T002, R006			
Landform (hillslope, terrace, etc.): Depression	ocal relief (concave, convex, none): <u>Concave</u> Slope (%): <u>2</u>			
Subregion (LRR or MLRA): <b>L99</b> Lat: <b>40.840649</b>	Long: <b>-84.175333</b> Datum: WGS 84			
Soil Map Unit Name: SbA	NWI classification: None			
Are climatic / bydrologic conditions on the site typical for this time of y	vear? Yes Vo (If no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology significantl	y disturbed? Are "Normal Circumstances" present? Yes <u>// No</u>			
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed, explain any answers in Remarks.)			
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.			
Hydrophytic Vegetation Present?       Yes          ✓	Is the Sampled Area within a Wetland? Yes <u>Ves</u> No If yes, optional Wetland Site ID: ort.)			
Representative of a forested wetland along	g a stream.			
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: check all that apply	Surface Soil Cracks (B6)			
Surface Water (A1) Water-Stained	Drainage Patterns (B10)			
High Water Table (A2) Aquatic Fauna	a (B13) Moss Trim Lines (B16)			
Saturation (A3) Marl Deposits	(B15) Drv-Season Water Table (C2)			
Water Marks (B1) Hydrogen Sul	fide Odor (C1) Crayfish Burrows (C8)			
Sediment Deposits (B2) Oxidized Rhiz	cospheres on Living Roots (C3) Saturation Vis ble on Aerial Imagery (C9)			
Drift Deposits (B3)	Reduced Iron (C4) Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4) Recent Iron R	eduction in Tilled Soils (C6)			
Iron Deposits (B5) Thin Muck Su	rface (C7) Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7) Other (Explain	n in Remarks) Microtopographic Relief (D4)			
Sparsely Vegetated Concave Surface (B8)	✓ FAC-Neutral Test (D5)			
Field Observations:				
Surface Water Present? Yes No 🖌 Depth (inche	s):			
Water Table Present? Yes No 🖌 Depth (inche	s):			
Saturation Present? Yes No Ves Depth (inches): Ves No Ves No				
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if available:			
Demorter				
Remarks:				
Multiple wetland hydrology indicators were	e present at the time of sampling.			

	Absolute	Dominant	Indicator	Dominance Test worksheet
Tree Stratum (Plot size: <u>30 ft r</u> )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1. Ulmus americana	30	<u> </u>	FACW	That Are OBL, FACW, or FAC: <u>6</u> (A)
2. Platanus occidentalis	10	<u> </u>	FACW	Total Number of Dominant
3. <u>Acer negundo</u>	5		FAC	Species Across All Strata: <u>6</u> (B)
4		·		Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of:Multiply by:
	45%	= Total Cov	ver	OBL species $0$ $x_1 = 0$
Sapling/Shrub Stratum (Plot size: 15 ft r )				FACW species $115$ x 2 = $230$
1. Celtis occidentalis	5	~	FAC	FAC species $\frac{20}{2}$ x 3 = $\frac{60}{2}$
2. Ulmus americana	5	~	FACW	FACU species $\frac{0}{2}$ x 4 = $\frac{0}{2}$
3.				UPL species $0$ $x = 0$
4.				Column Totals: <u>133</u> (A) <u>290</u> (B)
5				Prevalence Index = $B/A = 2.15$
6				Hydrophytic Vegetation Indicators:
7		·		1 - Rapid Test for Hydrophytic Vegetation
/	10%	Total Ca		✓ 2 - Dominance Test is >50%
light of the contract of the second sec	1070		ver	$\checkmark$ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
<u>Hero Stratum</u> (Plot size: <u>5101</u> )	40	~	FACW	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
2. Carex gravi	25		FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Calex gray	10			
3. Verbesina alternifelia	5			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
		·	FACW	be present, unless disturbed or problematic.
5		·		Definitions of Vegetation Strata:
6		·		Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8		·		Sapling/shrub – Woody plants less than 3 in. DBH
9		·		and greater than or equal to 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tail.
12				Woody vines – All woody vines greater than 3.28 ft in beight
	80%	= Total Cov	ver	neight.
Woody Vine Stratum (Plot size: 30 ft r )				
1				
2				
3				Hydrophytic
4.				Vegetation
		= Total Cov	ver	Present? Yes <u>No</u> No
Remarks: (Include photo numbers here or on a separate	sheet.)			
A preponderance of hydrophytic ver	netation	n is nree	sent	
	getation		Serre.	

SOIL
------

Profile Desc	cription: (Describe	to the dep	oth needed to docu	ment the	indicator	or confirm	the absence	of indicators.)
Depth (inches)	<u>Matrix</u> Color (moist)	%	Color (moist)	ox Feature %	S Type <sup>1</sup>		Texture	Remarks
0 - 3	10YR 4/1	100			<u> </u>		Silt Loam	Kentano
5 20	10VP 4/2	95	10VP 5/6	5	<u> </u>		Silt Loam	
5 - 20	10 fR 4/2	95	1018 5/6	<u> </u>	<u> </u>			
-								
-								
-								
-								
-								
-								
-								
					·			
-								
<sup>1</sup> Type: C=Co	oncentration, D=Dep	pletion, RM	=Reduced Matrix, M	S=Masked	d Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
Hydric Soll	Indicators:		Debuglue Dele	w Curfooo				for Problematic Hydric Solls :
Histic Fr	(AT) Dipedon (A2)		Polyvalue Belo MLRA 149B	w Sunace	(36) ( <b>LR</b> I	к κ,	Coast F	Prairie Redox (A16) (LRR K, L, MLRA 1496)
Black Hi	Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B)					LRA 149B)	) 5 cm M	lucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Mucky I	Mineral (F	1) ( <b>LRR K</b>	(, L)	Dark Su	urface (S7) (LRR K, L)
Stratified	d Layers (A5)		Loamy Gleyed	Matrix (F2	2)		Polyval	ue Below Surface (S8) (LRR K, L)
Depleted	d Below Dark Surfac	e (A11);	X Depleted Matrix	x (F3) urfaco (E6)			Thin Da	ark Surface (S9) (LRR K, L)
Sandy M	Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7)					Piedmont Floodplain Soils (F19) (MLRA 149B)		
Sandy G	Gleyed Matrix (S4)	Redox Depressions (F8)				Mesic S	Spodic (TA6) ( <b>MLRA 144A, 145, 149B</b> )	
Sandy R	Redox (S5)	5)				Red Pa	arent Material (F21)	
Stripped	Stripped Matrix (S6)					Very Sł	hallow Dark Surface (TF12)	
Dark Su	nace (57) ( <b>LRR R,</b> 1	VILKA 149	в)				Other (I	Explain in Remarks)
<sup>3</sup> Indicators of	f hydrophytic vegeta	tion and w	etland hydrology mu	st be pres	ent, unles	s disturbed	or problematic	
Restrictive I	Layer (if observed)	:						
Туре:								
Depth (ind	ches):						Hydric Soil	Present? Yes 🥙 No
Remarks:								
The soil	profile most	s tha c	ritoria for hav	vinaa	doplot	tod ma	triv	
	prome meet	s the c		ving a	uepie	leu ma		

Project/Site: AEP North Delphos - Rockhill	City/County: Gomer/ Alle	n	Sampling Date: 2021-06-29
Applicant/Owner: AEP		<sub>State:</sub> Ohio	Sampling Point: 1-E UPL
Investigator(s): J. Holmes E. Wilson	Section, Township, Range:	S028, T002, R	006
Landform (hillslope, terrace, etc.): Upland, Flat	Local relief (concave, convex, no	one): None	Slope (%): 0
Subregion (LRR or MLRA): 40.841	<b>317</b> Long: <u>-8</u>	4.175253	Datum: WGS 84
Soil Map Unit Name: SbA		NWI classific	ation: N/A
Are climatic / hydrologic conditions on the site typical for this time	e of year? Yes 🗾 No	(If no, explain in R	emarks.)
Are Vegetation <u>/</u> , Soil , or Hydrology signific	cantly disturbed? Are "Norma	al Circumstances" p	oresent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology natura	ally problematic? (If needed,	explain any answe	rs in Remarks.)
			increase footunes ato

#### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No <u>r</u> No <u>r</u> No <u>r</u>	Is the Sampled Area within a Wetland? Yes No If yes, optional Wetland Site ID:				
Remarks: (Explain alternative proce	dures here or in a	a separate report.)					
Representative of grassy area. Mowed area							

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living	Roots (C3) Saturation Vis ble on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Sc	ils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes No 🖌 Depth (inches):	
Saturation Present? Yes No V Depth (inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
Remarks:	
No primary and or secondary wetland hydrology indica sampling	tors were present at the time of

Tara Charter (Plat size: 30 ft r	Absolute	Dominant	Indicator	Dominance Test worksheet:
Iree Stratum (Plot size: <u>50 m</u> )	<u>% Cover</u>	<u>Species</u> ?		Number of Dominant Species
				That Are OBL, FACW, or FAC: 0 (A)
2. Acer saccharum	10	~	FACU	Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6.				
7			·	Trevalence index worksneet:
··	25%	Tatal Oa		I otal % Cover of: Multiply by:
	2070		ver	$\begin{array}{c} \text{OBL species}  \underline{0} \\ \text{FACW species}  \underline{0} \\ \text{VACW species}  \underline{0} \\ \text{VACW species}  \underline{0} \\ \text{VACW species} \\ VACW species$
Sapling/Shrub Stratum (Plot size: 15101)				FACW species $0$ $x^2 = 0$
1				FACt species $\frac{1}{125}$ $x_4 = 500$
2				$\frac{1}{10} = \frac{1}{10} $
3				Column Totals: $125$ (A) $500$ (B)
4.				
5				Prevalence Index = $B/A = \frac{4.0}{1000}$
6			·	Hydrophytic Vegetation Indicators:
			·	1 - Rapid Test for Hydrophytic Vegetation
/			·	2 - Dominance Test is >50%
		= Total Co	ver	$3 - $ Prevalence Index is $\leq 30^{1}$
Herb Stratum (Plot size: 5 ft r )				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
1. Lolium perenne	45	✓	FACU	data in Remarks or on a separate sheet)
2. Dactylis glomerata	40	~	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3. Trifolium pratense	10		FACU	1
4. Lotus corniculatus	5	_	FACU	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5.				Definitions of Variation Strates
6			·	Definitions of vegetation Strata:
				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
/			·	at breast height (DBH), regardless of height.
8			·	Sapling/shrub – Woody plants less than 3 in. DBH
9			·	and greater than or equal to 3.28 ft (1 m) tall.
10			·	Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12				Woody vines – All woody vines greater than 3.28 ft in
	100%	= Total Co	ver	height.
Woody Vine Stratum (Plot size: 30 ft r )				
() () () () () () () () () () () () () (				
l			·	
2				
3			·	Hydrophytic
4			·	Present? Yes No V
		= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			
A preponderance of hydrophytic ver	detatior	n is not	presen	t
			1	

Profile Desc	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth	Matrix		Redo	x Feature	s					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0 - 20	10YR 4/3	100					Silt Loam	10 coarse fragments		
-										
-										
-										
-										
1							2			
Type: C=Co	oncentration, D=Dep	pletion, RM=	Reduced Matrix, M	S=Masked	I Sand Gr	ains.		: PL=Pore Lining, M=Matrix.		
Hydric Soli I				o (	(00) (I <b>D</b>		indicators			
HISTOSOI	(A1)	-		w Surrace	(58) ( <b>LR</b> I	<b>К</b> ,	2 cm N	/IUCK (A10) (LRR K, L, MLRA 149B)		
Black Hi	stic (A3)		Thin Dark Surfa	) 200 (50) (I		DA 1/08	$\sim 5 \text{ cm}$	Aucky Peat or Peat (S3) (IPP K I P)		
Hvdroge	en Sulfide (A4)	-	Loamy Mucky M	/lineral (F	1) (I RR K		) <u> </u>	Surface (S7) ( $I RR K I$ )		
Stratified	d Lavers (A5)	-	Loamy Gleved	Matrix (F2		<b>,                                    </b>	Polvva	lue Below Surface (S8) (LRR K. L)		
Depleted	d Below Dark Surfac	ce (A11)	Depleted Matrix	(F3)	,		Thin D	ark Surface (S9) (LRR K, L)		
Thick Da	ark Surface (A12)	. ,	Redox Dark Su	rface (F6)			Iron-M	anganese Masses (F12) (LRR K, L, R)		
Sandy M	lucky Mineral (S1)	-	Depleted Dark	Surface (F	7)		Piedm	ont Floodplain Soils (F19) (MLRA 149B)		
Sandy G	Bleyed Matrix (S4)	-	Redox Depress	ions (F8)			Mesic	Spodic (TA6) ( <b>MLRA 144A, 145, 149B</b> )		
Sandy R	ledox (S5)						Red Pa	arent Material (F21)		
Stripped Matrix (S6)							Very Shallow Dark Surface (TF12)			
Dark Surface (S7) (LRR R, MLRA 1491			)				Other (Explain in Remarks)			
°Indicators of	f hydrophytic vegeta	tion and wet	land hydrology mus	st be prese	ent, unless	s disturbed	or problematio	<u>.</u>		
Restrictive I	Layer (if observed)	:								
Type:										
Depth (ind	ches):						Hydric Soil	Present? Yes No 🖌		
Remarks:										

#### WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: AEP North Delphos - Rockhill	City/County: Lima / Allen		Sampling Date:	2021-06-29
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-F
Investigator(s): J. Holmes E. Wilson	Section, Township, Range: _	S003 T003	3 R006	
Landform (hillslope, terrace, etc.): Depression	Local relief (conca	ave, convex, none):	Concave	
Slope (%): 1 Lat: 40.814693	Long:84.154259		Datum: WGS 8	34
Soil Map Unit Name: PmA		NWI classific	ation: PEM1C	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🔽 No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances" p	resent? Yes	✓ №
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locati	ons, transects	, important f	eatures, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         V         No           Yes         V         No           Yes         V         No	Is the Sampled Area within a Wetland? Yes No
Remarks:		

## Mapped PEM1C wetland in corn field

20 († *	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				
5.				Percent of Dominant Species
		= Total Co	/er	
Sapling/Shrub Stratum (Plot size: 15 ft r )		10101 00		Prevalence Index worksheet:
1				Total % Cover of:Multiply by:
2.				OBL species65 x 1 =65
3.				FACW species $35$ x 2 = $70$
۵ ۵				FAC species $0$ x 3 = $0$
5				EACLI species $0$ $x = 0$
J				$\frac{1}{10} \text{ species } \frac{0}{2} \text{ species } \frac{1}{2} \text{ species } \frac{1}{2$
Herb Stratum (Plot size: 5 ft r )			ver	Column Totals: $100$ (A) $135$ (B)
Leersia oryzoides	45	~	OBL	
2. Carex vulpinoidea	35	~	FACW	Prevalence Index = B/A = <u>1.4</u>
3. Juncus effusus	10		OBL	Hydrophytic Vegetation Indicators:
4 Typha angustifolia	10		OBL	1 - Rapid Test for Hydrophytic Vegetation
5				✓ 2 - Dominance Test is >50%
6				✓ 3 - Prevalence Index is $\leq 3.0^1$
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
0				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5				
10	100%			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )	100 %	= Total Co	ver	be present, unless disturbed or problematic.
1				Hades should
2				Hydropnytic Vegetation
2		- Total Car		Present? Yes No
Pemarke: (Include photo numbers here or on a concrete o			/er	
Nemarks. (include prioto numbers here of on a separate s	neet.)			
A preponderance of hydrophytic ve	egetatio	on is pi	resent	

#### SOIL

(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 20	10YR 5/2	95	10YR 4/6	5	C	 M	Silty Clay Loam	
-								
-								
-								
-								
-								
					·			
-							2,	
ype: C=Cc	Indicators:	pletion, Riv	I=Reduced Matrix, Ma	=maske	d Sand Gr	ains.	Indicators f	PL=Pore Lining, M=Matrix.
Histosol	(A1)		Sandy	leved M	atrix (SA)		Coast P	rairia Redov (A16)
Histic Er	(AT) bipedon (A2)		Sandy G	Redox (St	aurix (34) 5)		Dark Su	rface (S7)
Black Hi	stic (A3)		Stripped	Matrix (	56)		Iron-Ma	nganese Masses (F12)
Hydroge	n Sulfide (A4)		Loamy M	Jucky Mi	neral (F1)		Very Sh	allow Dark Surface (TF12)
_ Stratified	Layers (A5)		Loamy (	Gleyed M	atrix (F2)		Other (E	xplain in Remarks)
_ 2 cm Mu	ick (A10)		Depleted	d Matrix (	F3)			
_ Depleted	d Below Dark Surfa	ce (A11)	Redox D	ark Surfa	ace (F6)			
_ Thick Da	ark Surface (A12)		Depleted	d Dark Su	urface (F7	)	<sup>3</sup> Indicators of	of hydrophytic vegetation and
_ Sandy M	lucky Mineral (S1)	20)	Redox L	epressio	ons (F8)		wetland	hydrology must be present,
_ 5 cm Mu	aver (if ebserved	53) <u>1</u> .						listurbed or problematic.
Tupo	Layer (II Observed	).						
Type							Hydric Soil P	resent? Yes 🖌 No
Daniela (in a								
Depth (ind Remarks: The soil	profile me	ets the	criteria for h	aving	a dep	leted ı	matrix	
Depth (ind Remarks: The soil	profile me	ets the	criteria for h	aving	a dep	leted ı	matrix	
Depth (inc Remarks: The soil YDROLO	profile me	ets the	criteria for h	aving	a dep	leted I	matrix	
Depth (ind Remarks: The soil YDROLO	GY	ets the	criteria for ha	aving	a dep	leted ı	matrix	u Indicators (minimum of two required
Depth (ind remarks: The soil (DROLO) (etland Hyd rimary Indic Surface	GY GY GY Water (A1)	ets the	criteria for ha	aving	a dep	leted I	matrix	y Indicators (minimum of two required
Depth (ind remarks: The soil (DROLO) (Vetland Hyd rimary Indic Surface High Wa	GY GY GY Water (A1) ter Table (A2)	ets the	criteria for ha	ply)	a dep	leted I	matrix <u>Secondar</u> <u>Surfa</u>	y Indicators (minimum of two required ce Soil Cracks (B6)
Depth (ind emarks: The soil (DROLO /etland Hyd rimary Indic _ Surface _ High Wa Saturatic	GY GY GY Water (A1) ter Table (A2) on (A3)	ets the	uired: check all that ap Water-Stai Aquatic Fa	ply) ned Leav una (B13	a dep	leted i	matrix <u>Secondar</u> <u>Surfa</u> <u>V</u> Drain.	y Indicators (minimum of two required ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2)
Depth (ind emarks: The soil (DROLO /etland Hyd rimary Indic Surface High Wa Saturatic Water M	GY GY GY Water (A1) ther Table (A2) on (A3) arks (B1)	ets the	uired: check all that ap Water-Stai Aquatic Fa True Aqua	ply) ned Leav una (B13 tic Plants Sulfide O	a dep	leted ı	matrix <u>Secondar</u> <u>Secondar</u> <u>V</u> Drain <u>Dry-S</u> Cravf	y Indicators (minimum of two required ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2)
Depth (ind emarks: The soil /DROLO /etland Hyd rimary Indic Surface High Wa Saturatic Water M Sedimer	GY drology Indicators cators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1) at Deposits (B2)	ets the	ired: check all that ap Water-Stai Aquatic Fa True Aqua Hydrogen	ply) ned Leav una (B13 tic Plants Sulfide O	a dep ////////////////////////////////////	leted I	matrix <u>Secondar</u> <u>Surfa</u> <u>V</u> Drain. <u>Dry-S</u> <u>Crayf</u> (C3) <del>V</del> Satur	y Indicators (minimum of two required ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9)
Depth (ind emarks: The soil /DROLO /etland Hyd rimary Indic Surface High Wa Saturatic Water M Sedimer Drift Der	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3)	ets the	ired: check all that ap Water-Stai Aquatic Fa True Aqua K Oxidized R Presence of	ply) ned Leav una (B13 tic Plants Sulfide O thizosphe of Reduce	a dep ves (B9) (B14) dor (C1) eres on Liv eres on Liv	ing Roots	matrix <u>Secondar</u> <u>Surfa</u> <u>V</u> Drain. <u>Dry-S</u> <u>Crayf</u> (C3) <u>V</u> Saturt	<u>y Indicators (minimum of two required</u> ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1)
Depth (ind remarks: The soil /DROLO /etland Hyd rimary Indic 	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	ets the	ired: check all that ap Water-Stai Aquatic Fa True Aqua Hydrogen 3 X Oxidized R Presence o Recent Iro	ply) ned Leav una (B13 tic Plants Sulfide O thizosphe of Reduce n Reduct	a dep ves (B9) (B14) dor (C1) eres on Liv ed Iron (C4) ion in Tille	ing Roots	matrix <u>Secondar</u> <u>V</u> Drain <u>V</u> Dry-S <u>Crayf</u> (C3) <u>V</u> Saturt Sturt (C3) <u>V</u> Geom	y Indicators (minimum of two required ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) norohic Position (D2)
Depth (inc temarks: The soil (DROLO) (DROLO) (Tetland Hyd trimary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep	GY GY drology Indicators cators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1) arks (B1) arks (B2) posits (B3) at or Crust (B4) posits (B5)	ets the	tired: check all that ap Water-Stai Aquatic Fa Aquatic Fa True Aqua Hydrogen S X Oxidized R Presence C Recent Iroo Thin Muck	ply) ned Leav una (B13 tic Plants Sulfide O hizosphe of Reduct n Reduct Surface	a dep res (B9) (B14) dor (C1) eres on Liv ed Iron (C- ion in Tille (C7)	ing Roots 4) d Soils (Cd	matrix <u>Secondar</u> <u>Surfa</u> <u>V</u> Drain <u>Crayf</u> (C3) <u>V</u> Saturta Stunta Stunta Stunta Stunta	y Indicators (minimum of two required ce Soil Cracks (B6) age Patterns (B10) leason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)
Depth (ind remarks: The soil /DROLO //etland Hyd //etland	GY GY GY drology Indicators cators (minimum of Water (A1) ther Table (A2) on (A3) arks (B1) arks (B1) arks (B2) posits (B2) posits (B3) th or Crust (B4) posits (B5) on Visible on Aeria	ets the	tired: check all that ap Water-Stai Water-Stai Aquatic Fa True Aqua Hydrogen 3 X Oxidized R Presence 0 Recent Iron Thin Muck 37) Gauge or V	ply) ned Leav una (B13 tic Plants Sulfide O thizosphe of Reduct Surface Vell Data	a dep res (B9) (B14) dor (C1) eres on Liv ed Iron (C4) ion in Tille (C7) (D9)	ing Roots 4) d Soils (Co	natrix <u>Secondar</u> <u>Surfa</u> <u>V</u> Drain. <u>Dry-S</u> <u>Crayf</u> (C3) <u>V</u> Saturt 6) <u>V</u> Geom <u>V</u> FAC-	y Indicators (minimum of two required ce Soil Cracks (B6) age Patterns (B10) leason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) horphic Position (D2) Neutral Test (D5)
Depth (ind remarks: The soil Che soil C	GY GY GY Grology Indicators cators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1) arks (B1) arks (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aeria v Vegetated Conca	ets the ets the one is requ	tired: check all that ap Water-Stai Aquatic Fa True Aqua Hydrogen 3 X Oxidized R Presence 0 Recent Iron Thin Muck 37) Gauge or V (B8) Other (Exp	aving ply) ned Leav una (B13 tic Plants Sulfide O chizosphe of Reduce n Reduct Surface Well Data lain in Re	a dep res (B9) (B14) dor (C1) eres on Liv ed Iron (C4) ion in Tille (C7) (D9) emarks)	ing Roots 4) d Soils (Cd	matrix <u>Secondar</u> <u>Surfa</u> <u>V</u> Drain. <u>Dry-S</u> <u>Crayf</u> (C3) <u>V</u> Saturt 5) <u>V</u> Georr <u>V</u> FAC-I	y Indicators (minimum of two required ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)
Depth (ind remarks: The soil YDROLO Vetland Hyd rimary India Saturatia Saturatia Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatia Sparsely ield Obser	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria v Vegetated Conca vations:	ets the ets the one is requ	ired: check all that ap Water-Stai Aquatic Fa True Aqua Hydrogen 3 X Oxidized R Presence 0 Recent Iron Thin Muck 37) Gauge or V (B8) Other (Exp	aving <u>ply</u> ) ned Leav una (B13 tic Plants Sulfide O thizosphe of Reduct Sulfide Surface Well Data lain in Re	a dep ves (B9) (B14) dor (C1) eres on Liv ed Iron (C4) ion in Tille (C7) (C9) emarks)	ing Roots 4) d Soils (Co	matrix <u>Secondar</u> <u>Surfa</u> <u>V</u> Drain. Dry-S <u>Crayf</u> (C3) <u>V</u> Saturt 6) <u>V</u> FAC-	<u>y Indicators (minimum of two required</u> ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) horphic Position (D2) Neutral Test (D5)
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Depth (ind Remarks: The soil YDROLO YURIAND Hyd YURALO Vetland Hyd Yurimary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely ield Obsern Surface Water Yater Table Saturation Pr	GY GY GY Grology Indicators cators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1) nt Deposits (B2) oosits (B3) at or Crust (B4) posits (B5) on Visible on Aeria v Vegetated Conca vations: er Present? Present? present?	ets the ets th	criteria for hat aired: check all that ap Water-Stai Water-Stai True Aquaic Fa True Aquai Hydrogen 3 Oxidized R Presence 0 Recent Iroi Thin Muck 37) Gauge or N (B8) Other (Exp No Depth (income No	ply) ned Leav una (B13 tic Plants Sulfide O thizosphe of Reduct Sulfide O thizosphe of Reduct Sulfide O thisosphe of Reduct Sulface Nell Data lain in Re-	a dep res (B9) (B14) dor (C1) eres on Liv ed Iron (C4) ion in Tille (C7) (D9) emarks)	ing Roots 4) d Soils (Cl	matrix <u>Secondar</u> <u>Surfa</u> <u>V</u> Drain. <u>Dry-S</u> <u>Crayf</u> (C3) <u>V</u> Saturt 6) <u>V</u> Geom <u>V</u> FAC-1	y Indicators (minimum of two required ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5) Present? Yes Yes No
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Depth (ind emarks: The soil (DROLO) (etland Hyd rimary Indic 	ches): profile mean GY drology Indicators cators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1) arks (B1) arks (B1) arks (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria vegetated Conca vations: er Present? Present? Present? pillary fringe) corded Data (streat	ets the	criteria for ha  ired: check all that ap  Water-Stai Aquatic Fa True Aqua Hydrogen 3 X Oxidized R Presence 0 Recent Irou Thin Muck 37) Gauge or V (B8) Other (Exp No Depth (inc No Depth (inc nonitoring well, aerial p and bydrologe	ply) ned Leav una (B13 tic Plants Sulfide O thizosphe of Reduct Surface Nell Data dain in Re- ches): ches): thotos, pl	a dep	ing Roots 4) d Soils (Cd 	matrix <u>Secondar</u> <u>Surfa</u> <u>U</u> Drain <u>U</u> Dry-S <u>U</u> Crayf (C3) <u>V</u> Saturt Stunt Stunt Stunt FAC-I and Hydrology if available:	y Indicators (minimum of two required ce Soil Cracks (B6) age Patterns (B10) leason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5) Present? Yes No

#### WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: AEP North Delphos - Rockhill	City/County: Lima / Allen		Sampling Date:	2021-06-29
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-F UPL
Investigator(s): J. Holmes E. Wilson	Section, Township, Range: _	S003 T003	R006	
Landform (hillslope, terrace, etc.): Upland, Flat	Local relief (conc	ave, convex, none):	None	
Slope (%): 1 Lat: _40.814215	Long: -84.153881		Datum: WGS 8	34
Soil Map Unit Name: BIG1A1		NWI classific	cation: PEM1C	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🗾 No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norm	al Circumstances" p	present? Yes	✓ No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	rs in Remarks.)	

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	ls the Sampled Area within a Wetland?	Yes	No
Remarks:					

## Representative of Areas outside wetland

20.4	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft r</u> )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2(B)
4				
5.				Percent of Dominant Species
		= Total Cov	/er	
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2.				OBL species x 1 =
3.				FACW species $0   x 2 = 0$
4				FAC species $0$ x 3 = $0$
5				EACU species $100$ $x = 400$
0		- Total Car		$\frac{1111}{1111} \text{ species } \frac{1}{0} \text{ species } \frac$
Herb Stratum (Plot size: 5 ft r )			/er	Column Tatala: $100$ (A) $400$ (B)
1 Solidago canadensis	30	~	FACU	
2. Trifolium repens	25	~	FACU	Prevalence Index = B/A = 4.0
3. Asclepias syriaca	15		FACU	Hydrophytic Vegetation Indicators:
4. Dipsacus fullonum	15		FACU	1 - Rapid Test for Hydrophytic Vegetation
5. Erigeron annuus	15		FACU	2 - Dominance Test is >50%
6.				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7.				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8.				data in Remarks or on a separate sheet)
9				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10				
10	100%	- Total Car		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )	10070	- 10(a) COV	/ei	be present, unless disturbed or problematic.
1.				Hudronbutio
2				Vegetation
<b>a</b> -		= Total Cov		Present? Yes No
Remarks: (Include photo numbers here or on a separate s	heet )	- 10(a) 00(		1
A preponderance of hydrophytic ve	egetatio	on is no	ot pres	ent

#### SOIL

Profile Description: (Describe to the dept	n needed to document the indicator or con	nfirm the absence of indicators.)
Depth <u>Matrix</u>	Redox Features	<u>.</u>
(inches) Color (moist) %	Color (moist) % Type <sup>1</sup> Loc	c <sup>z</sup> <u>Texture</u> <u>Remarks</u>
<u>0-20</u> <u>10YR 4/3</u> <u>100</u> _		Sandy Clay Loam
-		
-		
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
Histic Epipedon (A2)	Sandy Redox (S5)	Dark Surface (S7)
Black Histic (A3)	Stripped Matrix (S6)	Iron-Manganese Masses (F12)
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1)	Very Shallow Dark Surface (TF12)
Stratified Layers (A5)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
2 cm Muck (A10) Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	wetland hydrology must be present.
5 cm Mucky Peat or Peat (S3)		unless disturbed or problematic.
Restrictive Layer (if observed):		
Туре:		
Depth (inches):		Hydric Soil Present? Yes No
Remarks:		
HYDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is require	ed; check all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)
Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rnizospheres on Living Ro	Sturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Fresence of Reduced from (C4) Recent Iron Reduction in Tilled Soils	(C6) Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7	Gauge or Well Data (D9)	
Sparsely Vegetated Concave Surface (B	8) Other (Explain in Remarks)	
	· · · · · · · · · · · · · · · · · ·	
Field Observations:		
Field Observations: Surface Water Present? Yes N	o Depth (inches):	
Field Observations:         Surface Water Present?       Yes         Water Table Present?       Yes	Depth (inches):	
Field Observations:         Surface Water Present?       Yes N         Water Table Present?       Yes N         Saturation Present?       Yes N	o      Depth (inches):       o      Depth (inches):       o      Depth (inches):	Wetland Hydrology Present? Yes No V
Field Observations:         Surface Water Present?       Yes N         Water Table Present?       Yes N         Saturation Present?       Yes N         (includes capillary fringe)       N	Io         Image: Constraint of the second seco	Wetland Hydrology Present? Yes No
Field Observations:         Surface Water Present?       Yes N         Water Table Present?       Yes N         Saturation Present?       Yes N         (includes capillary fringe)       Describe Recorded Data (stream gauge, mor	Image: constraint of the system       Image: constraint of the system         Image: constraint of the system       Image: constraint of the system         Image: constraint of the system       Image: constraint of the system         Image: constraint of the system       Image: constraint of the system         Image: constraint of the system       Image: constraint of the system         Image: constraint of the system       Image: constraint of the system         Image: constraint of the system       Image: constraint of the system         Image: constraint of the system       Image: constraint of the system         Image: constraint of the system       Image: constraint of the system         Image: constraint of the system       Image: constraint of the system         Image: constraint of the system       Image: constraint of the system         Image: constraint of the system       Image: constraint of the system         Image: constraint of the system       Image: constraint of the system         Image: constraint of the system       Image: constraint of the system         Image: constraint of the system       Image: constraint of the system         Image: constraint of the system       Image: constraint of the system         Image: constraint of the system       Image: constraint of the system         Image: constraint of the system       Image: constraint of the system	Wetland Hydrology Present? Yes No
Field Observations:         Surface Water Present?       Yes N         Water Table Present?       Yes N         Saturation Present?       Yes N         (includes capillary fringe)       Describe Recorded Data (stream gauge, mor         No primary and or secondary wetlan         Remarks:	Io       ✓       Depth (inches):	Wetland Hydrology Present? Yes No ons), if available: It at the time of sampling
Field Observations:         Surface Water Present?       Yes N         Water Table Present?       Yes N         Saturation Present?       Yes N         (includes capillary fringe)       Describe Recorded Data (stream gauge, mor         No primary and or secondary wetlan         Remarks:	io       ✓       Depth (inches):	Wetland Hydrology Present? Yes No ons), if available: It at the time of sampling
Field Observations:         Surface Water Present?       Yes N         Water Table Present?       Yes N         Saturation Present?       Yes N         (includes capillary fringe)       Describe Recorded Data (stream gauge, mor         No primary and or secondary wetlan         Remarks:	io       ✓       Depth (inches):	Wetland Hydrology Present? Yes No ons), if available: It at the time of sampling
Field Observations:         Surface Water Present?       Yes N         Water Table Present?       Yes N         Saturation Present?       Yes N         (includes capillary fringe)       Describe Recorded Data (stream gauge, mor         No primary and or secondary wetlan         Remarks:	Io       ✓       Depth (inches):	Wetland Hydrology Present? Yes No ons), if available: It at the time of sampling

#### WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: <u>^t</u> ,) ? n Ž, S _ ĺ 5 Ž ], H,   B Å Ž ¡ ĺ ĺ	_ City/County:i ê ĉ <b>/ Alle</b> r	1	_ Sampling Date: _	Н	Н
Applicant/Owner:^ t		State: > Ž j	Sampling Point:	ΗŒ	
Investigator(s):q , ĺ ê] , ^ q , Æ ¡ ĺ ] _ ñ	_ Section, Township, Range: _	S003 T0	003 R006		
Landform (hillslope, terrace, etc.): <u>S_5?_]];</u> ñ	Local relief (conc	ave, convex, none)	<u>HñBõž_</u>		
Slope (%): Lat: _40.811100	_ Long: -84.150530		Datum: ƌ%	, 00 ,	
Soil Map Unit Name: _ t ê		NWI classifi	cation: ) D		
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes 🖌 No	(If no, explain in F	Remarks.)		
Are Vegetation, Soil, or Hydrology significant	ly disturbed? Are "Norm	al Circumstances"	present? Yes	No	
Are Vegetation, Soil, or Hydrology naturally p	problematic? (If needed	, explain any answe	ers in Remarks.)		

#### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         V         No           Yes         V         No           Yes         V         No	Is the Sampled Area within a Wetland?	Yes No
Remarks:			

# **PEM** Wetland

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: )	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4.				
5.				Percent of Dominant Species
		= Total Cov	/er	
Sapling/Shrub Stratum (Plot size:, • n , ?)		10101-001		Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x 1 =
3.				FACW species x 2 =
4.				FAC species x 3 =
5.				FACU species x 4 =
		= Total Cov	/er	UPL species x 5 =
Herb Stratum (Plot size:, • n , ?)		i olui ool		Column Totals: (A) (B)
1. <u>tŽõĺõ?;]</u> ,õ?}ñN;ñõB_õ		<u> </u>	<u> </u>	
2. Hõ?_«,ž}ĺ5;ñ ;N_õ			^ ΗÆ	Prevalence Index = B/A =
3. ‰ B ; ? 5 } ] , B ° 5 _ ? ; ñ } ]			> @	Hydrophytic Vegetation Indicators:
4.				∠ 1 - Rapid Test for Hydrophytic Vegetation
5				∠ 2 - Dominance Test is >50%
6				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
0				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
ə				-
10.	P	- Total Car		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: , • n , ? )	<u> </u>	= Total Cov	/er	be present, unless disturbed or problematic.
1.				Hudrophytic
2				Vegetation
		= Total Cov	/er	Present? Yes No
Remarks: (Include photo numbers here or on a separate	sheet.)	10101 001		
	,	~		~
,5?_5 nN_?on,& <u>"</u> N? 52°ź	n_i, <u>B</u> ,n	onij]5ŕ	יא _ ] _	_ n n

SOIL
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	in noodod to doballiont the maloute			aloutors.j
Depth Matrix	Redox Features			
(inches) Color (moist) %	<u>Color (moist)</u> <u>%</u> <u>Type</u> <sup>1</sup>		Texture	Remarks
<u> </u>	<u> </u>		‰;ĺn°,Hĺõ°	
-				
<u> </u>				
<sup>1</sup> Type: C=Concentration, D=Depletion, RM	=Reduced Matrix, MS=Masked Sand G	Frains.	<sup>2</sup> Location: PL=	Pore Lining, M=Matrix.
Hydric Soil Indicators:	·		Indicators for P	roblematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Gleyed Matrix (S4)		Coast Prairi	e Redox (A16)
Histic Epipedon (A2)	Sandy Redox (S5)		Dark Surfac	e (S7)
Black Histic (A3)	Stripped Matrix (S6)		Iron-Manga	nese Masses (F12)
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1	)	Very Shallo	w Dark Surface (TF12)
Stratified Layers (A5)	Loamy Gleyed Matrix (F2)		Other (Expla	ain in Remarks)
2 cm Muck (A10) Depleted Below Dark Surface (A11)	<ul> <li>Depleted Matrix (F3)</li> <li>Beday Dark Surface (F6)</li> </ul>			
Thick Dark Surface (A12)	Depleted Dark Surface (F	7)	<sup>3</sup> Indicators of hy	drophytic vegetation and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	. ,	wetland hyd	rology must be present,
5 cm Mucky Peat or Peat (S3)	,		unless distu	rbed or problematic.
Restrictive Layer (if observed):				
Туре:				
Depth (inches):			Hydric Soil Pres	ent? Yes No
Remarks:				
Ž1. 150 a. Á p. 4. Ž		E Í nô	ann 2	
	<u>D</u> , ?   II _• ? {A) Q Z   ID,,,}, <u>-</u>	_ 5 I _ ne	_ani, ?   «	
HYDROLOGY				
HYDROLOGY Wetland Hydrology Indicators:				
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requi	red: check all that apply)		Secondary Inc	licators (minimum of two required)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requi Surface Water (A1)	red: check all that apply) Water-Stained Leaves (B9)		<u>Secondary In</u>	dicators (minimum of two required) coil Cracks (B6)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requi Surface Water (A1) High Water Table (A2)	red: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13)		<u>Secondary Ind</u> Surface S Drainage	<u>dicators (minimum of two required)</u> soil Cracks (B6) Patterns (B10)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requi Surface Water (A1) High Water Table (A2) Saturation (A3)	red: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14)		<u>Secondary Ind</u> Surface S Drainage Dry-Seas	<u>dicators (minimum of two required)</u> coil Cracks (B6) Patterns (B10) on Water Table (C2)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	red: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1)		Secondary Ind Surface S Drainage Dry-Seas Crayfish	dicators (minimum of two required) coil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	red: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) .X Oxidized Rhizospheres on L	iving Roots (C	Secondary Ind Surface S V Drainage Dry-Seas Crayfish I Saturation	dicators (minimum of two required) soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requi 	red: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) .X Oxidized Rhizospheres on L Presence of Reduced Iron (0	iving Roots (C	<ul> <li>Secondary Ind</li> <li>Surface S</li> <li>Drainage</li> <li>Dry-Seas</li> <li>Crayfish I</li> <li>Saturation</li> <li>Stunted c</li> </ul>	dicators (minimum of two required) Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) r Stressed Plants (D1)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	red: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) .X Oxidized Rhizospheres on L Presence of Reduced Iron (C Recent Iron Reduction in Till	iving Roots (C C4) ed Soils (C6)	<u>Secondary Ind</u> Surface S Drainage Dry-Seas Crayfish I 3)	dicators (minimum of two required) Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) r Stressed Plants (D1) hic Position (D2)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	red: check all that apply)          Water-Stained Leaves (B9)         Aquatic Fauna (B13)         True Aquatic Plants (B14)         Hydrogen Sulfide Odor (C1)         X       Oxidized Rhizospheres on L         Presence of Reduced Iron (C         Recent Iron Reduction in Till         Thin Muck Surface (C7)	iving Roots (C C4) ed Soils (C6)	<ul> <li>Secondary Ind</li> <li>Surface S</li> <li>Drainage</li> <li>Dry-Seas</li> <li>Crayfish I</li> <li>Saturation</li> <li>Stunted of</li> <li>Geomorp</li> <li>FAC-Neu</li> </ul>	dicators (minimum of two required) coil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) r Stressed Plants (D1) hic Position (D2) tral Test (D5)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B	red: check all that apply)	iving Roots (C C4) ed Soils (C6)	Secondary Ind         Surface S         ✓         Drainage         Dry-Seas         Crayfish         Saturation         Stunted of         ✓         Geomorp         ✓         FAC-Neur	dicators (minimum of two required) Goil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) In Stressed Plants (D1) hic Position (D2) tral Test (D5)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requi 	red: check all that apply)          Water-Stained Leaves (B9)         Aquatic Fauna (B13)         True Aquatic Plants (B14)         Hydrogen Sulfide Odor (C1)         .X         Oxidized Rhizospheres on L         Presence of Reduced Iron (O         Recent Iron Reduction in Till         Thin Muck Surface (C7)         7)       Gauge or Well Data (D9)         B8)       Other (Explain in Remarks)	iving Roots (C C4) ed Soils (C6)	Secondary Ind Surface S V Drainage Dry-Seas Crayfish I Saturation Stunted c V Geomorp V FAC-Neu	dicators (minimum of two required) Goil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) In Stressed Plants (D1) hic Position (D2) tral Test (D5)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requi 	red: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) .X Oxidized Rhizospheres on L Presence of Reduced Iron (0 Recent Iron Reduction in Till Thin Muck Surface (C7) 7) Gauge or Well Data (D9) B8) Other (Explain in Remarks)	iving Roots (C 24) ed Soils (C6)	Secondary Ind Surface S Drainage Dry-Seas Crayfish I Saturation Stunted c V Geomorp V FAC-Neu	dicators (minimum of two required) Goil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) In Stressed Plants (D1) hic Position (D2) tral Test (D5)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is requited)	red: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) .X Oxidized Rhizospheres on L Presence of Reduced Iron (C Recent Iron Reduction in Till Thin Muck Surface (C7) 7) Gauge or Well Data (D9) B8) Other (Explain in Remarks) No Depth (inches):	iving Roots (C C4) ed Soils (C6)	<ul> <li>Secondary Ind</li> <li>Surface S</li> <li>✓ Drainage</li> <li>Dry-Seas</li> <li>Crayfish I</li> <li>✓ Saturation</li> <li>Stunted c</li> <li>✓ Geomorp</li> <li>✓ FAC-Neu</li> </ul>	dicators (minimum of two required) Goil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) In Stressed Plants (D1) hic Position (D2) tral Test (D5)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is requi	red: check all that apply)	iving Roots (C C4) ed Soils (C6)	Secondary Ind Surface S Drainage Dry-Seas Crayfish I Saturation Stunted o Geomorp FAC-Neu	dicators (minimum of two required) coil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) r Stressed Plants (D1) hic Position (D2) tral Test (D5)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is requited)	red: check all that apply)	iving Roots (C C4) ed Soils (C6)	Secondary Ind Surface S Drainage Dry-Seas Crayfish I Saturation Stunted c Geomorp FAC-Neu	dicators (minimum of two required) coil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) r Stressed Plants (D1) hic Position (D2) tral Test (D5) sent? Yes No
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is requited)	red: check all that apply)	iving Roots (C C4) ed Soils (C6) 	<ul> <li>Secondary Ind</li> <li>Surface S</li> <li>Drainage</li> <li>Dry-Seas</li> <li>Crayfish I</li> <li>Saturation</li> <li>Stunted c</li> <li>Stunted c</li> <li>Geomorp</li> <li>FAC-Neu</li> </ul>	dicators (minimum of two required) coil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) r Stressed Plants (D1) hic Position (D2) tral Test (D5) sent? Yes <u>Ves</u> No
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is requited)	red: check all that apply)         Water-Stained Leaves (B9)         Aquatic Fauna (B13)         True Aquatic Plants (B14)         Hydrogen Sulfide Odor (C1)         .X       Oxidized Rhizospheres on L         Presence of Reduced Iron (C         Recent Iron Reduction in Till         Thin Muck Surface (C7)         7)       Gauge or Well Data (D9)         B8)       Other (Explain in Remarks)         No          V       Depth (inches):         No          V       Depth (inches):         No          Depth (inches):          No          Depth (inches):          No          Depth (inches):	iving Roots (C C4) ed Soils (C6)  Wetlar ispections), if	<ul> <li><u>Secondary Ind</u></li> <li>Surface S</li> <li>✓ Drainage</li> <li>Dry-Seas</li> <li>Crayfish I</li> <li>Saturation</li> <li>Stunted c</li> <li>✓ Geomorp</li> <li>✓ FAC-Neu</li> </ul>	dicators (minimum of two required) Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) In Stressed Plants (D1) hic Position (D2) tral Test (D5) sent? Yes No
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is requited)	red: check all that apply)	iving Roots (C C4) ed Soils (C6)  Wetlar spections), if	<ul> <li>Secondary Ind</li> <li>Surface S</li> <li>✓ Drainage</li> <li>Dry-Seas</li> <li>Crayfish I</li> <li>Saturation</li> <li>Stunted c</li> <li>✓ Geomorp</li> <li>✓ FAC-Neu</li> </ul>	dicators (minimum of two required) coil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) r Stressed Plants (D1) hic Position (D2) tral Test (D5) sent? Yes No
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is requited)	red: check all that apply)	iving Roots (C C4) ed Soils (C6)  wetlar ispections), if	Secondary Ind Surface S ✓ Drainage — Dry-Seas — Crayfish I Saturation — Stunted c ✓ Geomorp ✓ FAC-Neu hd Hydrology Pre available:	dicators (minimum of two required) coil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) r Stressed Plants (D1) hic Position (D2) tral Test (D5) sent? Yes No
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is requited)	red: check all that apply)         Water-Stained Leaves (B9)         Aquatic Fauna (B13)         True Aquatic Plants (B14)         Hydrogen Sulfide Odor (C1)         .X       Oxidized Rhizospheres on L         Presence of Reduced Iron (C         Recent Iron Reduction in Till         Thin Muck Surface (C7)         7) Gauge or Well Data (D9)         B8) Other (Explain in Remarks)         No Depth (inches):         No Depth (inches):         onitoring well, aerial photos, previous in         ní í ő ñŽNN N ? Í ¢°_, ? <u>5</u> , ?	iving Roots (C C4) ed Soils (C6) 	Secondary Ind Surface S Drainage Dry-Seas Crayfish I Saturation Sturted o Sturted o Stur	dicators (minimum of two required) Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) r Stressed Plants (D1) hic Position (D2) tral Test (D5) sent? Yes No ] Õ Ê 5 ĺ j Ñ "
Project/Site: AEP North Delphos - Rockhill	City/County: Lima / Allen		Sampling Date:	2021-06-29
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Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-G/H UPL
Investigator(s): J. Holmes E. Wilson	Section, Township, Range:	S003 T003	R006	
Landform (hillslope, terrace, etc.): Upland, Flat	Local relief (concav	e, convex, none):	None	
Slope (%): <u>1</u> Lat: <u>40.810840</u>	Long: -84.150266		Datum: WGS 8	34
Soil Map Unit Name: PMA		NWI classifica	ation: N/A	
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes 🔽 No (	If no, explain in Re	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Normal	Circumstances" p	resent? Yes	✓ No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, e	xplain any answer	s in Remarks.)	

#### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	ls the Sampled Area within a Wetland?	Yes	No
Remarks:					

## Representative of existing ROW

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
15 ft r		= Total Cov	/er	
Sapling/Shrub Stratum (Plot size: 15111 )				Prevalence Index worksheet:
1				Total % Cover of:Multiply by:
2				OBL species $0$ $x = 0$
3				FACW species $0 \times 2 = 0$
4				FAC species $0 \times 3 = 0$
5				FACU species 95 x 4 = 380
<b>F</b> (1)		= Total Cov	/er	UPL species <u>5</u> x 5 = <u>25</u>
Herb Stratum (Plot size: 5 ft r )			FAOL	Column Totals: 100 (A) 405 (B)
1. Solidago canadensis	30		FACU	
2. Medicago sativa	25	<u> </u>	FACU	Prevalence Index = B/A = 4.1
3. Asclepias syriaca	15		FACU	Hydrophytic Vegetation Indicators:
4. Dipsacus fullonum	15		FACU	1 - Rapid Test for Hydrophytic Vegetation
5. Erigeron annuus	10		FACU	2 - Dominance Test is >50%
6. Apocynum androsaemifolium	5		UPL	3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8.				data in Remarks or on a separate sheet)
9.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10.				
	100%	= Total Cov	/er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )		10101 000		be present, unless disturbed or problematic.
1				Hydrophytic
2				Vegetation
		= Total Cov	/er	Present? Yes No V
Remarks: (Include photo numbers here or on a separate s	sheet.)			1
A preponderance of hydrophytic ve	egetatio	on is no	ot pres	ent

Profile Desc	ription: (Describe	to the dep	oth needed to docur	nent the i	indicator	or confirm	m the absence of indicators.)			
Depth	Matrix		Redo	x Feature	s					
(inches)	Color (moist)	%	Color (moist)	%	_Type <sup>1</sup>	Loc <sup>2</sup>	Remarks			
0 - 9	10YR 4/3	100					Sandy Clay Loam			
<u>9 <sup>-</sup> 20</u>	10YR 4/2	95	10YR 4/6	5	<u>C</u>	<u>M</u>	Clay Loam			
-										
-							· ·			
							· ·			
		·					· ·			
		·					· ·			
-										
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, MS	S=Masked	d Sand Gr	ains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.			
Hydric Soil	indicators:						Indicators for Problematic Hydric Soils':			
Histosol	(A1)		Sandy C	Gleyed Ma	atrix (S4)		Coast Prairie Redox (A16)			
Histic Ep	pipedon (A2)		Sandy F	Redox (S5	<b>)</b>		Dark Surface (S7)			
Black Hi	stic (A3)		Stripped	Matrix (S	66)		Iron-Manganese Masses (F12)			
Hydroge	n Sulfide (A4)		Loamy I	Mucky Mir	neral (F1)		Very Shallow Dark Surface (TF12)			
Stratified	Layers (A5)		Loamy (	Gleyed Ma	atrix (F2)		Other (Explain in Remarks)			
2 cm Mu	ick (A10)		<u>V</u> Deplete	d Matrix (	F3)					
Depleted	Below Dark Surfac	e (A11)	Redox I	Jark Surfa	ace (F6)		3			
Thick Da	ark Surface (A12)		Deplete	d Dark Su	Inface (F7	)	Indicators of hydrophytic vegetation and			
Sandy M	lucky Mineral (S1)	2)	Redox L	Jepressio	ns (F8)		wetland hydrology must be present,			
5 cm iviu	cky Peat or Peat (S	3)					unless disturbed or problematic.			
Tupo	_ayer (il observed)									
Depth (in)							Hydric Soil Present? Yes No			
Depth (Inc	cnes):									
Remarks:										
The soil	profile mee	ts the	criteria for h	aving	a dep	leted r	matrix			
				armg						
HYDROLO	GY									
Wetland Hyd	drology Indicators:									
Primary Indic	ators (minimum of o	ne is requ	ired; check all that ap	ply)			Secondary Indicators (minimum of two required)			
Surface	Water (A1)		Water-Sta	ined Leav	es (B9)		Surface Soil Cracks (B6)			
High Wa	ter Table (A2)		Aquatic Fa	una (B13	)		Drainage Patterns (B10)			
Saturatio	on (A3)		True Aqua	tic Plants	(B14)		Dry-Season Water Table (C2)			
Water M	arks (B1)		Hydrogen	Sulfide O	dor (C1)		Crayfish Burrows (C8)			
Sedimer	nt Deposits (B2)		Oxidized F	Rhizosphe	res on Liv	ing Roots	(C3) Saturation Visible on Aerial Imagery (C9)			
Drift Der	osits (B3)		Presence	of Reduce	ed Iron (C	4)	Stunted or Stressed Plants (D1)			
Algal Ma	t or Crust (B4)		Recent Iro	n Reducti	on in Tille	d Soils (Ce	6) Geomorphic Position (D2)			
Iron Dep	osits (B5)		Thin Muck	Surface (	(C7)		EAC-Neutral Test (D5)			
Inundatio	on Visible on Aerial	magery (B	(7) Gauge or	Well Data	(D9)					
Sparsely	Vegetated Concav	e Surface (	(B8) Other (Exc	lain in Re	marks)					
Field Obser	vations:		/		,					
Surface Wate	er Present? Y	es	No 🖌 Depth (in	ches).						
Water Table	Present?		No V Depth (in	chee):		-				
vvaler rable Present?     Yes No Depth (inches);       Saturation Breacht?     Vac				—     Moti	land Hydrology Present? Ves No V					
(includes cap	pillary fringe)									
Describe Red	corded Data (stream	gauge, m	onitoring well, aerial p	photos, pr	evious ins	spections),	, if available:			
Demonstration										
Remarks:										
No prim	ary and or sec	ondary	wetland hydrol	ogy ind	licators	were p	present at the time of sampling			

Project/Site: AEP North Delphos - Rockhill	_ City/County: Lima / Allen	Sampling Date: 2021-06-29
Applicant/Owner: AEP	State: Oh	io Sampling Point: 1-H
Investigator(s): J. Holmes E. Wilson	_ Section, Township, Range:	3 T003 R006
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex	none): Concave
Slope (%): <u>1</u> Lat: <u>40.810474</u>	_ Long:84.149832	Datum: WGS 84
Soil Map Unit Name: PmA	NWI	classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes 🖌 No (If no, expl	ain in Remarks.)
Are Vegetation, Soil, or Hydrology significant	tly disturbed? Are "Normal Circumsta	inces" present? Yes No
Are Vegetation, Soil, or Hydrology naturally p	problematic? (If needed, explain any	answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	ng sampling point locations, tran	sects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area	

Hydric Soil Present? Wetland Hydrology Present?	Yes 🔽 No Yes 🔽 No	Is the Sampled Area within a Wetland?	Yes No
Remarks:			
Wetland in existing ROW	/		

20 ft -	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2(B)
4				
5				That Are OBL_EACW or EAC: 100 (A/B)
		= Total Cov	/er	
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1				Total % Cover of:Multiply by:
2				OBL species 0 x 1 = 0
3.				FACW species 100 x 2 = 200
4				FAC species $0$ x 3 = $0$
5				FACU species $0$ $x = 0$
o	·	= Total Cov		UPL species $0$ x 5 = $0$
Herb Stratum (Plot size: 5 ft r )		- 10(a) 00(		Column Totals: $100$ (A) $200$ (B)
1. Lysimachia nummularia	45	~	FACW	
2. Phalaris arundinacea	45	~	FACW	Prevalence Index = B/A = 2.0
3. Carex vulpinoidea	10		FACW	Hydrophytic Vegetation Indicators:
4.				✓ 1 - Rapid Test for Hydrophytic Vegetation
5.				✓ 2 - Dominance Test is >50%
6.				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7.				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
9				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10				
10	100%	= Total Cox		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )		- 10(a) 001		be present, unless disturbed or problematic.
1.				Hydrophytic
2.				Vegetation
		= Total Cov	/er	Present? Yes No No
Remarks: (Include photo numbers here or on a separate	sheet.)			1
A succession of baseline is the	· · · · · ·	<b>•</b> -		
A preponderance of hydrophytic ve	egetation	on is pr	esent	

<u>quired)</u>
<u>quired)</u>
quired)
<u>quired)</u>
<u>quired)</u>
<u>quired)</u> (C9)
quired) (C9)
<u>quired)</u> (C9)
guired) (C9)
<u>quired)</u> (C9)
<u>quired)</u> (C9)
<u>quired)</u> (C9)
<u>quired)</u> (C9)

Project/Site: AEP North Delphos - Rockhill Delineation	_ City/County:Lima/ Allen Sampling Date: 2021-06-29
Applicant/Owner: AEP	State: Ohio Sampling Point: 1-I
Investigator(s): E. Wilson, J. Holmes	_ Section, Township, Range: S003, T003, R006
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, none): Concave
Slope (%): <u>1</u> Lat: <u>40.8092150</u>	_ Long: -84.1485264 Datum: WGS 84
Soil Map Unit Name: PmA	NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of y	year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	ly disturbed? Are "Normal Circumstances" present? Yes 🔽 No
Are Vegetation, Soil, or Hydrology naturally pr	roblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	_
Hydric Soil Present? Yes No	Is the Sampled Area
Wetland Hydrology Present? Yes Ves No	within a Wetland? Yes No
Remarks:	
PEM wetland within ROW. Wetland lies at	t toe slope of old railroad.

00 (i	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: <u>3</u> (A)
2.				
3				Total Number of Dominant
				Species Across All Strata (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
5 m m m m m m m m 15 ft r		= Total Cov	/er	Durvelance Index workshoet:
Sapling/Shrub Stratum (Plot size: 1910)				Prevalence index worksneet:
1				Total % Cover of:Multiply by:
2				OBL species <u>5</u> x 1 = <u>5</u>
3				FACW species <u>85</u> x 2 = <u>170</u>
4.				FAC species <u>10</u> x 3 = <u>30</u>
5				FACU species $0 \qquad x 4 = 0$
		- Total Car		$\frac{1100}{100} \text{ species } \frac{1}{0} \text{ species } $
Herb Stratum (Plot size: 5 ft r )			er	Column Totala: $100$ (A) $205$ (B)
Lysimachia ciliata	40	~	FACW	
2. Dichanthelium clandestinum	25	~	FACW	Prevalence Index = $B/A = 2.1$
3. Phalaris arundinacea	20	~	FACW	Hydrophytic Vegetation Indicators:
4. Lilium canadense	10		FAC	1 - Rapid Test for Hydrophytic Vegetation
5. Eupatorium perfoliatum	5		OBL	✓ 2 - Dominance Test is >50%
6.				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7.				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
0				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
ð				
10	100%			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Weads Vine Strature (Distained 30 ft r	100%	= Total Cov	er	be present, unless disturbed or problematic.
(Plot size)				
1				Hydrophytic
2				Present2 Ves No
		= Total Cov	ver	
Remarks: (Include photo numbers here or on a separate s	sheet.)			
Hydrophytic vegetation is present.				

SOIL								Sampling Point:
Profile Desc	cription: (Describe	e to the de	pth needed to docu	ment the	e indicator	or confi	rm the absence	of indicators.)
Depth	Matrix		Redo	x Featur	es		_	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
0 - 20	10YR 3/2	95	10YR 6/6	5	С	М	Clay Loam	
-		_			_			
-								
-								
'Type: C=C	oncentration, D=De	pletion, RM	I=Reduced Matrix, M	S=Maske	ed Sand Gr	ains.	Location	n: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators	for Problematic Hydric Soils":
Histosol	(A1)		Sandy	Gleyed N	latrix (S4)		Coast	Prairie Redox (A16)
Histic El	oipedon (A2)		Sandy	Redox (S	S5)		Dark S	Surface (S7)
Black Hi	istic (A3)		Strippe	d Matrix	(S6) Kasas (E4)		Iron-M	langanese Masses (F12)
Hydroge	en Sulfide (A4)		Loamy	MUCKY IV	Ineral (F1)		Very S	(Explain in Remarke)
2 cm Mu	u Layers (AD)		Loaniy	d Matrix	(E3)			(Explain III Remarks)
Depleter	d Below Dark Surfa	ce (A11)	✓ Redox	Dark Sur	(F6)			
Thick Da	ark Surface (A12)		Deplete	d Dark S	Surface (F7	)	<sup>3</sup> Indicators	s of hydrophytic vegetation and
Sandy M	lucky Mineral (S1)		Redox	Depressi	ons (F8)	/	wetlan	d hydrology must be present,
5 cm Mi	ucky Peat or Peat (	53)	_	·	· ,		unless	s disturbed or problematic.
Restrictive	Layer (if observed	):						
Type: N	/A							
Depth (in	ches):						Hydric Soil	Present? Yes No No
Remarks:	,							
Hydric s	soils are pre	esent.						
HYDROLO	GY							
Wetland Hy	drology Indicators	:						
Primary India	cators (minimum of	one is requ	uired: check all that a	oply)			Seconda	ary Indicators (minimum of two required)
<ul> <li>Surface</li> </ul>	Water (A1)		Water-Sta	ined Lea	ves (B9)		Sur	face Soil Cracks (B6)
High Wa	ater Table (A2)		Aquatic Fa	auna (B1	3)		V Drai	inage Patterns (B10)
Saturatio	on (A3)		True Aqua	atic Plant	s (B14)		Drv-	-Season Water Table (C2)
Water M	larks (B1)		Hvdrogen	Sulfide (	Odor (C1)		Cra	vfish Burrows (C8)
Sedimer	nt Deposits (B2)		V Oxidized I	Rhizosph	eres on Liv	vina Root	s (C3) Satu	uration Visible on Aerial Imagery (C9)
Drift Der	posits (B3)		Presence	of Redu	ced Iron (C	4)	Stur	nted or Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Recent Iro	n Reduc	tion in Tille	d Soils (0	C6) 🖌 Geo	omorphic Position (D2)
Iron Der	posits (B5)		Thin Much	Surface	e (C7)		FAC	C-Neutral Test (D5)
Inundati	on Visible on Aerial	Imagery (	B7) Gauge or	Well Dat	a (D9)			
 Sparsely	Vegetated Conca	ve Surface	(B8) Other (Ex	plain in F	Remarks)			
Field Obser	vations:				-,			
Surface Wat	er Present?	Yes 🗸	No Depth (in	ches) 2				
Water Table	Present?	Yes	No V Depth (in	ches).		—		
Saturation D	resent?	Yes	No V Depth (in	chee).		—   wo	tland Hydrolog	v Present? Yes V
Saturation			Deput (in	Siles)		_   ""	and injuicity	, i i i i i i i i i i i i i i i i i i i

Remarks:

Hydrology indicators are present throughout wetland

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

(includes capillary fringe)

Project/Site: AEP North Delphos - Rockhill	City/County: Lima / Aller	<u> </u>	Sampling Date:	2021-06-30
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-I UPL
Investigator(s): J. Holmes E. Wilson	Section, Township, Range:	S003 T	003 R006	
Landform (hillslope, terrace, etc.): Upland, Flat	Local relief (conc	ave, convex, none):	None	
Slope (%): 1 Lat: _40.809352	Long: -84.148792		Datum: WGS 8	34
Soil Map Unit Name: PmA		NWI classific	cation: N/A	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🗾 No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norm	al Circumstances" p	present? Yes	✓ No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed	, explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locat	ions, transects	, important fe	eatures, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No Yes No Yes No	ls the Sampled Area within a Wetland?	Yes	No
Remarks:				

# Representative of existing ROW along old reclaimed ROW

00 ft	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4.				(=,
5				Percent of Dominant Species
o		- Total Cox		That Are OBL, FACW, or FAC: 0 (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft r )		- 10(a) 001		Prevalence Index worksheet:
1. Aesculus flava	10	✓	FACU	Total % Cover of:Multiply by:
2.				OBL species 0 x 1 = 0
3				FACW species $5_{x,2} = 10$
4				FAC species $0$ x 3 = $0$
5				FACU species $105$ x 4 = $420$
···	10%	= Total Cox		UPL species $0$ $x_5 = 0$
Herb Stratum (Plot size: 5 ft r )	1070	- 10(a) 000		Column Totals: $110$ (A) $430$ (B)
1. Lolium perenne	35	~	FACU	
2. Phleum pratense	20	~	FACU	Prevalence Index = B/A = 3.9
3. Asclepias syriaca	15		FACU	Hydrophytic Vegetation Indicators:
4. Cirsium vulgare	15		FACU	1 - Rapid Test for Hydrophytic Vegetation
5. Erigeron annuus	10		FACU	2 - Dominance Test is >50%
6. Verbesina alternifolia	5		FACW	3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				Brohlometic Hudronbutic Vegetation <sup>1</sup> (Evaluation)
9				
10				1
<b>22</b> <i>i i</i>	100%	= Total Cov	er	Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )				
1				Hydrophytic
2				Vegetation
= Total Cover				Present ? Yes NO
Remarks: (Include photo numbers here or on a separate	sheet.)			
A preponderance of hydrophytic ve	egetatio	on is no	ot pres	ent

· · · · · · · · · · · · · · · · · · ·	ne indicator or commit the absence of indicators.)
Depth Matrix Redox Fea	ures
_(inches)Color (moist)%Color (moist)%	Type <sup>1</sup> _ Loc <sup>2</sup> Texture Remarks
<u>0-6</u> <u>10YR 4/3</u> <u>100</u>	Sandy Clay Loam
-	
·	
-	
<sup>1</sup> Type: C=Concentration D=Depletion RM=Reduced Matrix MS=Max	the d Sand Grains <sup>2</sup> Location: PL=Pore Lining M=Matrix
Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Sandy Gleved	Matrix (S4) Coast Prairie Redox (A16)
Histic Epipedon (A2) Sandy Redox	(S5) Dark Surface (S7)
Black Histic (A3)	x (S6) Iron-Manganese Masses (F12)
Hydrogen Sulfide (A4)	Mineral (F1) Very Shallow Dark Surface (TF12)
Stratified Layers (A5) Loamy Gleyer	Matrix (F2) Other (Explain in Remarks)
2 cm Muck (A10) // Depleted Mat	ix (F3)
Depleted Below Dark Surface (A11) Redox Dark S	urface (F6)
Thick Dark Surface (A12) Depleted Darl	Surface (F7) <sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Redox Depres	ssions (F8) wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)	unless disturbed or problematic.
Restrictive Layer (if observed):	
Туре:	Hudric Sail Present? Ves No
Depth (inches):	
Remarks:	
The soil profile meets the criteria for havir	ng a depleted matrix
HYDROLOGY	
HYDROLOGY Wetland Hydrology Indicators:	
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply)	Secondary Indicators (minimum of two required)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Water-Stained L	Secondary Indicators (minimum of two required) eaves (B9) Surface Soil Cracks (B6)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)	
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)         eaves (B9)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)         eaves (B9)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)         eaves (B9)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)         eaves (B9)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)	Secondary Indicators (minimum of two required)         eaves (B9)       Surface Soil Cracks (B6)         313)       Drainage Patterns (B10)         ints (B14)       Dry-Season Water Table (C2)         e Odor (C1)       Crayfish Burrows (C8)         pheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         luced Iron (C4)       Stunted or Stressed Plants (D1)         uction in Tilled Soils (C6)       Geomorphic Position (D2)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)         eaves (B9)       Surface Soil Cracks (B6)         B13)       Drainage Patterns (B10)         ints (B14)       Dry-Season Water Table (C2)         e Odor (C1)       Crayfish Burrows (C8)         pheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         luced Iron (C4)       Stunted or Stressed Plants (D1)         uction in Tilled Soils (C6)       Geomorphic Position (D2)         ce (C7)       FAC-Neutral Test (D5)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)         eaves (B9)       Surface Soil Cracks (B6)         313)       Drainage Patterns (B10)         ints (B14)       Dry-Season Water Table (C2)         e Odor (C1)       Crayfish Burrows (C8)         pheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         luced Iron (C4)       Stunted or Stressed Plants (D1)         uction in Tilled Soils (C6)       Geomorphic Position (D2)         ce (C7)       FAC-Neutral Test (D5)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)	Secondary Indicators (minimum of two required)         eaves (B9)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)         eaves (B9)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)         eaves (B9)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)	Secondary Indicators (minimum of two required)         eaves (B9)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)	Secondary Indicators (minimum of two required)         eaves (B9)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)	
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)         eaves (B9)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)         eaves (B9)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)	Secondary Indicators (minimum of two required)         eaves (B9)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)	Secondary Indicators (minimum of two required)         eaves (B9)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)	Secondary Indicators (minimum of two required)         eaves (B9)

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: AEP North Delphos - Rockhill	City/County:	Sampling Date: 2021-06-30
Applicant/Owner: AEP	State: Ohio	_ Sampling Point: <u>1-J</u>
Investigator(s): J. Holmes E. Wilson	Section, Township, Range: S028 T002 R0	06
Landform (hillslope, terrace, etc.): Depression	ocal relief (concave, convex, none): <u>Concave</u>	Slope (%): <u>3</u>
Subregion (LRR or MLRA): Lat:	Long: -84.175525	Datum: WGS 84
Soil Map Unit Name: PmA	NWI classifica	ation: N/A
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes 🗹 No (If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Normal Circumstances" pr	resent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed, explain any answers	s in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects,	important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	V V V	No No No	Is the Sampled Area within a Wetland? Yes <u>Ves</u> No If yes, optional Wetland Site ID:		
Remarks: (Explain alternative procedures here or in a separate report.)						
Representative of a PEM wetland along a ditch.						

### HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	<ul> <li>Drainage Patterns (B10)</li> </ul>
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living	Roots (C3) Saturation Vis ble on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Second	pils (C6) <u> Geomorphic Position (D2)</u>
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes No 🖌 Depth (inches):	
Saturation Present? Ves No 🖌 Depth (inches):	Wetlend Undreisen: Dresent? Ves V
(includes capillary fringe)	wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks: Multiple wetland hydrology indicators were present at	the time of sampling.
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks: Multiple wetland hydrology indicators were present at	the time of sampling.
Contractor reserves       reserves       Depth (inclues).         Contractor reserves       Contractor reserves         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspectives)         Remarks:         Multiple wetland hydrology indicators were present at	the time of sampling.
Contractor reserves       ress       Depth (inclues).         (includes capillary fringe)         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective)         Remarks:         Multiple wetland hydrology indicators were present at	the time of sampling.
(includes capillary fringe)         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Remarks:         Remarks:         Multiple wetland hydrology indicators were present at	tions), if available:
(includes capillary fringe)         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective)         Remarks:         Multiple wetland hydrology indicators were present at	tions), if available:
Contraction reserves       No Depth (inclues).         (includes capillary fringe)         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective)         Remarks:         Multiple wetland hydrology indicators were present at	the time of sampling.
Contraction reserves       No Depth (inclues).         (includes capillary fringe)         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective)         Remarks:         Multiple wetland hydrology indicators were present at	tions), if available:
Contraction reserves       No Depth (inclues).         (includes capillary fringe)         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective         Remarks:         Multiple wetland hydrology indicators were present at	the time of sampling.

Tree Stratum (Plot size: 30 ft r )	Absolute	Dominant	t Indicator	Dominance Test worksheet:
	76 COver	<u>Species</u> :	Status	Number of Dominant Species
l			·	That Are OBL, FACW, or FAC: (A)
2			·	Total Number of Dominant
3			·	Species Across All Strata: (B)
4			·	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7			<u> </u>	Total % Cover of: Multiply by:
		= Total Co	ver	$\overline{OBL \text{ species}}  100 \qquad \overline{x_{1}} = 100$
Sapling/Shrub Stratum (Plot size: 15 ft r )				FACW species $0$ $x_2 = 0$
1				FAC species $0   x 3 = 0$
··			·	FACU species <u>0</u> x 4 = <u>0</u>
2			·	UPL species $0   x 5 = 0$
3			·	Column Totals: 100 (A) 100 (B)
4			·	Decusion and an and 100
5			<u> </u>	Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7			·	✓ 1 - Rapid Test for Hydrophytic Vegetation
		= Total Co	ver	✓ 2 - Dominance Test is >50%
Herb Stratum (Plot size: 5 ft r				$\checkmark$ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
1. Typha angustifolia	100	~	OBL	4 - Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)
2			·	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3			·	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6.				
7				<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter
0				at breast height (bbh), regardless of height.
o			<u> </u>	<b>Sapling/shrub</b> – Woody plants less than 3 in. DBH
9			·	
10			·	Herb – All herbaceous (non-woody) plants, regardless
11			·	or size, and woody plants less than 5.20 it tall.
12				Woody vines – All woody vines greater than 3.28 ft in
	100%	= Total Co	ver	neight.
Woody Vine Stratum (Plot size: 30 ft r )				
1.				
2			·	
2			·	
3			·	Hydrophytic Vegetation
4			·	Present? Yes <u>V</u> No
		= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			
A preponderance of hydrophytic veg	getatior	n is pre	sent.	
	-	-		

SOIL	
------	--

Profile Desc	ription: (Describe	to the dep	th needed to docum	nent the	indicator	or confirm	n the absence of	f indicators.)	
Depth (inchos)	Matrix	0/	Redo	x Feature	S Turno <sup>1</sup>	1.00 <sup>2</sup>	Texture Remarks		
		<u>%</u> 95		<u>%</u> 15			Silt Loom	Remarks	
	1018 4/1	00	101R 3/0	15	<u> </u>				
-		. <u> </u>			<u> </u>				
-									
-									
		·							
-				·					
_		<u> </u>			<u> </u>				
-									
	-	·			·				
		·		·	·				
-		·							
-									
-									
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, MS	S=Masked	d Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.	
Hydric Soil	indicators:						Indicators for	or Problematic Hydric Soils <sup>3</sup> :	
Histosol	(A1)		Polyvalue Below	v Surface	(S8) ( <b>LR</b>	RR,	2 cm Mu	ick (A10) ( <b>LRR K, L, MLRA 149B</b> )	
Histic Ep	pipedon (A2)		MLRA 149B)				Coast Pr	rairie Redox (A16) ( <b>LRR K, L, R</b> )	
Hvdroge	n Sulfide (A4)		Loamy Mucky N	/lineral (F	1) (LRR K	LKA 1490	) 5 cm Mu Dark Sur	rface (S7) (LRR K. L)	
Stratified	Layers (A5)		Loamy Gleyed I	Matrix (F2	<u>2)</u>	., _/	Polyvalu	e Below Surface (S8) (LRR K, L)	
Depleted	d Below Dark Surfac	e (A11)	✓ Depleted Matrix	(F3)			Thin Dar	rk Surface (S9) (LRR K, L)	
Thick Da	ark Surface (A12)		Redox Dark Su	face (F6)			Iron-Mar	nganese Masses (F12) (LRR K, L, R)	
Sandy IV	lucky Mineral (S1)		Depleted Dark : Redox Depress	Surrace (F ions (F8)	-7)		Pleamon Mesic Sr	nt Floodplain Solis (F19) (MLRA 149B) podic (TA6) (MI RA 144A 145 149B)	
Sandy R	Sandy Gleyed Mathx (34) Redox Depressions (Fo)					Red Par	ent Material (F21)		
Stripped	pped Matrix (S6)					Very Sha	allow Dark Surface (TF12)		
Dark Su	rface (S7) (LRR R, N	/LRA 149	<b>B</b> )				Other (E	xplain in Remarks)	
<sup>3</sup> Indicators of	f hydrophytic vegetat	tion and we	etland hydrology mus	t be pres	ent. unles:	s disturbed	or problematic.		
Restrictive I	_ayer (if observed):				,				
Туре:									
Depth (ind	ches):						Hydric Soil P	resent? Yes 🖌 No	
Remarks:									
	profile most	o tha a	ritoria for bay	vina o	doplot	had ma	triv		
The soli	prome meets	s the c		ning a	uepie	leu ma	uix.		

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: AEP North Delphos - Rockhill	City/County: Gomer/ Allen		Sampling Date: 2021-06-30
Applicant/Owner: AEP		State: Ohio	Sampling Point: 1-J UPL
Investigator(s): J. Holmes E. Wilson	Section, Township, Range:	S028 T002	R006
Landform (hillslope, terrace, etc.): Upland, Hillslope	ocal relief (concave, convex, non	<sub>e):</sub> None	Slope (%): 2
Subregion (LRR or MLRA): L99 Lat: 40.834913	Long: _ <b>-84.</b>	175626	Datum: WGS 84
Soil Map Unit Name: Blg1A1		NWI classifica	ation: N/A
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🖌 No (	If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Normal	Circumstances" p	resent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, e	xplain any answer	s in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locatio	ns, transects,	important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes	No <u>  No   No   </u>	Is the Sampled Area within a Wetland? Yes No <u>·</u>				
Remarks:     (Explain alternative procedures here or in a separate report.)							
Maintain road side area	outside w	/etland					

## HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)       Water-Stained Leaves (B9)         High Water Table (A2)       Aquatic Fauna (B13)         Saturation (A3)       Marl Deposits (B15)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living         Drift Deposits (B3)       Presence of Reduced Iron (C4)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled So         Iron Deposits (B5)       Thin Muck Surface (C7)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)         Sparsely Vegetated Concave Surface (B8)       Sparsely Vegetated Concave Surface (B8)	<ul> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Roots (C3)</li> <li>Saturation Vis ble on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>bils (C6)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> <li>FAC-Neutral Test (D5)</li> </ul>
Field Observations:	
Surface Water Present? Yes No V Depth (inches):	
Water Table Present? Yes <u>No</u> Depth (inches):	
Saturation Present? Yes No Mo Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No _
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
Remarks:	
No primary and or secondary wetland hydrology indica sampling	ators were present at the time of

Tree Charter (Plat size: 30 ft r	Absolute	Dominan	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>SOTT</u> )	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1			·	That Are OBL, FACW, or FAC: 1 (A)
2			·	Total Number of Dominant
3			·	Species Across All Strata: <u>3</u> (B)
4				Percent of Dominant Species
5			<u> </u>	That Are OBL, FACW, or FAC: <u>33</u> (A/B)
6.				Drevelance Index werkeheet:
7				Tetal % Cover of: Multiply by:
		- Total Ca		$\begin{array}{c c} \hline 101a1 \% \hline Cover 01. \\ \hline 001 \hline 000 \hline 0 \\ \hline 001 \hline 0 \\ \hline 0 \hline \hline 0 \\ \hline 0 \hline \hline 0$
Oralian/Ohmeth Olimetrum (Distributed 15 ft r			vei	EACW species $25$ $x_2 = 50$
Sapling/Shrub Stratum (Plot size: 1910)				FAC species $0$ $x_3 = 0$
1			·	FACU species $65$ $x 4 = 260$
2				UPL species $10 \times 5 = 50$
3				Column Totals: $100$ (A) $360$ (B)
4				
5				Prevalence Index = B/A = 3.6
6.				Hydrophytic Vegetation Indicators:
7			·	1 - Rapid Test for Hydrophytic Vegetation
/:			·	2 - Dominance Test is >50%
E ft -		= Total Co	ver	3 - Prevalence Index is ≤3.0 <sup>1</sup>
Herb Stratum (Plot size: 51(1))				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
1. Dactylis glomerata	25	<u> </u>	FACU	data in Remarks or on a separate sheet)
2. Phalaris arundinacea	25	~	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3. Phleum pratense	25	~	FACU	
4. Phleum pratense	15		FACU	be present, unless disturbed or problematic.
<sub>5.</sub> Asclepias syriaca	10		UPL	Definitions of Vegetation Strates
6				Demitions of vegetation Strata.
7				<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter
7			·	at breast height (DBH), regardless of height.
8			·	<b>Sapling/shrub</b> – Woody plants less than 3 in. DBH
9			·	and greater than or equal to 3.28 ft (1 m) tall.
10			·	Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12				Woody vines – All woody vines greater than 3.28 ft in
	100%	= Total Co	ver	height.
Woody Vine Stratum (Plot size: 30 ft r )				
1				
··				
2			·	
3			·	Hydrophytic Vegetation
4				Present? Yes No V
		= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			

Profile Desc	ription: (Describe	to the depth	needed to docur	ment the i	ndicator	or confirm	n the absence of indi	cators.)	
Depth	Matrix		Redo	x Features	<u>s</u> 1			_	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type'	Loc <sup>2</sup>	Texture	Remark	S
0 - 20	10YR 4/3	100					Silt Loam		
-									
		·					·		<u>.</u>
-									
		· ·							
							·		
							. <u> </u>		
-									
		·							
		·					·		<u> </u>
							. <u> </u>		
-									
		·							
-		·							<u>.</u>
'Type: C=Co	oncentration, D=Dep	letion, RM=R	educed Matrix, M	S=Masked	I Sand Gr	ains.	<sup>2</sup> Location: PL=F	ore Lining, M=N	Matrix.
Hydric Soli I			Data at a Data	0 (	(00) (I <b>D</b>		Indicators for Pro		
HISTOSOI	(A1)	_	Polyvalue Belo	w Surface	(58) ( <b>LR</b> I	κĸ,	2 cm Muck (A	$(\mathbf{L}\mathbf{R}\mathbf{R} \mathbf{K}, \mathbf{L}, \mathbf{L}) = (\mathbf{L}\mathbf{R}\mathbf{R} \mathbf{K}, \mathbf{L})$	MLKA 149B)
Black Hi	stic (A3)		Thin Dark Surf	) ace (S9) (I		RA 1498	) 5 cm Mucky F	Peat or Peat (S3	$(\mathbf{I} \mathbf{R} \mathbf{R} \mathbf{K} \mathbf{I} \mathbf{R})$
Hydroge	n Sulfide (A4)		Loamy Mucky I	Mineral (F1	1) (LRR K	, L)	Dark Surface	(S7) (LRR K, L	)
Stratified	d Layers (A5)	_	Loamy Gleyed	Matrix (F2	)	. ,	Polyvalue Bel	ow Surface (S8	) (LRR K, L)
Depleted	d Below Dark Surfac	e (A11)	_ Depleted Matrix	k (F3)			Thin Dark Su	face (S9) (LRR	<b>K</b> , L)
Thick Da	ark Surface (A12)	_	_ Redox Dark Su	rface (F6)			Iron-Mangane	ese Masses (F1	2) ( <b>LRR K, L, R</b> )
Sandy M	lucky Mineral (S1)	_	_ Depleted Dark	Surface (F	7)		Piedmont Flo	odplain Soils (F	19) ( <b>MLRA 149B</b> )
Sandy G	Gleyed Matrix (S4)	_	_ Redox Depress	sions (F8)			Mesic Spodic	(TA6) ( <b>MLRA 1</b>	44A, 145, 149B)
Sandy R	(COOX (CS)						Red Parent IV	laterial (F21)	
Supped	rface (S7) (IRR R I						Other (Evolution	Dark Surface (1	IF 12)
		<b>ILIXA 1450</b> )						r in Remarks)	
<sup>3</sup> Indicators of	f hydrophytic vegeta	tion and wetla	and hydrology mus	st be prese	ent, unless	s disturbed	l or problematic.		
Restrictive L	_ayer (if observed):								
Туре:									
Depth (inc	ches):						Hydric Soil Prese	nt? Yes	No
Remarks:									
	<b>.</b>								
The soil	profile does	not mee	t the criter	ia for a	ny hy	dric so	il indicators		

Project/Site: AEP North Delphos - Rockhill	C	ity/County:	Lima / A	llen	Sampling D	Date: 2021-06-3	30
Applicant/Owner: AEP				State: Oh	io Sampling P	oint: 1-K	
Investigator(s): J. Holmes E. Wilson	s	Section, Tov	vnship, Ran	<sub>ige:</sub> S011	T003 R006		
Landform (hillslope, terrace, etc.): Depression		L	ocal relief (	concave, convex,	, none): <u>Concave</u>	;	
Slope (%): <u>1</u> Lat: <u>40.798630</u>	L	.ong: _ <b>-84</b> .	137416		Datum: W	GS 84	
Soil Map Unit Name: Blg1B1				NWI	classification:		
Are climatic / hydrologic conditions on the site typical for this ti	time of yea	r?Yes_	No	(If no, expl	ain in Remarks.)		
Are Vegetation, Soil, or Hydrology sig	nificantly d	listurbed?	Are "N	Normal Circumsta	ances" present? Ye	es No 🗹	<u> </u>
Are Vegetation, Soil, or Hydrology nat	turally prob	lematic?	(If nee	eded, explain any	answers in Remark	ks.)	
SUMMARY OF FINDINGS – Attach site map sh	howing	sampling	g point lo	ocations, tran	isects, importa	nt features, et	c.
Hydrophytic Vegetation Present? Yes No							
Hydric Soil Present? Yes Ves No		Is the	e Sampled	Area			
Wetland Hydrology Present? Yes <u>Ves</u> No		with	n a Wetlan	d? Ye	'S NO		$\neg$
RSS Watland on odge of POW Recently	mowo	d como	woa do	straved Br	okon canling	ic procopt	
PSS wettand on edge of ROW. Recently	mowe	a some	veg de	споуец. ы	oken sapiing	s present.	
VEGETATION – Use scientific names of plants							
	Absolute	Dominant	Indicator	Dominance Tes	st worksheet:		$\neg$
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dom	inant Species		
1				That Are OBL, F	FACW, or FAC: 3	(A)	
2				Total Number of	f Dominant		
3				Species Across	All Strata: <u>3</u>	(B)	
4				Percent of Dom	inant Species		
5		- Total Cov		That Are OBL, F	FACW, or FAC: 10	<u>J0</u> (A/B	9
Sapling/Shrub Stratum (Plot size: 15 ft r )		- 10(a) 000		Prevalence Ind	ex worksheet:		٦
1. Salix nigra	40	<u> </u>	OBL	Total % Co	ver of: N	Aultiply by:	
2. Rosa palustris	5		OBL	OBL species	45 x 1 =	: 45	
3				FACW species	<u>35</u> × 2 =	<u>105</u>	
4				FAC species	<u>45</u> x 3 =	- <u>135</u>	
5	459/			FACU species	<u>15</u> × 4 =	<u>, 00</u>	
Herb Stratum (Plot size: 5 ft r )	45% =	= Total Cov	er	OPL species	<u>140</u> (A)	310 (P)	
Apocynum cannabinum	45	~	FAC	Column Totals.	(A)	<u> </u>	
2. Phalaris arundinacea	35	~	FACW	Prevalence	e Index = B/A = <u>2</u> .	.2	
3. Solidago canadensis	15		FACU	Hydrophytic Ve	egetation Indicator	's:	
4				1 - Rapid Te	est for Hydrophytic	Vegetation	
5				2 - Dominar	nce Test is >50%		
6				3 - Prevaler	nce Index is ≤3.0'		
7				4 - Morphol data in F	ogical Adaptations' Remarks or on a ser	(Provide supporting parate sheet)	g
8				Problematio	c Hydrophytic Veget	ation <sup>1</sup> (Explain)	
9							
10	95%	- Total Cav		<sup>1</sup> Indicators of hy	dric soil and wetlan	d hydrology must	
Woody Vine Stratum (Plot size: <u>30 ft r</u> )		- Total Cov	er	be present, unle	ess disturbed or prot	olematic.	
1				Hydrophytic			
2				Vegetation		N -	
	=	= Total Cov	er	Present?	tes	NO	
Remarks: (Include photo numbers here or on a separate sh	leet.)						
A preponderance of hydrophytic ved	getatic	on is pr	esent				
	-	•					
L							

Depth <u>Matrix</u> inches) Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	$1 \text{ oc}^2$	Texture	Remarks
0 - 20 10YR 5/2	<u> </u>	178 4/6	20	<u> </u>	<u> </u>	Clay Loam	Keniarka
		511(4,0		<u> </u>			
-							
-							
		duced Matrix M	S-Masko			<sup>2</sup> L ocation	· PL-Poro Liping M-Matrix
vdric Soil Indicators:				u Sanu Gi	an 15.	Indicators	for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)		Sandy (	Gleved Ma	atrix (S4)		Coast	Prairie Redox (A16)
_ Histic Epipedon (A2)		Sandy I	Redox (St	5)		Dark S	Surface (S7)
Black Histic (A3)		Stripped	d Matrix (	56)		Iron-M	anganese Masses (F12)
_ Hydrogen Sulfide (A4)		Loamy	Mucky Mi	neral (F1)		Very S	hallow Dark Surface (TF12)
_ Stratified Layers (A5)		Loamy	Gleyed M	atrix (F2)		Other	(Explain in Remarks)
2 cm Muck (A10)		Deplete	ed Matrix (	F3)			
_ Depieted Below Dark Suna Thick Dark Surface (A12)	ce (ATT)	Redox I	od Dark Suna	irface (FO)	<b>`</b>	<sup>3</sup> Indicators	of hydrophytic vegetation and
Sandy Mucky Mineral (S1)		Redox	Depressio	ons (F8)	)	wetland	d hydrology must be present.
_ 5 cm Mucky Peat or Peat (	\$3)	_		( /		unless	disturbed or problematic.
estrictive Layer (if observed	):						
Type:							
. )							
Depth (inches):		_ 				Hydric Soil	Present? Yes No
Depth (inches): emarks: The soil profile mee	ets the cr	 iteria for h	aving	a dep	leted	Hydric Soil matrix	Present? Yes <u>V</u> No
Depth (inches): emarks: The soil profile mee	ets the cr	 iteria for h	aving	a dep	leted	Hydric Soil	Present? Yes <u>V</u> No
Depth (inches): emarks: he soil profile mee	ets the cr	iteria for h	aving	a dep	leted	Hydric Soil	Present? Yes <u>V</u> No
Depth (inches): emarks: The soil profile mean DROLOGY	ets the cr	iteria for h	aving	a dep	leted	Hydric Soil	Present? Yes <u>V</u> No
Depth (inches): emarks: The soil profile mean (DROLOGY /etland Hydrology Indicators rimary Indicators (minimum of	ets the cr	iteria for h	aving	a dep	leted	Hydric Soil matrix <u>Seconda</u>	Present? Yes <u>V</u> No <u>v</u>
Depth (inches): emarks: The soil profile mee (DROLOGY (etland Hydrology Indicators rimary Indicators (minimum of Surface Water (A1)	ets the cr	iteria for h	aving	a dep	leted	Hydric Soil matrix <u>Seconda</u>	Present? Yes No ary Indicators (minimum of two requir face Soil Cracks (B6)
Depth (inches): emarks: The soil profile mee /DROLOGY /etland Hydrology Indicators rimary Indicators (minimum of Surface Water (A1) High Water Table (A2)	ets the cr	iteria for h	oply) ined Leav	a dep	leted	Hydric Soil matrix <u>Seconda</u>	Present? Yes No ary Indicators (minimum of two requir face Soil Cracks (B6) nage Patterns (B10)
Depth (inches): emarks: The soil profile mee (DROLOGY Vetland Hydrology Indicators rimary Indicators (minimum of 	ets the cr	<u>: check all that ar</u> Water-Sta Aquatic Fa	oply) ined Leav auna (B13 atic Plants	a dep	leted	Hydric Soil matrix <u>Seconda</u> <u>Seconda</u> <u>V</u> Drai Drai Dry-	Present? Yes No ary Indicators (minimum of two requir face Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2)
Depth (inches): emarks: The soil profile mean Depth (inches): emarks: The soil profile mean Depth (inches): Depth (inches): The soil profile mean Depth (inches): The soil profile mea	ets the cr	iteria for h	oply) ined Leav auna (B13 atic Plants Sulfide O	a dep res (B9) (B14) dor (C1)		Hydric Soil matrix <u>Seconda</u> <u>Seconda</u> <u>U</u> Drai <u>Dry</u> <u>Cray</u> (C2)	Present? Yes No ary Indicators (minimum of two requir face Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) yfish Burrows (C8)
Depth (inches): emarks: The soil profile mean Depth (inches): emarks: The soil profile mean Depth (inches): Topology Indicators (imary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Depth Deposits (B2)	ets the cr	iteria for h <u>check all that ap</u> Water-Sta Aquatic Fa True Aqua Hydrogen X Oxidized F	oply) ined Leav auna (B13 atic Plants Sulfide O Rhizosphe	a dep //es (B9) (B14) dor (C1) eres on Liv	ing Roots	Hydric Soil matrix <u>Seconda</u> <u>Seconda</u> <u>U</u> Drai <u>Dry-</u> (C3) State	Present? Yes No ary Indicators (minimum of two requir face Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9)
Depth (inches): emarks: The soil profile mean Depth (inches): emarks: The soil profile mean Depth (inches): Topology Indicators (DROLOGY (Etland Hydrology Indicators imary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Alrael Matter Crust (B4)	ets the cr	iteria for h <u>; check all that ar</u> Water-Sta Aquatic Fa True Aqua Hydrogen X Oxidized F Presence Bocont Irrue	aving oply) ined Leav auna (B13 atic Plants Sulfide O Rhizosphe of Reduce	a dep res (B9) (B14) dor (C1) res on Liv ed Iron (C-	ing Roots	Hydric Soil matrix <u>Seconda</u> <u>Surf</u> Drai Dry- (C3) Surf Sturf Cray (C3) Sturf Cray	Present? Yes No ary Indicators (minimum of two requir face Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) Irration Visible on Aerial Imagery (C9 ited or Stressed Plants (D1) marphic Pocificin (D2)
Depth (inches): emarks: The soil profile mean DROLOGY etland Hydrology Indicators imary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	ets the cr	<pre>iteria for h iteria for h</pre>	oply) ined Leav auna (B13 atic Plants Sulfide O Rhizosphe of Reduct	a dep res (B9) (B14) dor (C1) eres on Liv ed Iron (C- ion in Tille (C7)	ing Roots 4) d Soils (C	Hydric Soil matrix <u>Seconda</u> <u>Suff</u> Drai <u>Cray</u> (C3) Satu Stur 6) <u>V</u> Geo	Present? Yes No ary Indicators (minimum of two requir face Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 nted or Stressed Plants (D1) morphic Position (D2) Season (D5)
Depth (inches): emarks: The soil profile mean DROLOGY etland Hydrology Indicators imary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial	ets the cr		oply) ined Leav auna (B13 atic Plants Sulfide O Rhizosphe of Reduce on Reduct Surface	a dep res (B9) (B14) dor (C1) eres on Liv ed Iron (C- ion in Tille (C7) (D9)	ing Roots 4) d Soils (C	Hydric Soil matrix <u>Seconda</u> <u>Seconda</u> <u>U</u> Drai <u>Dry-</u> (C3) <u>Satu</u> (C3) <u>Satu</u> (C3) <u>Satu</u> (C3) <u>FAC</u>	Present? Yes No ary Indicators (minimum of two requir face Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2) C-Neutral Test (D5)
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Depth (inches): emarks: he soil profile mean DROLOGY etland Hydrology Indicators imary Indicators (minimum of 	ets the cr :: one is required Imagery (B7) ve Surface (B8) Yes No	<pre>iteria for h iteria for h</pre>	aving oply) ined Leav auna (B13 atic Plants Sulfide O Rhizosphe of Reduce of Reduce Well Data plain in Re ches):	a dep res (B9) (B14) dor (C1) eres on Liv ed Iron (C- ion in Tille (C7) (C9) emarks)	ing Roots 4) d Soils (C	Hydric Soil matrix <u>Seconda</u> <u>V</u> Drai Drai Cray (C3) Satu (C3) Stur 6) <u>V</u> Geo VFAC	Present? Yes No ary Indicators (minimum of two requir face Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2) c-Neutral Test (D5)
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Depth (inches): emarks: The soil profile mean /DROLOGY /etland Hydrology Indicators rimary Indicators (minimum of 	ets the cr ets the cr inagery (B7) inagery (	iteria for h  icheck all that ag  check all that ag  Water-Sta Aquatic Fa Aqu	aving oply) ined Leav auna (B13 atic Plants Sulfide O Rhizosphe of Reduce on Reduce con Reduce surface Well Data plain in Re ches): ches):	a dep res (B9) (B14) dor (C1) eres on Liv ed Iron (C- ion in Tille (C7) (D9) emarks)	ing Roots 4) d Soils (C	Hydric Soil matrix <u>Seconda</u> <u>Surf</u> <u>Cray</u> (C3) <u>Satu</u> (C3) <u>Satu</u> (C3) <u>FAC</u> Market Soil	Present? Yes No ary Indicators (minimum of two requir acce Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) ated or Stressed Plants (D1) morphic Position (D2) S-Neutral Test (D5) y Present? Yes No
Depth (inches): emarks: The soil profile mean (DROLOGY (etland Hydrology Indicators rimary Indicators (minimum of 	ets the cr ets the cr imagery (B7) ve Surface (B8) Yes No Yes No Yes No Yes No Yes No	iteria for h <u>: check all that ar</u> Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen X Oxidized F Presence Recent Irc Thin Muck Gauge or Other (Exp U Depth (in U Depth (in Depth (in U Depth (in U Depth (in U Depth (in U Depth (in U Depth (in U Depth (in U Depth	aving	a dep res (B9) (B14) dor (C1) eres on Live dor (C1) eres on Live (C7) (C9) emarks)	ing Roots 4) d Soils (C	Hydric Soil matrix <u>Seconda</u> <u>V</u> Drai <u>Dry</u> (C3) Satu (C3) Satu <u>Stur</u> 6) <u>V</u> Geo <u>V</u> FAC	Present? Yes No ary Indicators (minimum of two requir face Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2) C-Neutral Test (D5) y Present? Yes No
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Project/Site: AEP North Delphos - Rockhill	City/County: Lima /Allen		Sampling Date:	2021-06-30
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-K/L UPL
Investigator(s): J. Holmes E. Wilson	Section, Township, Range: _	S011 T0	03 R006	
Landform (hillslope, terrace, etc.): Upland, Flat	Local relief (conca	ave, convex, none):	None	
Slope (%): 1 Lat: 40.798859	Long: -84.137467		Datum: WGS 8	34
Soil Map Unit Name: Blg1B1		NWI classific	cation: N/A	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🗾 No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norm	al Circumstances" p	present? Yes	✓ No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing	a sampling point locat	ons. transects	. important f	eatures. etc.

Hydrophytic Vegetation Present?	Yes	No 🖌			
Hydric Soil Present?	Yes	No	Is the Sampled Area		
Wetland Hydrology Present?	Yes	No	within a Wetland?	Yes	No
Remarks:					

# Representative of existing ROW. Recently mowed. Veg disturbed

20 ft	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 1 (A)
2.				
3				Total Number of Dominant
				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 25 (A/B)
15 64 -		= Total Cov	/er	
Sapling/Shrub Stratum (Plot size: 15 Tt r )				Prevalence Index worksheet:
1. Fraxinus americana	15	<u> </u>	FACU	Total % Cover of:Multiply by:
2. Rosa multiflora	10	<u> </u>	FACU	OBL species 0 x 1 = 0
3				FACW species x 2 =
4.				FAC species 15 $x_3 = 45$
5				FACU species 85 x 4 = 340
<u>.                                    </u>	25%	- Total Car		$  P  _{\text{species}} = 0 \qquad x_5 = 0$
Herb Stratum (Plot size: 5 ft r )	2070		er	Column Tatala: $100$ (A) $385$ (B)
1. Solidago canadensis	50	~	FACU	
2 Apocynum cannabinum	15	~	FAC	Prevalence Index = B/A = 3.9
3 Erigeron annuus	10		FACU	Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
5				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
<i>I</i>				data in Remarks or on a separate sheet)
8				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
9				
10				Indiantee of hydric coll and wetland hydrology much
00 (1	75%	= Total Cov	/er	he present unless disturbed or problematic
Woody Vine Stratum (Plot size: 30 ft r )				
1				Hydrophytic
2				Vegetation
		= Total Cov	ver	Present? Yes No
Remarks: (Include photo numbers here or on a separate s	heet.)			
		<b>!</b>		
A preponderance of hydrophytic ve	egetation	on is no	ot pres	ent

Profile Description	(Describe	to the dep	oth neede	d to docum	nent the ind	licator or cor	nfirm t	he absence	of indicato	ors.)	
Depth	Matrix			Redox	Features	- 1 .				_	
(inches) Col	or (moist)		<u>Color</u>	(moist)		Type' Loc	<u> </u>	Texture		Remarks	
<u>0-6</u> <u>10Y</u>	8 4/3	100					s	Sandy Clay Loam			
-											
-											
-											
<sup>1</sup> Type: C=Concentra	ation D=Den	letion RM	=Reduced	Matrix MS	=Masked S	and Grains		<sup>2</sup> Location	PI =Pore	Lining M=M	atrix
Hydric Soil Indicate	ors:		Reduced	matrix, me	mached o			Indicators	for Proble	matic Hydrid	c Soils <sup>3</sup> :
Histosol (A1)				Sandy G	leved Matri	x (S4)		Coast	Prairie Red	ox (A16)	
Histic Epipedon	(A2)		_	Sandy R	edox (S5)	(- ')		Dark S	Surface (S7)		
Black Histic (A3	)		_	_ Stripped	Matrix (S6)			Iron-M	anganese N	Aasses (F12)	
Hydrogen Sulfid	e (A4)		_	_ Loamy N	lucky Miner	al (F1)		Very S	Shallow Dark	Surface (TF	12)
Stratified Layers	(A5)			Loamy C	Bleyed Matri	ix (F2)		Other	(Explain in F	Remarks)	
2 cm Muck (A10	)			Depleted	d Matrix (F3)	)					
Depleted Below	Dark Surfac	e (A11)	_	_ Redox D	ark Surface	e (F6)					
Thick Dark Surfa	ace (A12)		_	_ Depleted	d Dark Surfa	ace (F7)		<sup>3</sup> Indicators	s of hydroph	ytic vegetatio	on and
Sandy Mucky M	ineral (S1)		-	_ Redox D	epressions	(F8)		wetlan	d hydrology	must be pres	sent,
5 cm Mucky Pea	at or Peat (S	3)						unless	disturbed o	or problemation	0.
Restrictive Layer (i	f observed):										
Туре:								Hydric Soil	Present?	Yes	No 🗸
Depth (inches): _								nyane oon	1 resent:	103	
Remarks:											
The soil prot	ilo moo	te tha	critori	a for h	e nuive	donlata	d m	atriv			
			Cinteri		aving a	depicte					
HYDROLOGY											
Wetland Hydrology	Indicators:										
Primary Indicators (r	ninimum of c	ne is requi	ired: check	all that an	nlv)			Second	ary Indicator	s (minimum)	of two required)
Finally indicators (		ne is requi	irea, crieci	Motor Stai		(BO)					or two required)
Surface water (				Aquetio Eo	upo (P12)	(D9)		Oui	ince Soli Cia	(B10)	
	ie (A2)		_		una (DIS)			Dia		ton Table (Of	2)
Saturation (A3)	4.		_	True Aquat	ic Plants (B	(04)		Dry	-Season wa	iter Table (CA	2)
Water Marks (B	1) 1)		_	Hydrogen :	Sulfide Odol	r (C1) - an Lisian Da		Cra	yrish Burrow	/s (C8)	(00)
Sediment Depos	sits (B2)			Oxialzea R	nizospheres	s on Living Ro	oots (C	3) Sat	uration Visib	ole on Aerial I	magery (C9)
Drift Deposits (E	53)			Presence o	Reduced	Iron (C4)	(0.0)	Stu	nted or Stres	ssed Plants (	D1)
Algal Mat or Cru	ist (B4)		_	Recent Iron	n Reduction	in Tilled Soils	s (C6)	Geo	pmorphic Po	sition (D2)	
Iron Deposits (B	5)			Thin Muck	Surface (C7	7)		FAC	C-Neutral Te	est (D5)	
Inundation Visib	le on Aerial I	magery (B	7)	Gauge or V	Vell Data (D	99)					
Sparsely Vegeta	ated Concave	e Surface (	B8)	Other (Exp	lain in Rema	arks)					
Field Observations	:										
Surface Water Prese	ent? Y	es	No	Depth (inc	:hes):						
Water Table Present	? Y	es	No	Depth (inc	:hes):						
Saturation Present?	Y	es	No 🔽	Depth (inc	:hes):	v	Wetlan	d Hydrolog	y Present?	Yes	No
(includes capillary fri	nge) Data (atraas	00100	onitoring	ell aarial -	hotes main		one) if	available:			
Describe Recorded	Jala (stream	gauge, m		ven, aerial p	notos, previ	ious inspectio	ons), ir i	avaliable.			
No primary and c	or seconda	ry wetla	nd hydr	ology ind	icators w	ere presen	nt at th	ne time of	sampling		
Remarks:											

Project/Site: AEP North Delphos - Rockhill	City/County: Lima / Allen		Sampling Date:	2021-06-30
Applicant/Owner: AEP		State: Ohio	Sampling Point:	I-L
Investigator(s): J. Holmes E. Wilson	Section, Township, Range: _	S011 T00	03 R006	
Landform (hillslope, terrace, etc.): Depression	Local relief (conca	ave, convex, none):	Concave	
Slope (%): <u>1</u> Lat: <u>40.799327</u>	Long: -84.137937		Datum: WGS 84	4
Soil Map Unit Name: PmA		NWI classific	cation: N/A	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🔽 No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norm	al Circumstances" p	present? Yes 🗾	No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locat	ons, transects	, important fe	atures, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         V         No           Yes         V         No           Yes         V         No	Is the Sampled Area within a Wetland? Yes No
Remarks:		•

# Wetland in existing ROW. Recently mowed.

20.4	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across All Strata; 2 (B)
4.				(-,
5				Percent of Dominant Species
···		- Total Ca		That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft r )		- 10tai 00t		Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				$OBL species 0$ $x_1 = 0$
2.				EACW species $90$ $x_2 = 180$
S				$\frac{1}{10} = \frac{10}{10} = \frac{10}$
4				FACT species $\frac{10}{2}$ $x^3 = \frac{10}{2}$
5				FACU species $0$ $x 4 = 0$
Hark Stratum (Distaire: 5 ft r		= Total Cov	/er	UPL species $0 \times 5 = 0$
Leersia virginica	45	~	FACW	Column Totals: 100 (A) 210 (B)
1. <u>Decloid virginica</u>	45		EACW	Prevelence Index = P/A = 21
	10			
3. Apocynum cannabinum	10		FAC	Hydrophytic vegetation indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5				∠ 2 - Dominance Test is >50%
6				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8.				data in Remarks or on a separate sheet)
9.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10				
10.	100%	- Total Cox		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )		- 10(a) 001		be present, unless disturbed or problematic.
1.				Hydrophytic
2				Vegetation
۵		- Total Cox		Present? Yes No
Remarks: (Include photo numbers here or on a separate s	theet )	- 10(a) 00(		
Nomano. (molece prote nembers here of on a separate s				
A preponderance of hydrophytic ve	egetatio	on is pr	resent	

nches) Color (mo	ist) %	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
0 - 20 10YR 5/2	95	10YR 4/6	_ 5	<u> </u>	M	Silty Clay Loam	
-							
-							
-							
be: C=Concentration, E	D=Depletion, RM	=Reduced Matrix, M	IS=Maske	d Sand G	ains.	<sup>2</sup> Location	: PL=Pore Lining, M=Matrix.
ric Soil Indicators:						Indicators	for Problematic Hydric Soils":
Histosol (A1)		Sandy	Gleyed M	atrix (S4)		Coast I	Prairie Redox (A16) urface (S7)
Black Histic (A3)		Strippe	d Matrix (	5) S6)		Dark 3	anganese Masses (F12)
Hydrogen Sulfide (A4)		Loamy	Mucky M	ineral (F1)		Very S	hallow Dark Surface (TF12)
Stratified Layers (A5)		Loamy	Gleyed N	latrix (F2)		Other (	Explain in Remarks)
2 cm Muck (A10)		<ul> <li>Deplete</li> </ul>	ed Matrix	(F3)			
Depleted Below Dark	Surface (A11)	Redox	Dark Surf	ace (F6)		3	
Thick Dark Surface (A	12)	Deplete	ed Dark S	urface (F7	)	Indicators	of hydrophytic vegetation and
5 cm Mucky Peat or P	(51) eat (S3)	Redox	Depressio	ons (F8)		unless	d hydrology must be present,
strictive Layer (if obse	rved):						distanced of problematic.
Type.							
100.							
Depth (inches):						Hydric Soil	Present? Yes V No
Depth (inches): marks: he soil profile r	neets the	criteria for h	naving	a dep	leted	Hydric Soil matrix	Present? Yes <u>V</u> No
Depth (inches): marks: ne soil profile r	neets the	criteria for h	naving	a dep	leted	Hydric Soil matrix	Present? Yes <u>v</u> No
Depth (inches): narks: ne soil profile r	neets the	criteria for h	naving	a dep	leted	Hydric Soil matrix	Present? Yes <u>v</u> No
Depth (inches): narks: ne soil profile r DROLOGY tland Hydrology Indic	neets the	criteria for h	naving	a dep	leted	Hydric Soil matrix	Present? Yes <u>v</u> No
Depth (inches): marks: The soil profile r DROLOGY tland Hydrology Indic. mary Indicators (minimu	neets the ators: m of one is requ	criteria for h		a dep	leted	Hydric Soil matrix <u>Seconda</u>	Present? Yes <u>v</u> No
Depth (inches): marks: The soil profile r DROLOGY tland Hydrology Indica mary Indicators (minimu Surface Water (A1)	neets the ators: m of one is requ	criteria for h	pply)	a dep	leted	Hydric Soil matrix <u>Seconda</u>	Present? Yes No Inv Indicators (minimum of two requinates Soil Cracks (B6)
Depth (inches): marks: The soil profile r DROLOGY tland Hydrology Indica mary Indicators (minimu Surface Water (A1) High Water Table (A2)	neets the ators: m of one is requ	ired: check all that a Water-Sta Aquatic F	pply) ained Lear auna (B1	a dep //es (B9) 3)	leted	Hydric Soil matrix <u>Seconda</u> <u>V</u> Drai	Present? Yes No ry Indicators (minimum of two requi ace Soil Cracks (B6) nage Patterns (B10)
Depth (inches): narks: ne soil profile r DROLOGY tland Hydrology Indic: nary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3)	neets the ators: m of one is requ	ired: check all that a Water-Sta Aquatic F True Aqua	pply) ained Lear auna (B13 atic Plants	a dep	leted	Hydric Soil matrix <u>Seconda</u> <u>Seconda</u> <u>U</u> Draii Drai	Present? Yes No ry Indicators (minimum of two requi ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fet Revenue (C2)
Depth (inches): narks: ne soil profile r DROLOGY tland Hydrology Indic mary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	neets the ators: m of one is requ	ired: check all that a Water-Sta Aquatic F True Aqua Hydrogen	pply) ained Lear auna (B13 atic Plants o Sulfide C	a dep //es (B9) 3) 5 (B14) 5 dor (C1)		Hydric Soil matrix <u>Seconda</u> <u>Sufa</u> Drai Dry- Cray	Present? Yes No Inv Indicators (minimum of two requinates and the second se
Depth (inches): marks: The soil profile r DROLOGY tland Hydrology Indic: mary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	neets the ators: m of one is requ	ired: check all that a Water-Sta Aquatic F True Aqua X Oxidized	pply) ained Lear auna (B13 atic Plants a Sulfide C Rhizosphi	a dep ves (B9) 3) 5 (B14) odor (C1) eres on Liv	ving Roots	Hydric Soil matrix <u>Seconda</u> <u>Seconda</u> <u>Cray</u> Gray <u>Seconda</u>	Present? Yes No Inv Indicators (minimum of two requi ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) (fish Burrows (C8) Irration Visible on Aerial Imagery (C9) tod or Straced Plonte (C1)
Depth (inches): marks: The soil profile r DROLOGY tland Hydrology Indic: mary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4)	neets the ators: m of one is requ	ired: check all that a Water-Sta Aquatic F True Aqua Hydrogen X Oxidized Presence Presence	pply) ained Leav auna (B13 atic Plants a Sulfide C Rhizosphi of Reduc	a dep ves (B9) 3) 5 (B14) 2dor (C1) eres on Liv ed Iron (C	ving Roots	Hydric Soil matrix Seconda Suff Drai Cray (C3) Satu Stun Cray Suff Cray	Present? Yes No ry Indicators (minimum of two requi ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) rfish Burrows (C8) irration Visible on Aerial Imagery (C9) ited or Stressed Plants (D1) morphic Position (D2)
Depth (inches): marks: Te soil profile r DROLOGY tland Hydrology Indic: mary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	neets the ators: m of one is requ	ired: check all that a Water-Sta Aquatic F True Aqua Hydrogen X Oxidized Recent In Thin Muc	pply) ained Lea auna (B13 atic Plants o Sulfide C Rhizosphe of Reduc on Reduct	a dep ves (B9) 3) 5 (B14) odor (C1) eres on Liv ed Iron (C tion in Tille (C7)	ving Roots 4) ed Soils (C	Hydric Soil matrix <u>Seconda</u> <u>Surf</u> Drain <u>Cray</u> G(C3) Satu Stur G(C3) Satu Stur Geo	Present? Yes No ry Indicators (minimum of two requi ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) rfish Burrows (C8) Irration Visible on Aerial Imagery (C9 ted or Stressed Plants (D1) morphic Position (D2) -Neutral Test (D5)
Depth (inches): narks: De Soil profile r DROLOGY tland Hydrology Indic: mary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Inundation Visible on A	neets the ators: m of one is requ	ired: check all that a Water-Sta Aquatic F True Aqua True Aqua X Oxidized Presence Recent Ira Thin Muc	pply) ained Lea auna (B13 atic Plants a Sulfide C Rhizosphi of Reduc on Reduct k Surface Well Date	a dep ves (B9) 3) 5 (B14) odor (C1) eres on Liv ed Iron (C cion in Tille (C7) a (D9)	ving Roots 4) ed Soils (C	Hydric Soil matrix <u>Seconda</u> <u>Suff</u> Drai <u>Cray</u> (C3) Satu (C3) Satu Stur 6) <u>V</u> Geo <u>Y</u> FAC	Present? Yes No Inv Indicators (minimum of two required ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) rfish Burrows (C8) Irration Visible on Aerial Imagery (C9) ited or Stressed Plants (D1) morphic Position (D2) -Neutral Test (D5)
Depth (inches): narks: ne soil profile r DROLOGY tland Hydrology Indic mary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Inundation Visible on A Sparsely Vegetated Co	neets the ators: m of one is requ 2) Aerial Imagery (B oncave Surface (	ired: check all that a Water-Sta Aquatic F Aquatic F True Aqua Hydrogen X Oxidized Presence Recent Ind Thin Muci (17) Gauge or (18) Other (Ex	pply) ained Lear auna (B13 atic Plants of Reduc on Reduct k Surface Well Data splain in R	a dep ves (B9) 3) 5 (B14) odor (C1) eres on Liv ed Iron (C cion in Tille (C7) a (D9) emarks)	ving Roots 4) ed Soils (C	Hydric Soil matrix <u>Seconda</u> <u>Surfa</u> <u>Cray</u> (C3) Satu (C3) Satu Stur (C3) Satu <u>Stur</u> (C3) Satu <u>Stur</u> (C3) Satu <u>Stur</u> (C3) Satu <u>Stur</u> (C3) Satu <u>Stur</u> (C3) Satu	Present? Yes No Inv Indicators (minimum of two requi ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) uration Visible on Aerial Imagery (C9 ited or Stressed Plants (D1) morphic Position (D2) -Neutral Test (D5)
Depth (inches): marks: De Soil profile r DROLOGY tland Hydrology Indic: mary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Inundation Visible on A Sparsely Vegetated Ca Inundation Sible on A	neets the ators: m of one is requ 2) Aerial Imagery (B oncave Surface (	ired: check all that a Water-Sta Aquatic F True Aqua Hydrogen X Oxidized Presence Recent In Thin Muc (B8) Other (Ex	pply) ained Leav auna (B13 atic Plants a Sulfide C Rhizospho of Reduc on Reduc k Surface Well Data splain in R	a dep ves (B9) 3) 5 (B14) odor (C1) eres on Liv ed Iron (C cion in Tille (C7) a (D9) emarks)	ving Roots 4) ed Soils (C	Hydric Soil matrix <u>Seconda</u> <u>Seconda</u> <u>Surfa</u> <u>Cray</u> Gray Gray Gray <u>Stur</u> <u>Cray</u> <u>Stur</u> <u>Cray</u> <u>Stur</u> <u>Cray</u> <u>Surfa</u> <u>Cray</u> <u>FAC</u>	Present? Yes No rry Indicators (minimum of two requi ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) rfish Burrows (C8) Irration Visible on Aerial Imagery (C9) thed or Stressed Plants (D1) morphic Position (D2) -Neutral Test (D5)
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Depth (inches): marks: De Soil profile r DROLOGY tland Hydrology Indic: mary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Inundation Visible on A Sparsely Vegetated Co Id Observations: face Water Present? ter Table Present?	neets the ators: m of one is requ 2) Aerial Imagery (B oncave Surface ( Yes Yes	ired: check all that a Water-Sta Water-Sta Aquatic F True Aqua Hydrogen True Aqua Presence Recent Ina Thin Mucl 17) Gauge or (B8) Other (Ex No Depth (ir No Depth (ir	pply) ained Lea auna (B1: atic Plants a Sulfide C Rhizosphi of Reduct on Reduct k Surface Well Data xplain in R mches):	a dep ves (B9) 3) 5 (B14) odor (C1) eres on Liv ed Iron (C cion in Tille (C7) a (D9) emarks)	ving Roots 4) ed Soils (C	Hydric Soil matrix <u>Seconda</u> <u>Surf</u> Drai <u>Cray</u> G(C3) Satu Stur 6) <u>V</u> Geo <u>V</u> FAC	Present? Yes No rry Indicators (minimum of two requi ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) rfish Burrows (C8) irration Visible on Aerial Imagery (C9 ited or Stressed Plants (D1) morphic Position (D2) -Neutral Test (D5)
Depth (inches): marks: Te Soil profile r DROLOGY tland Hydrology Indica mary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Inundation Visible on A Sparsely Vegetated Co Id Observations: face Water Present? ter Table Present? uration Present?	neets the ators: m of one is requ 2) Aerial Imagery (B oncave Surface ( Yes Yes Yes	ired: check all that a water-Sta Aquatic F True Aquatic F True Aquatic F X Oxidized Presence Recent Int Thin Muci 37) Gauge or (B8) Other (Ex No <u>v</u> Depth (ir No <u>v</u> Depth (ir No <u>v</u> Depth (ir	pply) ained Leav auna (B13 atic Plants a Sulfide C Rhizosphi of Reduct on Reduct k Surface Well Data splain in R uches): nches):	a dep ves (B9) 3) 5 (B14) odor (C1) eres on Liv ed Iron (C cion in Tille (C7) a (D9) emarks)	ving Roots 4) ed Soils (C	Hydric Soil matrix <u>Seconda</u> <u>Seconda</u> <u>Y</u> Drain <u>Pry-</u> (C3) Satu (C3) Satu Stun 6) <u>Y</u> Geo <u>FAC</u>	Present? Yes No rry Indicators (minimum of two requi ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) rfish Burrows (C8) irration Visible on Aerial Imagery (C9) ited or Stressed Plants (D1) morphic Position (D2) -Neutral Test (D5) y Present? Yes No
Depth (inches): marks: De Soil profile r DROLOGY tland Hydrology Indic: mary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Inundation Visible on A Sparsely Vegetated Ca Id Observations: face Water Present? ter Table Present? uration Present? uration Present? iudes capillary fringe) scribe Recorded Data (s	meets the ators: m of one is requ 2) Aerial Imagery (B pincave Surface ( Yes Yes Yes Stream gauge, m	ired: check all that a water-Sta Aquatic F True Aqua Hydrogen X Oxidized Presence Recent Iru Thin Muci Thin Muci Other (Ex No V Depth (ir No V Depth (ir	pply) ained Lear auna (B13 atic Plants a Sulfide C Rhizosphe of Reduc on Reduct k Surface Well Data splain in R uches): nches): photos, p	a dep ves (B9) 3) 5 (B14) odor (C1) eres on Liv ed Iron (C (C7) a (D9) emarks) revious in:	ving Roots 4) ed Soils (C	Hydric Soil matrix <u>Seconda</u> <u>Surfa</u> <u>Cray</u> (C3) <u>Satu</u> (C3) <u>Satu</u> (C3) <u>Satu</u> FAC	Present? Yes No Inv Indicators (minimum of two requinates a construction of two requinates (B6) Nage Patterns (B10) Season Water Table (C2) Infish Burrows (C8) Inration Visible on Aerial Imagery (C9) Inted or Stressed Plants (D1) morphic Position (D2) -Neutral Test (D5) V Present? Yes No
Depth (inches): marks: De Soil profile r DROLOGY tland Hydrology Indice mary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Inundation Visible on A Sparsely Vegetated Co Id Observations: face Water Present? ter Table Present? uration Present? Ludes capillary fringe) scribe Recorded Data (st	meets the ators: m of one is requ 2) Aerial Imagery (B oncave Surface ( Yes Yes Yes Stream gauge, m	ired: check all that a water-Sta Aquatic F True Aqua Hydrogen X Oxidized Presence Recent In Thin Much Oxidized Oxidized Presence Carpone No v Depth (ir No v Depth (ir	pply) ained Leav auna (B13 atic Plants a Sulfide C Rhizosphe of Reduc on Reduc k Surface Well Data rplain in R uches): nches): photos, p	a dep ves (B9) 3) 5 (B14) odor (C1) eres on Liv ed Iron (C tion in Tille (C7) a (D9) emarks) revious in:	ving Roots 4) ed Soils (C	Hydric Soil matrix <u>Seconda</u> <u>Y</u> Drai Dry- Cray (C3) Satu Stun 6) <u>Y</u> Geo <u>Y</u> FAC	Present? Yes No rry Indicators (minimum of two requi ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) rfish Burrows (C8) irration Visible on Aerial Imagery (C9 ted or Stressed Plants (D1) morphic Position (D2) -Neutral Test (D5) y Present? Yes No

Project/Site: AEP North Delphos - Rockhill	City/County: Lima / Allen		Sampling Date:	2021-06-30
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-M
Investigator(s): J. Holmes E. Wilson	_ Section, Township, Range: _	S011 T00	03 R006	
Landform (hillslope, terrace, etc.): Depression	Local relief (conca	ave, convex, none):	Concave	
Slope (%): <u>2</u> Lat: <u>40.794007</u>	Long: -84.132416 _		Datum: WGS 8	34
Soil Map Unit Name:SrA		NWI classific	ation: N/A	
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes 🔽 No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Norm	al Circumstances" p	present? Yes	✓ No
Are Vegetation, Soil, or Hydrology naturally pr	roblematic? (If needed,	explain any answe	rs in Remarks.)	

#### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         Yes         No           Yes         Yes         No           Yes         Yes         No	Is the Sampled Area within a Wetland? Yes I	No
Remarks:			

## PSS Wetland in existing ROW.

00 ft	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: 5 (B)
4.				(/
5.				Percent of Dominant Species
		= Total Cov	er	
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1. Cornus amomum	30	<u> </u>	FACW	Total % Cover of: Multiply by:
2. Acer negundo	10	✓	FAC	OBL species <u>10</u> x 1 = <u>10</u>
3.				FACW species 100 x 2 = 200
4				FAC species $10 \times 3 = 30$
5				FACU species $20$ $x = 80$
	40%	- Total Cov		$\frac{1}{100} \text{ species } \frac{1}{0} \text{ species } \frac{1}{$
Herb Stratum (Plot size: 5 ft r )	4070	- 10(a) 000		Column Totals: $140$ (A) $320$ (B)
1. Carex scoparia	20	~	FACW	
2. Impatiens capensis	20	~	FACW	Prevalence Index = $B/A = 2.3$
3. Solidago canadensis	20	~	FACU	Hydrophytic Vegetation Indicators:
4. Carex cristatella	15		FACW	1 - Rapid Test for Hydrophytic Vegetation
5. Verbesina alternifolia	15		FACW	✓ 2 - Dominance Test is >50%
6. Asclepias incarnata	10		OBL	$\checkmark$ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8.				data in Remarks or on a separate sheet)
9.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10				
···	100%	= Total Cov	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )		- 10(a) 004		be present, unless disturbed or problematic.
1.				Hydrophytic
2.				Vegetation
		= Total Cov	/er	Present? Yes No No
Remarks: (Include photo numbers here or on a separate s	sheet.)			1
	, <b>.</b>	<b>!</b>		
A preponderance of hydrophytic ve	egetatio	on is pr	esent	

ches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
) - 20	10YR 5/2	95	10YR 4/6	15	С	<u>M</u>	Silty Clay Loan	n
-								
-								
_								
-								
-								
be: C=Co	oncentration, D=De	pletion, RM	Reduced Matrix, M	S=Maske	d Sand Gr	ains.	<sup>2</sup> Locatio	on: PL=Pore Lining, M=Matrix.
ric Soil	ndicators:						Indicator	rs for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy	Gleyed M	atrix (S4)		Coas	st Prairie Redox (A16)
Histic Ep	oipedon (A2)		Sandy	Redox (S	5) 50)		Dark	Surface (S7)
Hydroge	n Sulfide (A4)		Suppe	Mucky Mi	50) neral (F1)		lion- Verv	Shallow Dark Surface (TE12)
Stratified	Lavers (A5)		Loamy	Gleved M	atrix (F2)		Othe	r (Explain in Remarks)
2 cm Mu	ick (A10)		Deplete	ed Matrix (	(F3)			
Depleted	d Below Dark Surfa	ce (A11)	Redox	Dark Surf	ace (F6)			
Thick Da	ark Surface (A12)		Deplete	ed Dark S	urface (F7	)	<sup>3</sup> Indicato	rs of hydrophytic vegetation and
Sandy N	lucky Mineral (S1)	22	Redox	Depressio	ons (F8)		wetla	nd hydrology must be present,
5 cm IVIU	aver (if observed)	· ·					unies	ss disturbed or problematic.
Type:	Layer (il observed)							
· · · · · · · · · · · · · · · · · · ·								il Present? Yes No
Depth (ind	ches):						Hydric So	
Depth (ind marks: he soil	profile mee	ets the	criteria for h	aving	a dep	leted	matrix	
Depth (ind narks: NE SOI	profile mee	ets the	criteria for h	aving	a dep	leted	matrix	
Depth (ind marks: De Soil	profile mee	ets the	criteria for h	aving	a dep	leted	matrix	
Depth (ind narks: DE SOII	profile mee GY drology Indicators	ets the	criteria for h	aving	a dep	leted	matrix	
Depth (ind narks: DE SOII DROLO tland Hyd nary Indic	ches): profile mee GY drology Indicators	ets the	criteria for h		a dep	leted	matrix	dary Indicators (minimum of two requir
Depth (ind narks: IE SOII DROLO tland Hyd nary India Surface	GY GY GY Water (A1)	ets the : one is requ	criteria for h	pply)	a dep	leted	Matrix	dary Indicators (minimum of two requir urface Soil Cracks (B6)
Depth (ind narks: DE SOII DROLO tland Hyd nary Indic Surface High Wa	GY GY GY Grology Indicators cators (minimum of Water (A1) tter Table (A2)	ets the	ired: check all that a Water-Sta	pply) ned Leav auna (B13	a dep	leted	Hydric So matrix <u>Secon</u>	dary Indicators (minimum of two requir urface Soil Cracks (B6) rainage Patterns (B10)
Depth (ind narks: DE SOII DROLO Cland Hyd nary India Surface High Wa Saturatio	GY GY GY Water (A1) ther Table (A2) on (A3) or (A3)	ets the	ired: check all that an Water-Sta Water-Sta True Aquatic Hudrogon	pply) ained Leav auna (B13 atic Plants	a dep //es (B9) 3) 5 (B14)	leted	Hydric So matrix <u>Secon</u> Dr Dr	dary Indicators (minimum of two requir urface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2)
Depth (ind narks: DE SOII DROLO tland Hyd nary India Surface High Wa Saturatia Water M	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) the Deposits (B2)	ets the	ired: check all that a Water-Sta Aquatic Fa True Aqua Wydrogen	oply) ained Leav auna (B13 atic Plants Sulfide O	a dep //es (B9) 3) 5 (B14) /dor (C1)		Hydric So matrix <u>Secon</u> <u>Secon</u> <u>Cr</u> (C3)	dary Indicators (minimum of two requir Inface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8)
Depth (ind narks: DE SOII DE S	GY drology Indicators cators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3)	ets the	ired: check all that and Water-Sta Water-Sta Aquatic Fa True Aqua Hydrogen .X Oxidized I Presence	pply) ained Leav auna (B13 atic Plants Sulfide O Rhizosphe of Reduc	a dep ves (B9) (B14) vers on Liver end Iron (C	ing Roots	Hydric So matrix <u>Secon</u> <u>Secon</u> <u>Cr</u> (C3) Sa St	dary Indicators (minimum of two requir urface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9)
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Depth (ind narks: DE SOII DE SOII DE SOII DE SOII DE SOII Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep	Ches): profile mee GY drology Indicators cators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1) tt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	ets the	ired: check all that an Water-Sta Aquatic Fa Aquatic Fa	pply) anned Leav auna (B13 atic Plants Sulfide O Rhizosphe of Reduct on Reduct Surface	a dep ves (B9) (B14) odor (C1) eres on Live ed Iron (C ion in Tille (C7)	ing Roots 4) d Soils (C	Hydric So matrix <u>Secon</u> <u>V</u> Dr <u>Cr</u> (C3) St 6) <u>V</u> Go V FA	dary Indicators (minimum of two requir urface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) unted or Stressed Plants (D1) eomorphic Position (D2) AC-Neutral Test (D5)
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Depth (ind narks: IE SOII IE S	Ches): profile mee GY drology Indicators cators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1) arks (B1) arks (B1) arks (B1) arks (B2) posits (B3) arks (B3) arks (B4) posits (B5) on Visible on Aerial v Vegetated Concav vations: er Present? Present? pillary fringe) corded Data (strear	ets the : one is required Imagery (E re Surface of res res res n gauge, m	ired: check all that and ired: check all that and Water-Sta Aquatic F: True Aquatic Hydrogen X Oxidized Presence Recent Ird Thin Muck 37) Gauge or (B8) Other (Ex No <u>v</u> Depth (in No <u>v</u> Depth (in	pply) ained Leav auna (B13 atic Plants Sulfide C Rhizosphe of Reduct Sulfide Z Rhizosphe of Reduct Sulfide Z well Data plain in R uches): nches): photos, p	a dep ves (B9) (B14) veres on Live ed Iron (C1) eres on Live ion in Tille (C7) a (D9) emarks) revious ins	ing Roots 4) d Soils (C	Hydric So matrix <u>Secon</u> <u>Secon</u> <u>V</u> Dr <u>Cr</u> (C3) <u>Sa</u> (C3) <u>Sa</u> (C3) <u>F</u> (C3) <u>F</u>	dary Indicators (minimum of two requir urface Soil Cracks (B6) rainage Patterns (B10) y-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) unted or Stressed Plants (D1) eomorphic Position (D2) AC-Neutral Test (D5) gy Present? Yes <u>V</u> No
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Project/Site: AEP North Delphos - Rockhill	City/County: Lima / Allen		Sampling Date:	2021-06-30
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-M/N UPL
Investigator(s): J. Holmes E. Wilson	Section, Township, Range: _	S011 T0	003 R006	
Landform (hillslope, terrace, etc.): Upland, Flat	Local relief (conca	ave, convex, none):	None	
Slope (%): 1 Lat: 40.794027	Long:84.132343		Datum: WGS 8	34
Soil Map Unit Name:SrA		NWI classific	ation:N/A	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🔽 No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances" p	present? Yes	✓ No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	rs in Remarks.)	

#### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Watland Hydrology Present?	Yes Yes	Is the Sampled Area	Yes	No 🖌
Remarks:	163			

## Representative of Areas outside wetland within existing ROW

00 ft	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft r</u> )	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Dominant
3				Species Across All Strata: 6 (B)
4				
5.				Percent of Dominant Species
		= Total Cov	/er	
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1. Juglans nigra	10	<u> </u>	FACU	Total % Cover of: Multiply by:
2. Rubus occidentalis	10	~	NI	OBL species x 1 =
3.				FACW species 25 x 2 = 50
4				FAC species 0 x 3 = 0
5				FACU species 85 x 4 = 340
···	20%	= Total Cov		UPL species $0$ x 5 = $0$
Herb Stratum (Plot size: 5 ft r )	2070	- 10(a) 000		Column Totals: 110 (A) 390 (B)
1. Solidago canadensis	45	~	FACU	
2. Asclepias syriaca	15	~	FACU	Prevalence Index = $B/A = 3.5$
3. Erigeron annuus	15	~	FACU	Hydrophytic Vegetation Indicators:
4. Verbesina alternifolia	15	~	FACW	1 - Rapid Test for Hydrophytic Vegetation
5. Impatiens capensis	10		FACW	2 - Dominance Test is >50%
6.				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7.				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8	·			data in Remarks or on a separate sheet)
9				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3	·			
10	100%			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r	100%	= Total Cov	/er	be present, unless disturbed or problematic.
1				
2	·			Hydrophytic Vegetation
2	·			Present? Yes No
Demorke: (Include photo pumbers here as an a concrete	heat )		er	
remarks. (include photo numbers here of on a separate s	sneet.)			
A preponderance of hydrophytic ve	egetatio	on is no	ot pres	ent

Profile Desc	ription: (Describe	e to the dep	th needed to document the indicator or o	confirm the absence of indicators.)	
Depth	Matrix		Redox Features	<u> </u>	
(inches)	Color (moist)	%	<u>Color (moist)</u> <u>%</u> <u>Type'</u> <u>L</u>	_oc <sup>2</sup> Texture Remarks	-
	10YR 4/3	100		Sandy Clay Loam	-
<u>9 <sup>-</sup> 20</u>	10YR 5/4	100		Clay Loam	_
-					
-					-
					-
					-
-					-
					_
<sup>1</sup> Type: C=Co	oncentration, D=De	pletion, RM=	Reduced Matrix, MS=Masked Sand Grains	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.	
Hydric Soil I	indicators:		· · ·	Indicators for Problematic Hydric Soils <sup>3</sup> :	
Histosol	(A1)		Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)	
Histic Ep	oipedon (A2)		Sandy Redox (S5)	Dark Surface (S7)	
Black Hi	stic (A3)		Stripped Matrix (S6)	Iron-Manganese Masses (F12)	
Hydroge	n Sulfide (A4)		Loamy Mucky Mineral (F1)	Very Shallow Dark Surface (TF12)	
Stratified	Layers (A5)		Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)	
2 cm Mu	ick (A10)	(	Depleted Matrix (F3)		
Depleted	Below Dark Surfa	ce (A11)	Redox Dark Surface (F6)	<sup>3</sup> Indicators of budger budie uppetition and	
Thick Da	Inchy Mineral (S1)		Depleted Dark Surface (F7)	wetland bydrology must be present	
5 cm Mu	icky Peat or Peat (S	\$3)		unless disturbed or problematic	
Restrictive L	_aver (if observed	):			
Type:		-			
Depth (inc	ches).			Hydric Soil Present? Yes No	
Bomorko:					
The soil	profile doe	s not m	leet the criteria for any hy	dric soil indicators	
HYDROLO	GY				_
Wetland Hy	drology Indicators				
Primary India	ators (minimum of	• ope is requi	red: check all that apply)	Secondary Indicators (minimum of two required)	、
<u>Filinary mulo</u>		one is requi	Water Steined Leaves (PO)	Surface Seil Creake (P6)	L
Surface	vvater (A1)		Water-Stained Leaves (B9)	Surface Soli Cracks (B6)	
Fign vva	(A2)		Aqualic Fauria (B13)	Drainage Patterns (BT0)	
Saturatio	on (AS) Jorka (P1)		True Aquatic Flants (B14)	Dry-Season Water Table (C2)	
Valer W	arks (DT)		Hydrogen Suilide Odor (CT)	Posts (C2) Saturation Visible on Aerial Imagon (C0)	
Sedimer	n Deposits (B2)		Oxidized Khizospheres on Living	Stunted or Stressed Plants (D1)	
Algal Ma	ot or Crust (B4)		Presence of Reduced from (C4)	cils (C6) Geomorphic Position (D2)	
	nosite (B5)		Thin Muck Surface (C7)	EAC_Neutral Test (D5)	
	on Visible on Aerial	Imagery (B)	Z) Gauge or Well Data (D9)		
Sparsely	Vegetated Conca	e Surface (I	38) Other (Explain in Remarks)		
Field Obser	vations:				
Surface Wate	or Present?	Voc	No Depth (inches):		
Mater Table	Drecent?		No Depth (inches):		
	Present?	res I	No Depth (Inches):		
Saturation Pr (includes cap	pillary fringe)	Yes	No Depth (inches):	Wetland Hydrology Present? Yes No	•
Describe Red	corded Data (strear	n gauge, mo	onitoring well, aerial photos, previous inspec	ctions), if available:	
No primary	and or second	ary wetlar	nd hydrology indicators were prese	ent at the time of sampling	
Remarks:					

WEILAND DEIE				- Midwest Neglon
Project/Site: AEP North Delphos - Rockhill		City/County	: <u>Lima</u> / /	Allen Sampling Date: 2021-06-30
Applicant/Owner: AEP				State: Ohio Sampling Point: 1-N
Investigator(s): J. Holmes E. Wilson		Section, To	wnship, Ra	nge: S011 T003 R006
Landform (hillslope, terrace, etc.): Depression			Local relief	(concave, convex, none): Concave
Slope (%); 2 Lat: 40.793591		Lona: -84	.132226	Datum: WGS 84
Soil Map Unit Name: HrB				NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this	time of ye	ar? Yes	No	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology sig	gnificantly	disturbed?	Are "	Normal Circumstances" present? Yes 🗾 No
Are Vegetation, Soil, or Hydrology na	aturally pro	blematic?	(If ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map s	howing	samplin	g point le	ocations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes       V       No         Hydric Soil Present?       Yes       V       No         Wetland Hydrology Present?       Yes       V       No         Remarks:       PSS Wetland in on the edge of exist	ing RC	Is th with	e Sampled in a Wetlar	Area nd? Yes <u> </u>
VEGETATION – Use scientific names of plants.				
Tree Stratum         (Plot size:30 ft r)           1            2            3	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:         Number of Dominant Species         That Are OBL, FACW, or FAC:       4         Total Number of Dominant         Species Across All Strata:       4         (B)
4 5				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft r )		- Total Co	ver	Prevalence Index worksheet:
1. Salix nigra	30	<u> </u>	OBL	Total % Cover of:Multiply by:
2. Acer negundo	10	<u> </u>	FAC	OBL species <u>30</u> x 1 = <u>30</u>
3				FACW species <u>85</u> x 2 = <u>170</u>
4				FAC species $\frac{10}{15}$ x 3 = $\frac{30}{22}$
5				FACU species $\frac{15}{2}$ $x 4 = \frac{60}{2}$
Harb Stratum (Plataiza: 5 ft r )	40%	= Total Cov	ver	UPL species $0 \times 5 = 0$
Photosize. (Photosize. )	45	~	FACW	Column Totals: 140 (A) 290 (B)
2. Phragmites australis	25	~	FACW	Prevalence Index = $B/A = 2.1$
3. Solidago canadensis	15		FACU	Hydrophytic Vegetation Indicators:
4. Verbesina alternifolia	15		FACW	1 - Rapid Test for Hydrophytic Vegetation
5.				∠ 2 - Dominance Test is >50%
6.				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
9				Problematic Hydrophytic Vegetation' (Explain)
10				1

100% = Total Cover

= Total Cover

US Army Corps of Engineers

Woody Vine Stratum (Plot size: <u>30 ft r</u>)
1.

Remarks: (Include photo numbers here or on a separate sheet.)

A preponderance of hydrophytic vegetation is present

2. \_\_\_\_\_

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Yes 🖌 No 🔄

Hydrophytic Vegetation

Present?

nches) (	Color (moist)		Color (moist)	%		_Loc*	Texture	Remarks
0 - 20 10	YR 4/2	95	10YR 4/6	15	С	М	Silty Clay Loam	
-								
							· ·	
		·					· ·	
		·						
ype: C=Concer	ntration, D=Dep	letion, RM=	Reduced Matrix, M	S=Masked	d Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
dric Soil Indic	ators:						Indicators f	or Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)			Sandy	Gleyed Ma	atrix (S4)		Coast P	Prairie Redox (A16)
Histic Epiped	on (A2)		Sandy	Redox (S5	5)		Dark Su	Irface (S7)
Black Histic (	A3)		Strippe	d Matrix (S	56) norol (E4)		Iron-Ma	nganese Masses (F12)
_ Hydrogen Su Stratified Lav	Inde (A4)		Loamy	Gleved M	neral (F1) atrix (F2)		Very Sn	allow Dark Surface (TFTZ)
2 cm Muck (A	(10)		✓ Deplete	ed Matrix (	F3)			
Depleted Bel	ow Dark Surface	e (A11)	Redox	Dark Surfa	ace (F6)			
Thick Dark S	urface (A12)		Deplete	ed Dark Su	urface (F7	)	<sup>3</sup> Indicators of	of hydrophytic vegetation and
Sandy Mucky	Mineral (S1)		Redox	Depressio	ons (F8)		wetland	hydrology must be present,
5 cm Mucky I	Peat or Peat (S3	3)					unless o	disturbed or problematic.
strictive Laye	r (if observed):							
lyne.								
Type							Hydric Soil F	resent? Yes No
Depth (inches) emarks: The soil pr	ofile mee	ts the c	criteria for h	aving	a dep	leted	matrix	Present? Yes <u> </u>
Depth (inches) emarks: he soil pr	ofile mee	ts the c	criteria for h	aving	a dep	leted	matrix	Present? Yes <u>No</u> No
Depth (inches) emarks: he soil pr	ofile mee	ts the c	criteria for h	aving	a dep	leted	matrix	Present? Yes <u>No</u> No
Depth (inches) marks: he soil pr DROLOGY	ofile mee	ts the c	criteria for h	aving	a dep	leted	matrix	Present? Yes <u>No</u> No
Depth (inches) marks: he soil pr DROLOGY etland Hydrolo mary Indicators	ofile mee	ts the c	criteria for h		a dep	leted	Hydric Soil F matrix	y Indicators (minimum of two require
Depth (inches) marks: he soil pr DROLOGY etland Hydrolo mary Indicators Surface Wate	ofile mee ogy Indicators: s (minimum of o er (A1)	ts the c	ed: check all that an Mater-Sta	oply)	a dep	leted	Hydric Soil F matrix <u>Secondar</u>	y Indicators (minimum of two required ince Soil Cracks (B6)
Depth (inches) marks: The soil pr DROLOGY stland Hydrolo mary Indicators Surface Wate High Water T Saturation (A	ofile mee ogy Indicators: s (minimum of o er (A1) able (A2)	ts the c	ed: check all that an Water-Sta Aquatic Fa	oply) naving	a dep	leted	Hydric Soil F matrix <u>Secondar</u> <u>V</u> Drain	y Indicators (minimum of two required the Soil Cracks (B6) lage Patterns (B10)
Depth (inches) marks: The soil pr DROLOGY etland Hydrolo mary Indicators Surface Wate High Water T Saturation (A Water Marks	ofile mee ogy Indicators: s (minimum of o er (A1) Table (A2) 3) (B1)	ts the c	ed: check all that an Water-Sta Aquatic Fa True Aquatic Hydrogen	oply) ined Leav auna (B13 atic Plants	a dep	leted	Hydric Soil F matrix <u>Secondar</u> <u>Surfa</u> <u>V</u> Drain _ Dry-S Cravf	y Indicators (minimum of two required to a soil Cracks (B6) tage Patterns (B10) Season Water Table (C2)
Depth (inches) marks: De Soil pr DROLOGY Itland Hydrolo mary Indicators Surface Wate High Water T Saturation (A Water Marks Sediment De	ofile mee ogy Indicators: s (minimum of o er (A1) able (A2) 3) (B1) posits (B2)	ts the c	ed: check all that ag Water-Sta Aquatic Fa True Aqua Hydrogen	oply) and Leav auna (B13 atic Plants Sulfide O Rhizosphe	a dep		Hydric Soil F matrix <u>Secondar</u> <u>Surfa</u> <u>V</u> Drain Dry-S Crayf	y Indicators (minimum of two required y Indicators (minimum of two required ice Soil Cracks (B6) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9)
Depth (inches) marks: The soil pr DROLOGY etland Hydrolo mary Indicators Surface Water High Water T Saturation (A Water Marks Sediment De Drift Deposits	ofile mee ogy Indicators: s (minimum of o er (A1) able (A2) 3) (B1) posits (B2) s (B3)	ts the c	ed: check all that a Water-Sta Aquatic Fa True Aqua Hydrogen X Oxidized I Presence	oply) and Leav auna (B13 atic Plants Sulfide O Rhizosphe of Reduce	a dep ves (B9) (B14) dor (C1) eres on Live ad Iron (C	leted	Hydric Soil F	y Indicators (minimum of two require the Soil Cracks (B6) hage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ed or Stressed Plants (D1)
Depth (inches) marks: The soil pr DROLOGY tland Hydrolo mary Indicators Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (	ofile mee ogy Indicators: s (minimum of o er (A1) able (A2) 3) (B1) posits (B2) s (B3) Crust (B4)	ts the c	ed: check all that an ed: check all that an — Water-Sta — True Aquatic Fa — True Aquatic Fa — True Aquatic Fa — True Aquatic Fa — Presence — Presence — Recent Inc	oply) ined Leav auna (B13 atic Plants Sulfide O Rhizosphe of Reduce	a dep res (B9) (B14) dor (C1) eres on Liv ed Iron (C- ion in Tille	ing Roots	Hydric Soil F matrix <u>Secondar</u> <u>Surfa</u> <u>Surfa</u> <u>Crayf</u> (C3) Satur Stunt (6) <b>v</b> Geon	y Indicators (minimum of two requir ice Soil Cracks (B6) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) red or Stressed Plants (D1) norphic Position (D2)
Depth (inches) marks: The soil pr DROLOGY tland Hydrolo mary Indicators Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or ( Iron Deposits	ofile mee ofile mee ogy Indicators: s (minimum of o er (A1) fable (A2) 3) (B1) posits (B2) s (B3) Crust (B4) s (B5)	ts the c	ed: check all that and ed: check all that and Water-Sta Aquatic Fa Aquatic Fa True Aquat True Aquat Presence Recent Ind Thin Muck	oply) ined Leav auna (B13 atic Plants Sulfide O Rhizosphe of Reduce on Reducti	a dep ves (B9) (B14) dor (C1) eres on Live ed Iron (C-1) ion in Tille (C7)	ing Roots 4) d Soils (C	Hydric Soil F matrix <u>Secondar</u> <u>Surfa</u> <u>V</u> Drain Dry-S <u>Crayf</u> (C3) Satur (C3) Satur Stunt 6) <u>V</u> Geon V FAC-	y Indicators (minimum of two requir uce Soil Cracks (B6) age Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)
Depth (inches) marks: he soil pr DROLOGY etland Hydrolo mary Indicators Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or ( Iron Deposits Inundation Vi	ofile mee ofile mee ogy Indicators: s (minimum of o er (A1) Table (A2) 3) (B1) posits (B2) s (B3) Crust (B4) s (B5) sible on Aerial I	ts the c	ed: check all that an ed: check all that an Water-Sta Aquatic Fa Aquatic Fa Aquatic Fa Aquatic Fa Presence Recent Inc Accent Inc Control Control	oply) ined Leav auna (B13 atic Plants Sulfide O Rhizosphe of Reduce on Reducti c Surface ( Well Data	a dep ves (B9) (B14) dor (C1) eres on Liv ed Iron (C- ion in Tille (C7) (D9)	ing Roots 4) d Soils (C	Hydric Soil F matrix <u>Secondar</u> <u>Surfa</u> <u>V</u> Drain Dry-S Crayf (C3) Satur Stunt 6) <u>V</u> Geon <u>V</u> FAC-	y Indicators (minimum of two requir ice Soil Cracks (B6) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) red or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)
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Depth (inches) marks: De Soil pr DROLOGY Atland Hydrolog mary Indicators Surface Water High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (C Iron Deposits Inundation Vi Sparsely Veg Hobservation rface Water Pre- turation Preser cludes capillary scribe Recorder	ofile mee ogy Indicators: s (minimum of o er (A1) able (A2) 3) (B1) posits (B2) s (B3) Crust (B4) s (B5) sible on Aerial I jetated Concave ns: esent? Y ent? Y (fringe) ad Data (stream	ts the c	ed: check all that a ed: check all that a Water-Sta Aquatic Fa Aquatic Fa Aquatic Fa Aquatic Fa Presence Recent Irc Action Muck Construction No Construction Depth (in No Construction C	aving	a dep res (B9) (B14) dor (C1) eres on Liv ed Iron (C- ion in Tille (C7) (D9) emarks)	ing Roots 4) d Soils (C	Hydric Soil F matrix <u>Secondar</u> <u>Surfa</u> <u>V</u> Drain Dry-S Crayf (C3) Satur (C3) Saturt Geon <u>V</u> Geon <u>V</u> FAC-	y Indicators (minimum of two required in the second sec
Depth (inches) marks: De Soil pr DROLOGY etland Hydrolo mary Indicators Surface Water High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (C Iron Deposits Inundation Vi Sparsely Veg Did Observatio rface Water Present turation Present cudes capillary scribe Recorded	ofile mee ofile mee ogy Indicators: s (minimum of o er (A1) fable (A2) 3) (B1) posits (B2) s (B3) Crust (B4) s (B5) sible on Aerial I getated Concave ins: esent? Y ent? Y fringe) ed Data (stream	ts the c	ed: check all that an ed: check all that an Water-Sta Aquatic Fa Aquatic Fa Aquatic Fa Aquatic Fa Presence Recent Irc Thin Muck Oxidized I Presence Control fa Control fa Depth (in No Conter (Ex Depth (Ex Dep	aving	a dep	ing Roots 4) d Soils (C	Hydric Soil F matrix <u>Secondar</u> <u>Surfa</u> <u>V</u> Drain Dry-S (C3) Satur Stunt (C3) Satur Stunt (C3) Satur FAC- Crayf (C3) Satur Stunt (C3) Satur Stunt (C3) Satur Stunt (C3) Satur (C3)	y Indicators (minimum of two required in the second sec
Depth (inches) marks: De Soil pr DROLOGY taland Hydrolog mary Indicators Surface Water High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (C Iron Deposits Inundation Vi Sparsely Veg Id Observation frace Water Pre- turation Preser cludes capillary scribe Recorder marks:	ofile mee ogy Indicators: s (minimum of o er (A1) able (A2) 3) (B1) posits (B2) s (B3) Crust (B4) s (B3) Crust (B4) s (B5) sible on Aerial I jetated Concave ns: esent? Y ent? Y fringe) ed Data (stream	ts the c	ed: check all that a ed: check all that a Water-Sta Aquatic Fa Aquatic Fa Aquatic Fa Aquatic Fa Presence Recent Irc Chin Muck Solution Cauge or Solution Cauge or Check all that a Aquatic Fa Aquatic Fa Check all that a Aquatic Fa Check all that a Aquatic Fa Check all that a Aquatic Fa Check all that a Aquatic Fa Aquatic Fa Check all that a Aquatic Fa Check all that a Aquatic Fa Aquatic Fa Check all that a Aquatic Fa Check all that a Aquatic Fa Aquatic Fa Check all that a Aquatic Fa Check all that a Aquatic Fa Aquatic Fa Check all that a Aquatic Fa Check all that a Check all th	poply) ined Leav auna (B13 atic Plants Sulfide O Rhizosphe of Reduct of Reduct o	a dep	ing Roots 4) d Soils (C	Hydric Soil F matrix <u>Secondar</u> <u>Surfa</u> <u>V</u> Drain Dry-S Crayf (C3) Satur (C3) Saturt Geon <u>V</u> Geon <u>V</u> FAC-	y Indicators (minimum of two required in the second sec

Project/Site: AEP North Delphos - Rockhill Deline	ation (	City/County	r: Lima/Al	len Sampling Date: 2021-06-30
Applicant/Owner: AEP				State: Ohio Sampling Point: 1-0
Investigator(s): E. Wilson, J. Holmes		Section, To	wnship, Ra	nge: S013, T003, R006
Landform (hillslope, terrace, etc.): Depression			Local relief	(concave, convex, none): Concave
Slope (%): 0 Lat: 40.778241		Long: -84	.115934	Datum: WGS 84
Soil Map Unit Name: PmA				NWI classification: PFO1A
Are climatic / hydrologic conditions on the site typical for thi	s time of yea	ar? Yes	✓ No	(If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology s	significantly	disturbed?	Are "	Normal Circumstances" present? Yes V No
Are Vegetation , Soil , or Hydrology I	naturally pro	blematic?	(lf ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing	samplin	ig point le	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes N	lo			
Hydric Soil Present? Yes V	lo	Is th	he Sampled	Area
Wetland Hydrology Present? Yes N	lo	with	nin a wetiar	
VEGETATION – Use scientific names of plants			vetiand	
True Oberham (Distributed 30 ft r	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 TT</u> ) 1.	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>3</u> (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: <u>67</u> (A/B)
Sanling/Shrub Stratum (Blat size) 15 ft r		= Total Co	ver	Prevalence Index worksheet:
Saping/Shiub Stratum (Flot size)				Total % Cover of: Multiply by:
2				$\begin{array}{c} \hline
3				FACW species $15$ $x_2 = 30$
4.				FAC species 0 x 3 = 0
5.				FACU species 0 x 4 = 0
		= Total Co	ver	UPL species 20 x 5 = 100
Herb Stratum (Plot size: 5 ft r )	40			Column Totals: 100 (A) 195 (B)
1. Carex stricta	- 40			$\mathbf{P}_{\mathrm{rest}}$
2. Eupatorium perioliatum	$-\frac{25}{20}$	<u> </u>		Prevalence Index = B/A = 2.0
3. Dipsacus iaciniatus	- 10			1 Panid Test for Hydrophytic Vegetation
4. Editiania granimiona	- 10			1 - Rapid Test for Hydrophytic Vegetation
			FACW	$\checkmark$ 3 - Prevalence Index is $< 30^{1}$
ö				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
۲ ۹				data in Remarks or on a separate sheet)
Q				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10				
Woody Vine Stratum (Plot eize: 30 ft r )	100%	= Total Co	ver	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1				Undrankutia
2			·	Vegetation
-		= Total Cor	ver	Present? Yes No
Remarks: (Include photo numbers here or on a separate	sheet.)	10(a) 00		1
Hydrophytic vegetation is present				

SOIL								Sampling Point:
Profile Desc	ription: (Describe	to the dep	th needed to docum	nent the	indicator	or confirm	m the absence of	indicators.)
Depth	Matrix		Redo	x Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	_Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 20	10YR 3/2	90	10YR 5/6	10	С	М	Clay Loam	
-								
							·	
							·	
-								
-								
		Lotion DM					<sup>2</sup> l continui <b>F</b>	
Hydric Soil L	ncentration, D=Dep	letion, Rivi	-Reduced Matrix, Ma	5=Maske	a Sana Gr	ains.	Indicators for	r Problematic Hydric Soils <sup>3</sup> :
Historolu	(A 1)		Sandy	loved M	atrix (SA)		Coost Pr	rio Dodox (A16)
	(AT) vinedon (A2)		Sandy C	Redox (S	ainx (34)		Coast Pra	
Black His	stic (A3)		Stripper	Matrix (	56) S6)		Iron-Man	nanese Masses (F12)
Hydroge	n Sulfide (A4)		Loamy I	Mucky Mi	neral (F1)		Very Sha	llow Dark Surface (TF12)
Stratified	Layers (A5)		Loamy (	Gleyed M	atrix (F2)		Other (Ex	(plain in Remarks)
2 cm Mu	ck (A10)		Deplete	d Matrix	(F3)			
Depleted	Below Dark Surfac	e (A11)	🖌 Redox 🛙	Dark Surf	ace (F6)			
Thick Da	rk Surface (A12)		Deplete	d Dark S	urface (F7	)	<sup>3</sup> Indicators of	hydrophytic vegetation and
Sandy M	lucky Mineral (S1)		Redox [	Depressio	ons (F8)		wetland h	ydrology must be present,
5 cm Mu	cky Peat or Peat (S	3)					unless dis	sturbed or problematic.
Restrictive L	.ayer (if observed):							
Type: <u>N/</u>	A						Hydric Soil Pr	esent? Yes No
Depth (inc	ches):							
Remarks:								
Hydric s	soils are nree	sent						
	solis are pre-	Sent.						
	GY							
	- I							
Primory India	ators (minimum of c	no io roqui	red: check all that an				Secondary	Indicators (minimum of two required)
		ne is requi					<u>Secondary</u>	- Seil Creeke (BC)
Surface	vvater (A1)		vvater-Stal	ned Leav	/es (B9)			a Soli Cracks (B6)
High Wa	ter Table (A2)		Aquatic Fa	iuna (B1)	) (D14)			ge Patterns (BTU)
	on (A3) orko (B1)		True Aqua	tic Plants	6 (B14)		Dry-Se	ason water Table (C2)
Water Ma	arks (B1)		Hydrogen	Suifide C		ing Deate		n Burrows (C8)
Seaimen				af Doduo			(C3) <u>Satura</u>	d or Strospod Planta (D1)
	t or Cruct (P4)		Presence of	n Reduct	ion in Tille	4) d Saile (C	E) Coome	or Silessed Flanis (DT)
			Recent Iro	Surface		a solis (C		Sphic Position (D2)
Iron Dep	usits (DD)	magany (P					FAC-N	eurar rest (D5)
Inundatio	Vogototod Concov	Eurfood	P		(D9)			
Sparsely	vegetated Concave	e Sunace (			emarks)			
Surface Mart	vauons:	~~		aboa'ı				
Surface wate	Present? Y	es		ches):				
vvater Table	Present? Y	es	No Depth (inc	cnes):		-	–	
Saturation Pr	resent? Y	es	No _ Depth (ind	cnes):		<sup>Wet</sup>	land Hydrology P	resent? Yes No
Describe Rec	corded Data (stream	gauge, m	onitoring well, aerial p	photos, p	revious ins	spections)	, if available:	

Remarks:

Hydrology indicators are present

Project/Site: AEP North Delphos - Rockhill Delineation	City/County: Lima/Allen	S	ampling Date: 2021-06-30
Applicant/Owner: AEP		_ <sub>State:</sub> Ohio <sub>S</sub>	ampling Point: 1-P
Investigator(s): E. Wilson, J. Holmes	Section, Township, Range:	S011, T003	3, R006
Landform (hillslope, terrace, etc.): Depression	Local relief (conc	cave, convex, none): _C	Concave
Slope (%): 1 Lat: _40.792737	Long: -84.131075	D	atum: WGS 84
Soil Map Unit Name: SrA		NWI classificati	<sub>ion:</sub> None
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🔽 No	_ (If no, explain in Ren	narks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norm	nal Circumstances" pre	sent? Yes 🔽 No
Are Vegetation, Soil, or Hydrology naturally pre-	oblematic? (If needed	l, explain any answers	in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point locat	tions, transects, i	mportant features, etc.

Hydrophytic Vegetation Present?	Yes No	
Hydric Soil Present?	Yes No	Is the Sampled Area
Wetland Hydrology Present?	Yes 🖌 No	within a Wetland? Yes <u>V</u> No

# PEM wetland within ROW in depression alongside AG field.

00 (i	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: <u>3</u> (A)
2.				
3				Total Number of Dominant
·				Species Across All Strata: <u>5</u> (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
15 ft r		= Total Cov	/er	
Sapling/Shrub Stratum (Plot size: 15 11 )				Prevalence Index worksheet:
1				Total % Cover of:Multiply by:
2				OBL species <u>45</u> x 1 = <u>45</u>
3.				FACW species 30 x 2 = 60
4				FAC species $20$ x 3 = $60$
5				EACLI species $0$ $x = 0$
5				$\frac{1}{100} \text{ species} \frac{5}{5} \text{ species} \frac{7}{25}$
Herb Stratum (Plot size: 5 ft r )		= Total Cov	ver	$\frac{100}{2} \times 5 = \frac{100}{100}$
Persicaria amphibia	30	~	OBL	Column Totals: 100 (A) 190 (B)
Phalaris arundinacea	25	<u> </u>	FACW	Prevalence Index = B/A = 1.9
	20		FAC	Hydrophytic Vegetation Indicators:
	15			1 Panid Tast for Hydrophytic Vegetation
	-			
5. Dipsacus laciniatus	5		UPL	2 - Dominance Test is >50%
6. Solidago gigantea	5		FACW	✓ 3 - Prevalence Index is ≤3.01
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8.				data in Remarks or on a separate sheet)
9				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10				
10	100%			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r	100%	= Total Cov	ver	be present, unless disturbed or problematic.
- I				Hydrophytic
2				Present? Yes No
		= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate s	sheet.)			
Hydrophytic vegetation is present.				

SOIL								Sampling Point:	
Profile Desc	cription: (Describe to	the depth	needed to docum	ent the i	ndicator	or confirr	n the absence	of indicators.)	
Depth	Matrix		Redox Features						
(inches)	Color (moist)	%	Color (moist)	%	_Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks	
0 - 20	10YR 3/2	95 10	DYR 6/6	5	С	М	Clay Loam		
-									
———									
-									
-									
1 <b>T</b>		tion DM-De	duced Metrix, MC		Cand Cr		21 apation	DI-Dava Lining M-Matrix	
Hydric Soil	Indicators:	tion, RIVI=RE	educed Matrix, MS	=Masked	Sand Gra	ains.	Location	for Problematic Hydric Soils <sup>3</sup> :	
Histosol	(A1)		Sandy G	loved Ma	triv (SA)		Coast	Prairia Paday (A16)	
Histic Fi	ninedon (A2)		Sandy G	edox (S5)	) )		Coast	Surface (S7)	
Black H	istic (A3)		Stripped	Matrix (S	, 6)		Iron-M	anganese Masses (F12)	
Hydroge	en Sulfide (A4)		Loamy N	lucky Min	eral (F1)		Very S	hallow Dark Surface (TF12)	
Stratifie	d Layers (A5)		Loamy G	leyed Ma	atrix (F2)		Other (Explain in Remarks)		
2 cm Mu	uck (A10)		Depleted	l Matrix (F	=3)				
Deplete	d Below Dark Surface	(A11)	Redox D	ark Surfa	ce (F6)		3		
Thick Da	Thick Dark Surface (A12) Depleted Dark Surface (F7)		Indicators	of hydrophytic vegetation and					
5 cm M	Sandy Mucky Mineral (S1) Redox Depressions (F8)		wetiand	d nydrology must be present,					
Restrictive	Laver (if observed):							distribed of problematic.	
Type N	/A								
Denth (in	ches).		_				Hydric Soil	Present? Yes 🖌 No	
Departies			_						
Hydric	soils are pres	ent.							
HYDROLO	GY								
Wetland Hy	drology Indicators:								
Primary Indi	cators (minimum of on	e is required	check all that app	oly)			<u>Seconda</u>	ary Indicators (minimum of two required)	
Surface	Water (A1)		Water-Stair	ned Leave	es (B9)		Surf	ace Soil Cracks (B6)	
High Wa	ater Table (A2)		Aquatic Fat	una (B13)	)		Drai	nage Patterns (B10)	
Saturati	on (A3)		True Aquat	ic Plants	(B14)		Dry-	Season Water Table (C2)	
Water M	larks (B1)		Hydrogen S	Sulfide Od	dor (C1)		Cray	yfish Burrows (C8)	
Sedimer	nt Deposits (B2)		Oxidized R	hizospher	res on Liv	ing Roots	(C3) 🔽 Satu	uration Visible on Aerial Imagery (C9)	
Drift De	posits (B3)		Presence o	f Reduce	d Iron (C4	+)	Stur	nted or Stressed Plants (D1)	
Algal Ma	at or Crust (B4)		Recent Iron	Reductio	on in Tille	d Soils (C	6) 🖌 Geo	morphic Position (D2)	
Iron Dep	posits (B5)		Thin Muck	Surface (	C7)		FAC	C-Neutral Test (D5)	
Inundati	on Visible on Aerial Im	agery (B7)	Gauge or V	Vell Data	(D9)				
Sparsel	y Vegetated Concave	Surface (B8)	Other (Expl	ain in Re	marks)				

Sparsely Vegetated Cor	cave Surface (B8) Other (Explain in Remarks)					
Field Observations:						
Surface Water Present?	Yes No Depth (inches):					
Water Table Present?	Yes No Depth (inches):					
Saturation Present? (includes capillary fringe)	Yes No Depth (inches):	Wetland Hydrology Present? Yes No				
Describe Recorded Data (st	ream gauge, monitoring well, aerial photos, previous inspec	tions), if available:				
Remarks:						
Hydrology indicators are present throughout wetland						

			5717		initiation i togion
Project/Site: AEP North Delphos - Rockhill Delineat	tion	City/Co	ounty:	Lima/ A	Ilen Sampling Date: 2021-06-30
Applicant/Owner: AEP					State: Ohio Sampling Point: 1-P/Q UPL
Investigator(s): E. Wilson, J. Holmes		Sectio	n, Tov	vnship, Rai	nge: S011, T003, R006
Landform (hillslope, terrace, etc.): Upland			L	ocal relief	(concave, convex, none): None
Slope (%): 0 Lat: 40.791951		Long:	-84.	130350	Datum: WGS 84
Soil Map Unit Name: SrA					NWI classification: None
Are climatic / hydrologic conditions on the site typical for this	time of ye	ear? Ye	es 📕	No	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology sig	gnificantly	disturb	ped?	Are "	Normal Circumstances" present? Yes 🗹 No
Are Vegetation, Soil, or Hydrology na	aturally pro	oblema	tic?	(If ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map s	howing	j sam	pling	g point le	ocations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes No         Hydric Soil Present?       Yes No         Wetland Hydrology Present?       Yes No         Remarks:       Yes No			ls the withi	e Sampled n a Wetlar	Area nd? Yes No
VEGETATION – Use scientific names of plants.	Absolute	Dom	inant	Indicator	Dominance Test worksheet:
1)					Number of Dominant Species         That Are OBL, FACW, or FAC:         1         (A)
3.					Total Number of Dominant       Species Across All Strata:         2   (B)
4 5					Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft r )		_ = Tota	al Cov	er	Prevalence Index worksheet:
1					Total % Cover of: Multiply by:
2					OBL species 0 x 1 = 0
3					FACW species 0 x 2 = 0
4					FAC species 25 x 3 = 75
5					FACU species <u>75</u> x 4 = <u>300</u>
		= Tota	al Cov	er	UPL species 0 x 5 = 0
Herb Stratum (Plot size: 5 ft r )	50				Column Totals: 100 (A) 375 (B)
1. Iritolium repens	50				
2. Poa pratensis	<u>25</u> 15			FAC	Prevalence Index = B/A = 3.0
3. Irifolium pratense	15			FACU	Hydrophytic Vegetation Indicators:
4. Plantago lanceolata	10			FACU	1 - Rapid Test for Hydrophytic Vegetation
5					2 - Dominance Test is >50%

100% = Total Cover

= Total Cover

Remarks: (Include photo numbers here or on a separate sheet.)

6.\_\_\_\_\_ \_\_\_\_ \_\_\_\_

7.\_\_\_\_\_\_

8. \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_

9.\_\_\_\_\_

No hydrophytic vegetation present.

10. \_\_\_\_\_

Woody Vine Stratum (Plot size: <u>30 ft r</u>) 1.

2.

\_\_\_\_ 3 - Prevalence Index is ≤3.0<sup>1</sup>

Hydrophytic Vegetation

Present?

\_\_\_\_ 4 - Morphological Adaptations<sup>1</sup> (Provide supporting

data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must

Yes \_\_\_\_\_ No \_\_\_\_

be present, unless disturbed or problematic.

	Sampling Point.
Profile Description: (Describe to the depth needed to document the indicator of	or confirm the absence of indicators.)
Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type <sup>1</sup>	Loc <sup>z</sup> Texture Remarks
<u>0-20</u> <u>10YR 4/4</u> <u>100</u>	Silt Loam
-	
· · · · · · · · · · · · · · · · · · ·	
·	
· · · · · · · · · · · · · · · · · · ·	
·	
-	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Gra	ins <sup>2</sup> Location: PL=Pore Lining M=Matrix
Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Sandy Gleved Matrix (S4)	Coast Prairie Redox (A16)
Histic Epipedon (A2) Sandy Redox (S5)	Dark Surface (S7)
Black Histic (A3) Stripped Matrix (S6)	Iron-Manganese Masses (F12)
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1)	Very Shallow Dark Surface (TF12)
Stratified Layers (A5) Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
2 cm Muck (A10) Depleted Matrix (F3)	
Depleted Below Dark Surface (A11) Redox Dark Surface (F6)	
Thick Dark Surface (A12) Depleted Dark Surface (F7)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Redox Depressions (F8)	wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)	unless disturbed or problematic.
Restrictive Layer (if observed):	
	Hydric Soil Present? Yes No
Depth (inches):	
Remarks:	
No hydric soils present	
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required: check all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1) Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
High Water Table (A2) Aquatic Eauna (B13)	Drainage Patterns (B10)
Saturation (A3) True Aquatic Plants (B14)	Dry-Season Water Table (C2)
Water Marks (B1) Hvdrogen Sulfide Odor (C1)	Cravfish Burrows (C8)
Sediment Deposits (B2) Oxidized Bhizospheres on Livi	ng Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4	) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Becent Iron Reduction in Tilled	Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	EAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9)	
Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks)	
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Ves No V Depth (inches):	-
Paturation Procent? Vee No Verth (inclines).	-   Wetland Hydrology/Bresent2 Vec No. V
(includes capillary fringe)	_   wettand mydrology Present? Tes NO
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous ins	pections), if available:

Remarks:

## No hydrology present

Project/Site: AEP North Delphos - Rockhill	City/County: Lima / Allen	Sampling Date: 2021-06-30
Applicant/Owner: AEP	State:	Ohio Sampling Point: 1-Q
Investigator(s): J. Holmes E. Wilson	Section, Township, Range:	S011 T003 R006
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, con	vex, none): Concave
Slope (%): 1 Lat: _40.791506	Long: -84.130002	Datum: WGS 84
Soil Map Unit Name:SrA	N	WI classification: <u>N/A</u>
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🔽 No (If no,	explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Circu	mstances" present? Yes 🗾 No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, explain	any answers in Remarks.)

#### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes	Is the Sampled Area within a Wetland? Yes No
Remarks:		

# Wetland in existing ROW depression .

20.64 -	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				
5.				Percent of Dominant Species That Are OBL_EACW_or_EAC: 100 (A/B)
		= Total Cov	/er	
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species 0 x 1 = 0
3.				FACW species 100 x 2 = 200
4				FAC species $0$ x 3 = $0$
5				FACU species $0$ $x = 0$
···		= Total Cov		UPL species $\overline{0}$ x 5 = $\overline{0}$
Herb Stratum (Plot size: 5 ft r )		- 10(a) 00(		Column Totals: 100 (A) 200 (B)
1. Phalaris arundinacea	60	~	FACW	
2. Urtica dioica	25	~	FACW	Prevalence Index = B/A = 2.0
3. Elymus virginicus	10		FACW	Hydrophytic Vegetation Indicators:
4. Impatiens capensis	5		FACW	✓ 1 - Rapid Test for Hydrophytic Vegetation
5				✓ 2 - Dominance Test is >50%
6				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7.				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
9.				Problematic Hydrophytic Vegetation (Explain)
10.				
	100%	= Total Cov	/er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )				be present, unless disturbed or problematic.
1				Hydrophytic
2				Vegetation
		= Total Cov	ver	Present? Yes No
Remarks: (Include photo numbers here or on a separate s	sheet.)			
A preponderance of hydrophytic ve	egetatio	on is pr	resent	

Profile Desc	ription: (Describe	to the dep	th needed to docum	ent the i	indicator	or confirn	n the absence of indicators.)	
Depth	Matrix		Redox	Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc <sup>2</sup>	Texture Remarks	
0-5	10YR 4/2	100					Silt Loam	
<u> </u>	10YR 5/2	85	10YR 4/6	15	<u>C</u>	M	Sandy Clay Loam	
-								
-								
								_
								—
<sup>1</sup> Type: C=C	oncentration, D=Dep	oletion, RM	=Reduced Matrix, MS	=Masked	d Sand Gr	ains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.	
Hydric Soil	Indicators:						Indicators for Problematic Hydric Soils':	
Histosol	(A1)		Sandy G	leyed Ma	atrix (S4)		Coast Prairie Redox (A16)	
Block Hi	Dipedon (A2)		Sandy R	edox (S5	) )		Dark Surface (S7)	
Hydroge	en Sulfide (A4)			Jucky Mir	neral (F1)		Very Shallow Dark Surface (TF12)	
Stratified	d Layers (A5)		Loamy O	Bleyed Ma	atrix (F2)		Other (Explain in Remarks)	
2 cm Mu	ıck (A10)		V Depleted	d Matrix (	F3)			
Deplete	d Below Dark Surfac	æ (A11)	Redox D	ark Surfa	ace (F6)			
Thick Da	ark Surface (A12)		Depleted	Dark Su	Irface (F7	)	<sup>3</sup> Indicators of hydrophytic vegetation and	
Sandy M	lucky Mineral (S1)	2)	Redox D	epressio	ns (F8)		wetland hydrology must be present,	
5 cm with	aver (if observed)	3)					unless disturbed of problematic.	
Type:		•						
Depth (in	ches).						Hydric Soil Present? Yes No	_
Remarks:								
The soi	l profile mee	ts the	criteria for ha	aving	a dep	leted r	matrix	
HYDROLO	GY							
Wetland Hy	drology Indicators:							
Primary India	cators (minimum of o	one is requi	red; check all that ap	ply)			Secondary Indicators (minimum of two requi	red)
Surface	Water (A1)		Water-Stai	ned Leav	es (B9)		Surface Soil Cracks (B6)	
High Wa	ater Table (A2)		Aquatic Fa	una (B13	)		Drainage Patterns (B10)	
Saturati	on (A3)		True Aquat	tic Plants	(B14)		Dry-Season Water Table (C2)	
Water M	larks (B1)		Hydrogen S	Sulfide O	dor (C1)		Crayfish Burrows (C8)	
Sedimer	nt Deposits (B2)		X Oxidized R	hizosphe	res on Liv	ing Roots	(C3) Saturation Visible on Aerial Imagery (C9	))
Drift De	posits (B3)		Presence of the second seco	of Reduce	ed Iron (C	4)	Stunted or Stressed Plants (D1)	
Algal Ma	at or Crust (B4)		Recent Iron	n Reducti	on in Tille	d Soils (C6	6) Ceomorphic Position (D2)	
Iron Dep	oosits (B5)		Thin Muck	Surface (	(C7)		FAC-Neutral Test (D5)	
Inundati	on Visible on Aerial	Imagery (B	7) Gauge or v	vell Data	(D9)			
Sparser	vegetated Concav	e Sunace (	Bo) Other (Exp	ain in Re	emarks)			
Surface Wet	or Procent?	(00	No V Donth (inc	boo):				
Water Table		<u> </u>	No V Dopth (inc	hes).		-		
Saturation D	recent?	CS	No V Depth (Inc	hes):			and Hydrology Present? Voc V	
(includes car	oillary fringe)	es		nes)			and right logy riesent? Tes NO	
Describe Re	corded Data (stream	n gauge, mo	onitoring well, aerial p	hotos, pr	evious ins	pections),	if available:	
Remarks:								
Multiple	indicators of	of wetla	and hydrolog	y wer	e pres	sent at	t the time of sampling	
			- 0	-	-			

Project/Site: AEP North Delphos - Rockhill	City/County: Lima / Allen	Sampling Date: 2021-06-30
Applicant/Owner: AEP	State: Ohio	Sampling Point: 1-R
Investigator(s): J. Holmes E. Wilson	Section, Township, Range: S013 T00	03 R006
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, non	e): Concave
Slope (%): 1 Lat: 40.777333	Long: -84.114653	Datum: WGS 84
Soil Map Unit Name:PmA	NWI class	ification: N/A
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🗾 No (If no, explain ir	n Remarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Circumstances	s" present? Yes 🗾 No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, explain any ans	wers in Remarks.)

#### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         V         No           Yes         V         No           Yes         V         No	Is the Sampled Area within a Wetland? Yes No
Remarks:		

# Wetland in existing ROW depression .

<b>20</b> ft -	Absolute	Dominant	Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species		
1				That Are OBL, FACW, or FAC: <u>3</u> (A)		
2				Total Number of Dominant		
3				Species Across All Strata: <u>3</u> (B)		
4						
5.				Percent of Dominant Species		
		= Total Cov	/er			
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:		
1				Total % Cover of: Multiply by:		
2.				OBL species _45 x 1 = _45		
3.				FACW species 50 $x_2 = 100$		
۵ ۵				FAC species $0$ x 3 = $0$		
5				FACIL species $0$ $x = 0$		
5		- Total Car		$\frac{1111}{1111} = \frac{1111}{1111}$		
Herb Stratum (Plot size: 5 ft r )			/er	Column Totals: $95$ (A) $145$ (B)		
1. Carex squarrosa	35	~	OBL			
2. Carex cristatella	25	~	FACW	Prevalence Index = B/A = <u>1.5</u>		
3. Carex vulpinoidea	25	~	FACW	Hydrophytic Vegetation Indicators:		
4. Glyceria striata	10		OBL	✓ 1 - Rapid Test for Hydrophytic Vegetation		
5.				✓ 2 - Dominance Test is >50%		
6				✓ 3 - Prevalence Index is $\leq 3.0^{1}$		
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting		
8				data in Remarks or on a separate sheet)		
0				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)		
5						
10	95%			<sup>1</sup> Indicators of hydric soil and wetland hydrology must		
Woody Vine Stratum (Plot size: 30 ft r )	= Total Cover		/er	be present, unless disturbed or problematic.		
1				Hadeselselle		
2				Nydropnytic Vegetation		
2		- Total Car		Present? Yes No		
Pemarke: (Include photo numbers here or on a concrete o	= Total Cover					
nemarks. (include prioto numbers here or on a separate s	sneet.)					
A preponderance of hydrophytic ve	egetation	on is pr	resent			

Profile Desc	ription: (Describe	to the dep	oth needed to docum	nent the	indicator	or confirm	n the absence of ir	ndicators.)		
Depth Matrix Redox Features										
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks		
0-5	10YR 4/2	100					Silt Loam			
<u> </u>	10YR 5/2	85	10YR 4/6	15	<u> </u>	<u>M</u>	Sandy Clay Loam			
-										
-										
<sup>1</sup> Type: C=C	oncentration, D=Dep	oletion, RM	=Reduced Matrix, MS	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location: PL	=Pore Lining, M=Matrix.		
Hydric Soil	Indicators:						Indicators for	Problematic Hydric Soils':		
Histosol	(A1)		Sandy G	Bleyed M	atrix (S4)		Coast Prair	rie Redox (A16)		
Black Hi	opedon (A2)		Sandy R	(Stedox (St	D) S6)		Dark Surra			
Hvdroge	en Sulfide (A4)		Loamv N	Juckv Mi	neral (F1)		Very Shallow Dark Surface (TF12)			
Stratified	d Layers (A5)		Loamy C	Gleyed M	atrix (F2)		Other (Explain in Remarks)			
2 cm Mu	ick (A10)		✓ Depleted	d Matrix (	(F3)					
Deplete	d Below Dark Surfac	æ (A11)	Redox D	ark Surf	ace (F6)		2			
Thick Da	ark Surface (A12)		Depleted	d Dark Si	urface (F7	)	"Indicators of h	<sup>3</sup> Indicators of hydrophytic vegetation and		
Sandy N	lucky Mineral (S1)	2)	Redox L	epressio	ons (F8)		wetland hydrology must be present,			
Schrive	aver (if observed)							urbed of problematic.		
Type:		•								
Depth (in	ches):						Hydric Soil Present? Yes No			
Remarks:										
The sol	i profile mee	ts the	criteria for ha	aving	а дер	leted i	matrix			
HYDROLO	GY									
Wetland Hy	drology Indicators:									
Primary India	cators (minimum of o	one is requ	ired; check all that ap	ply)			Secondary Ir	ndicators (minimum of two required)		
Surface	Water (A1)		Water-Stai	ned Leav	/es (B9)		Surface Soil Cracks (B6)			
High Wa	ater Table (A2)		Aquatic Fa	una (B13	3)		Drainage Patterns (B10)			
Saturati	_ Saturation (A3) True Aquatic Plants (B14)						Dry-Season Water Table (C2)			
Water M	larks (B1)		Hydrogen S	Sulfide O	dor (C1)		Crayfish Burrows (C8)			
Sedimer	Sediment Deposits (B2) X Oxidized Rhizospheres on Living Roots							on Visible on Aerial Imagery (C9)		
	Drift Deposits (B3) Presence of Reduced Iron (C4)						Stunted of Stressed Plants (D1)			
Argan wat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position								utral Test (D5)		
Inundati	on Visible on Aerial	lmagery (B	7) Gauge or V	Vell Data	(D9)					
Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks)										
Field Obser	vations:				,					
Surface Wat	er Present? Y	'es	No Depth (inc	ches):						
Water Table Present? Yes No Depth (inches):							etland Hydrology Present? Yes 🗹 No			
Saturation Present? Yes No V Depth (inches): Wet										
Remarks:										
Multiple indicators of wetland hydrology were present at the time of sampling										
Project/Site: AEP North Delphos - Rockhill	City/County: Lima / Allen		Sampling Date:	2021-06-30						
---	-----------------------------	----------------------	------------------	------------						
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-S						
Investigator(s): J. Holmes E. Wilson	Section, Township, Range: _	S013 T0	03 R006							
Landform (hillslope, terrace, etc.): Depression	Local relief (conca	ave, convex, none):	Concave							
Slope (%): 1 Lat: 40.778939	Long: -84.116656		Datum: WGS 8	34						
Soil Map Unit Name: PmA		NWI classific	cation: N/A							
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes 🔽 No	(If no, explain in R	(emarks.)							
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances" p	present? Yes	✓ No						
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	ers in Remarks.)							

# SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         V         No           Yes         V         No           Yes         V         No	Is the Sampled Area within a Wetland? Yes No
Remarks:		

# Wetland in existing ROW depression .

20.64 -	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft r</u> )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: <u>3</u> (A)
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4.				(-,
5				Percent of Dominant Species
<u>.                                    </u>		- Total Ca		That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft r )		- 10(a) CO	/ei	Prevalence Index worksheet:
1.				Total % Cover of: Multiply by:
2				OBL species 35 $x_{1} = 35$
2				EACW species $50$ x 2 = $100$
5				EAC species $10$ $x_3 = 30$
4				$\frac{10}{10} \times 4 = 0$
5				FACO species $\frac{0}{2}$ $x = 0$
Herb Stratum (Plot size: 5 ft r )		= Total Cov	/er	$\frac{OPL \text{ species}}{OF} = \frac{O}{165}$
Carex crinita	35	~	OBL	Column Totals: 95 (A) 105 (B)
Carex cristatella	25		FACW	Prevalence Index = B/A = 1.7
	25		FACW	Hydrophytic Vegetation Indicators:
	10			A Denid Test for Hudronbutic Vegetation
4. Apocynum cannabinum	10		FAC	
5				2 - Dominance Test is >50%
6				✓ 3 - Prevalence Index is ≤3.0
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sneet)
9				Problematic Hydrophytic Vegetation (Explain)
10.				
	95%	= Total Cov	/er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )				be present, unless disturbed or problematic.
1				Hydrophytic
2				Vegetation
		= Total Cov	/er	Present? Yes No No
Remarks: (Include photo numbers here or on a separate s	heet.)			1
A much and an an of lavely are levely	, <b>.</b>	<b> ! .</b>		
A preponderance of hydrophytic ve	getation	on is pr	esent	

Profile Desc	cription: (Describe	to the dep	oth needed to docur	nent the i	ndicator	or confiri	m the absence of i	ndicators.)
Depth	Matrix		Redo	x Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	Type	_Loc <sup>2</sup>	Texture	Remarks
	10YR 4/2	100					Silt Loam	
5 <sup>-</sup> 20	10YR 5/2	85	10YR 4/6	15	С	М	Sandy Clay Loam	
-								
-								
-								
<sup>1</sup> Type: C=C	oncentration D=Der	oletion RM	=Reduced Matrix M	- S=Masker	Sand Gr	ains	<sup>2</sup> Location: PL	=Pore Lining M=Matrix
Hydric Soil	Indicators:			0-Masket		anis.	Indicators for	Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy	Gleved Ma	atrix (S4)		Coast Prair	rie Redox (A16)
Histic Er	oipedon (A2)		Sandy I	Redox (S5	)		Dark Surfa	ce (S7)
Black Hi	istic (A3)		Stripped	d Matrix (S	, 66)		Iron-Manga	anese Masses (F12)
Hydroge	en Sulfide (A4)		Loamy	Mucky Mir	neral (F1)		Very Shallo	ow Dark Surface (TF12)
Stratified	d Layers (A5)		Loamy	Gleyed Ma	atrix (F2)		Other (Exp	lain in Remarks)
2 cm Mu	uck (A10)		<ul> <li>Deplete</li> </ul>	d Matrix (	F3)			
Depleted	d Below Dark Surfac	ce (A11)	Redox l	Dark Surfa	ace (F6)		3	
Thick Da	ark Surface (A12)		Deplete	d Dark Su	rface (F7)	)	Indicators of h	hydrophytic vegetation and
Sandy M	lucky Mineral (S1)	2)	Redox l	Depressio	ns (F8)		wetland hyd	drology must be present,
S critive I	aver (if observed)							urbed of problematic.
Type		•						
Dopth (in	abaa):						Hydric Soil Pres	sent? Yes 🦯 No
Deptri (ind	cnes).							
The sol	i profile mee	ets the	criteria for n	aving	а сер	leted	matrix	
HYDROLO	GY							
Wetland Hy	drology Indicators							
Primary India	cators (minimum of	one is requi	ired <sup>,</sup> check all that ar	(vla			Secondary Ir	dicators (minimum of two required)
Surface	Water (A1)		Water-Sta	ined Leav	es (B9)		Surface	Soil Cracks (B6)
High Wa	ater Table (A2)		Aquatic Fa	auna (B13	)			e Patterns (B10)
Saturatio	on (A3)		True Aqua	tic Plants	/ (B14)		Druinage	son Water Table (C2)
Water M	larks (B1)		Hydrogen	Sulfide Or	dor (C1)		Cravfish	Burrows (C8)
Sedimer	nt Deposits (B2)		Oxidized F	Rhizosphe	res on Liv	ina Roots	(C3) Saturatio	on Visible on Aerial Imagery (C9)
Drift Der	posits (B3)		Presence	of Reduce	d Iron (C4	4)	Stunted	or Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Recent Irc	n Reducti	on in Tille	., d Soils (C	(6) V Geomor	phic Position (D2)
Iron Dep	posits (B5)		Thin Muck	Surface (	C7)		✓ FAC-Ne	utral Test (D5)
Inundatio	on Visible on Aerial	Imagery (B	7) Gauge or	Well Data	(D9)			
Sparsely	Vegetated Concav	e Surface (	B8) Other (Ex	olain in Re	marks)			
Field Obser	vations:		/		,			
Surface Wat	er Present?	Yes	No / Depth (in	ches):				
Water Table	Present?	/es	No V Depth (in	ches):		-		
	resent?	/ 00	No V Depth (in	ches):		- Wet	land Hydrology Pr	esent? Ves 🗸 No
Saturation D	nesent:			cites)		_   ••••	danu Hydrology Ph	
(includes car	Jillary Innge)						if available:	
(includes cap Describe Re	corded Data (stream	n gauge, m	onitoring well, aerial	photos, pr	evious ins	pections)	, if available:	
Saturation P (includes cap Describe Re	corded Data (strean	n gauge, mo	onitoring well, aerial	photos, pr	evious ins	pections)	, if available:	
Saturation P (includes cap Describe Red Remarks:	corded Data (strean	n gauge, mo	onitoring well, aerial	photos, pr	evious ins	pections)	, if available.	

Project/Site: AEP North Delphos - Rockhill		City/County	: <u>Lima</u> / /	Allen	Sampling Date:	2021-06-30
Applicant/Owner: AEP				State: Ohio	Sampling Point:	1-O/R/S UPL
Investigator(s): J. Holmes E. Wilson		Section, To	wnship, Rai	nge: S013 T	003 R006	
Landform (hillslope, terrace, etc.): Upland, Flat			Local relief	(concave, convex, none	<sub>e):</sub> None	
Slope (%): 1 Lat: 40.778333		Long: -84	.115973	·	Datum: WGS 8	34
Soil Map Unit Name:PmA		Ū		NWI classi	fication: N/A	
Are climatic / hydrologic conditions on the site typical for this	s time of ye	ar? Yes	No	(If no, explain in	Remarks.)	
Are Vegetation, Soil, or Hydrologys	ignificantly	disturbed?	Are "	Normal Circumstances	" present? Yes	No
Are Vegetation, Soil, or Hydrology n	aturally pro	blematic?	(If ne	eded, explain any answ	wers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map	showing	samplin	g point le	ocations, transec	ts, important fe	atures, etc.
Hydrophytic Vegetation Present? Yes N	• <u> </u>					
Hydric Soil Present? Yes N	o	Is th	e Sampled	Area		
Wetland Hydrology Present? Yes N	• <u> </u>	with	in a Wetlar	nd? Yes	No	-
Remarks:	a back	amnlo	noint fa	or watlands 1_	$\cap$ 1-P and	1_9
Representative of existing ROW. Of		ampie				1-5
VEGETATION – Use scientific names of plants.						
Tree Streture (Distaire) 30 ft r	Absolute	Dominant	Indicator	Dominance Test wo	rksheet:	
<u>Tree Stratum</u> (Plot size: <u>30 TCT</u> )	<u>% Cover</u>	Species?	Status	Number of Dominant	Species	
2	·				7, 01 FAC. <u></u>	(A)
3.				Total Number of Dom	ninant trata: 3	(B)
4.						(5)
5				Percent of Dominant	Species	(A/B)
15 ft -		= Total Cov	/er			(////
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index w	orksheet:	
1				I otal % Cover of	<u> </u>	ly by:
2	·			OBL species 0	$x_1 = 0$	
3				FACW species 0	x 2 = 0	
4				FAC species 0	$x_3 = 0$	<u> </u>
5				FACU species 100	x4 = <u>40</u>	<u> </u>
Herb Stratum (Plot size: 5 ft r		= Total Cov	ver	Column Totals: 100	$(a) \frac{x^{5}}{40}$	0 (B)
1. Bromus inermis	40	~	FACU		(A) <u>10</u>	(B)
2. Trifolium repens	30	~	FACU	Prevalence Inde	ex = B/A = 4.0	
3. Solidago canadensis	20	<u> </u>	FACU	Hydrophytic Vegeta	tion Indicators:	
4. Lolium perenne	10		FACU	1 - Rapid Test fo	r Hydrophytic Veget	tation
5				2 - Dominance T	est is >50%	
6				3 - Prevalence In	ıdex is ≤3.0¹	
7				4 - Morphologica	Adaptations <sup>1</sup> (Prov	vide supporting
8				Droblematic Hyd	rophytic Vegetation	(Explain)
9					rophytic vegetation	(Explain)
10				<sup>1</sup> Indicators of hydric s	soil and wetland hyd	rology must
Weedy Vine Stratum (Plateize: 30 ft r	100%	= Total Cov	ver	be present, unless di	sturbed or problema	atic.
Woody Vine Stratum (Piot size)						
2				Hydrophytic Vegetation		
<u> </u>		= Total Cov	/er	Present?	ſes No _	<u> </u>
Remarks: (Include photo numbers here or on a separate s	sheet.)	i star oo		1		
A propondoronoo of hudronhutic	, , ,	on ic m	at pres	ont		
A preponderance of hydrophytic ve	getati		or pres	ent		

L

Profile Description: (De	scribe to the dept	n needed to docume	ent the indicator or	r confirm the	absence of indicators.)
DepthN	latrix	Redox	Features		
(inches) Color (me	oist)	Color (moist)	<u>% Type<sup>1</sup></u>	Loc <sup>2</sup> T	exture Remarks
<u> </u>	100			Sand	dy Clay Loam
-					
		·			
-					
	D-Dopletion DM-	Deduced Matrix, MC	Maakad Sand Crain		<sup>2</sup> Leasting DI - Dara Lining M-Matrix
Hydric Soil Indicators	D=Depletion, Rivi=	Reduced Matrix, MS-	-Masked Sand Grain	ns. Ir	Location: PL=Pore Lining, M=Matrix.
Historol (A1)		Sandy Cl	aved Matrix (S4)		Coast Prairie Reday (A16)
Histic Eninedon (A2)		Sandy Gr	eyed Matrix (34)	-	Dark Surface (S7)
Black Histic (A3)		Stripped I	Matrix (S6)	-	Iron-Manganese Masses (F12)
Hvdrogen Sulfide (A4	)	Loamv M	ucky Mineral (F1)	-	Very Shallow Dark Surface (TF12)
Stratified Layers (A5)	,	Loamy G	eved Matrix (F2)	-	Other (Explain in Remarks)
2 cm Muck (A10)		Depleted	Matrix (F3)	_	(
Depleted Below Dark	Surface (A11)	Redox Da	ark Surface (F6)		
Thick Dark Surface (A	(12)	Depleted	Dark Surface (F7)	3	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral	(S1)	Redox De	epressions (F8)		wetland hydrology must be present,
5 cm Mucky Peat or F	Peat (S3)				unless disturbed or problematic.
Restrictive Layer (if obs	erved):				
Туре:					
Depth (inches):				H	yaric Soll Present? Yes No
Remarks:					
The soil profile	does not me	eet the criter	ia for any hy	ydric soi	lindicators
HYDROLOGY					
Wetland Hydrology India	ators:				
Primary Indicators (minim	um of one is require	ed: check all that app	lv)		Secondary Indicators (minimum of two required)
Surface Water (A1)		Water-Stain	ed Leaves (B9)		Surface Soil Cracks (B6)
High Water Table (A2	)	Aquatic Fau	na (B13)		Drainage Patterns (B10)
Saturation (A3)	,	True Aquatio	Plants (B14)		Drv-Season Water Table (C2)
Water Marks (B1)		Hydrogen S	ulfide Odor (C1)		Cravfish Burrows (C8)
Sediment Deposits (P	(2)	Oxidized Rh	izospheres on Living	a Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	_/	Presence of	Reduced Iron (C4)	g	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4	1)	Recent Iron	Reduction in Tilled S	Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	• /	Thin Muck S	Surface (C7)	0010 (00)	EAC-Neutral Test (D5)
Inundation Visible on	Aerial Imagery (B7)	Gauge or W	ell Data (D9)		
Sparsely Vegetated C	oncave Surface (B	8) Other (Expla	ain in Remarks)		
Field Observations:		-, <u> </u>	,		
Surface Water Present?	Yes N	Depth (inch	ies).		
Water Table Present?	Ves N	o <u>V</u> Depth (inch	lee):	-	
	Yes N	o Depth (incl	les)	-	
(includes capillary fringe)		o Depth (Incr		wetland I	
No primary and or se	condary wetlan	d hydrology india	cators were pres	sent at the	time of sampling
Remarks:					

Project/Site: AEP North Delphos - Rockhill	City/County: Lima / Allen		Sampling Date:	2021-06-30
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-T
Investigator(s): J. Holmes E. Wilson	Section, Township, Range: _	S013 T00	3 R006	
Landform (hillslope, terrace, etc.): Depression	Local relief (conca	ave, convex, none):	Concave	
Slope (%): <u>1</u> Lat: <u>40.781248</u>	Long: -84.119136		Datum: WGS 8	34
Soil Map Unit Name:SkA		NWI classific	ation: N/A	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🔽 No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances" p	present? Yes	✓ No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	rs in Remarks.)	

#### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         V         No           Yes         V         No           Yes         V         No	Is the Sampled Area within a Wetland? Yes No
Remarks:		

# Wetland in existing ROW depression .

20.4	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: <u>3</u> (A)
2				Total Number of Deminent
3.				Species Across All Strata: 3 (B)
A				
T				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
Conting/Chruh Stratum (Distaire) 15 ft r		= Total Cov	/er	Prevalence Index worksheet:
1				
2				OBL species $43$ $x_1 = 43$
3				FACW species $50$ x 2 = $100$
4				FAC species 0 x 3 = 0
5.				FACU species 0 x 4 = 0
		= Total Cov	/er	UPL species $0 \times 5 = 0$
Herb Stratum (Plot size: 5 ft r )				Column Totals: 95 (A) 145 (B)
1. Carex squarrosa	35	~	OBL	
2. Carex cristatella	25	~	FACW	Prevalence Index = B/A = <u>1.5</u>
3. Carex vulpinoidea	25	<u> </u>	FACW	Hydrophytic Vegetation Indicators:
4. Glyceria striata	10		OBL	✓ 1 - Rapid Test for Hydrophytic Vegetation
5.				✓ 2 - Dominance Test is >50%
6.				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
°				data in Remarks or on a separate sheet)
0				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
9				
10				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Weath View Obstance (Distained 30 ft r	95%	= Total Cov	/er	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)				
1				Hydrophytic
2				Vegetation Present? Ves No
		= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate s	heet.)			
A preponderance of hydrophytic ve	getatio	on is pr	resent	

Profile Desc	cription: (Describe	to the dep	oth needed to docu	ment the	indicator	or confir	m the absence of i	ndicators.)
Depth	Matrix	0/	Rede	ox Feature	es Turn a <sup>1</sup>	1 2		Demeric
(inches)			Color (moist)	%	ype	_Loc-	lexture	Remarks
<u> </u>	1018 4/2	- 100		45				
5-20	10YR 5/2	85	10YR 4/6	15	<u> </u>	M	Sandy Clay Loam	
-								
-								
-								
<sup>1</sup> Type: C=C	oncentration, D=De	pletion, RM	Reduced Matrix, M	IS=Maske	d Sand Gr	ains.	<sup>2</sup> Location: Pl	_=Pore Lining, M=Matrix.
Hydric Soil	Indicators:	,	,				Indicators for	Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy	Gleyed M	atrix (S4)		Coast Prai	rie Redox (A16)
Histic Ep	pipedon (A2)		Sandy	Redox (S	5)		Dark Surfa	ce (S7)
Black Hi	istic (A3)		Strippe	d Matrix (	S6)		Iron-Mang	anese Masses (F12)
Hydroge Stratified	d Lavers (A5)		Loamy	MUCKY M	Ineral (F1) Istrix (F2)		Very Shall	DW Dark Surface (TF12)
0 an Mu	uck (A10)		✓ Deplete	ed Matrix	(F3)			
Deplete	d Below Dark Surfac	ce (A11)	Redox	Dark Surf	ace (F6)			
Thick Da	ark Surface (A12)		Deplete	ed Dark S	urface (F7	)	<sup>3</sup> Indicators of h	hydrophytic vegetation and
Sandy N	Aucky Mineral (S1)		Redox	Depressio	ons (F8)		wetland hy	drology must be present,
5 CM MIL	loky Peat of Peat (S	53)  •						urbed or problematic.
Type.	Layer (in observed)							_
Depth (in	ches):						Hydric Soil Pre	sent? Yes 🥓 No
Remarks:								
The soi	l profile mee	ets the	criteria for h	naving	a dep	leted	matrix	
HYDROLO	GY							
Wetland Hy	drology Indicators							
Primary India	cators (minimum of	one is reau	ired: check all that a	(vlaa			Secondary I	ndicators (minimum of two required)
Surface	Water (A1)		Water-Sta	ained Lea	ves (B9)		Surface	Soil Cracks (B6)
High Wa	ater Table (A2)		Aquatic F	auna (B1	3)		V Drainag	e Patterns (B10)
Saturati	on (A3)		True Aqu	atic Plants	s (B14)		Dry-Sea	son Water Table (C2)
Water M	larks (B1)		Hydrogen	Sulfide C	dor (C1)		Crayfish	Burrows (C8)
Sedimer	nt Deposits (B2)		X Oxidized	Rhizosph	eres on Liv	ing Roots	s (C3) Saturati	on Visible on Aerial Imagery (C9)
Drift De	posits (B3)		Presence	of Reduc	ed Iron (C	4)	Stunted	or Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Recent Ire	on Reduc	tion in Tille	d Soils (C	C6) <u>V</u> Geomor	phic Position (D2)
Iron Dep	oosits (B5)	Imagan (F	Thin Muc	k Surface	(07)		FAC-Ne	utral Test (D5)
Inundati	on visible on Aenal	Imagery (E	(B8) Other (Ev	vveii Data	a (D9) omarke)			
Field Obser	vations.	e ounace		Pairink	cindiks)			
Surface Wat	er Present?	Yes	No V Depth (ir	iches).				
Water Table	Present?	res	No V Depth (ir	nches):		-		
Saturation P	resent?	res	No V Depth (ir	nches):		-   Wet	tland Hydrology Pr	esent? Yes 🖌 No
(includes ca	pillary fringe)							
Describe Re	corded Data (strear	n gauge, m	onitoring well, aerial	photos, p	revious ins	spections)	), if available:	
Remarks:								
Multiple	indicators	of wetl	and hydrolog	gy we	re pres	sent a	t the time of	sampling

Project/Site: AEP North Delphos - Rockhill	_ City/County: Lima / Allen		Sampling Date:	2021-06-30
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-T/U UPL
Investigator(s): J. Holmes E. Wilson	_ Section, Township, Range: _	S013 T0	03 R006	
Landform (hillslope, terrace, etc.): Upland, Flat	Local relief (conc	ave, convex, none):	None	
Slope (%): 1 Lat: _40.781068	_ Long: -84.118766		Datum: WGS 8	34
Soil Map Unit Name:Gwg5B2		NWI classific	cation: N/A	
Are climatic / hydrologic conditions on the site typical for this time of y	/ear? Yes 🗾 No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significant	ly disturbed? Are "Norm	al Circumstances" p	present? Yes	✓ No
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed	explain any answe	ers in Remarks.)	

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	Is the Sampled Area within a Wetland?	Yes	No
Remarks:					

# Representative of existing ROW.

	Absolute	Dominani	Indicator	Dominance Test worksneet:
Tree Stratum (Plot size: 30 It r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>3</u> (B)
4				Devel (Device (Device)
5				That Are OBL_EACW_or_EAC: 0 (A/B)
_		= Total Co	ver	
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species <u>0</u> x 1 = <u>0</u>
3				FACW species <u>0</u> x 2 = <u>0</u>
4.				FAC species 0 x 3 = 0
5.				FACU species 90 x 4 = 360
		= Total Co	ver	UPL species $10 \times 5 = 50$
Herb Stratum (Plot size: 5 ft r )				Column Totals: 100 (A) 410 (B)
1. Dactylis glomerata	40	<u> </u>	FACU	
2. Phleum pratense	20	<ul> <li>✓</li> </ul>	FACU	Prevalence Index = B/A = <u>4.1</u>
3. Solidago canadensis	20	~	FACU	Hydrophytic Vegetation Indicators:
4. Dipsacus laciniatus	10		UPL	1 - Rapid Test for Hydrophytic Vegetation
5. Lolium perenne	10		FACU	2 - Dominance Test is >50%
6.				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7.				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
9				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10				
10.	100%	- Total Co		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )		- 10(a) C0	Vei	be present, unless disturbed or problematic.
1.				Hydrophytic
2.				Vegetation
		= Total Co	ver	Present? Yes No
Remarks: (Include photo numbers here or on a separate	sheet.)			

Profile Desc	cription: (Describ	e to the dep	th needed to document the	indicator o	or confirm	n the absence of	indicators.)
Depth	Matrix		Redox Feature	es			
(inches)	Color (moist)	%	Color (moist) %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
_0-16	10YR 4/3	100				Sandy Clay Loam	
-							
				·			
				·			
-							
-							
-							
<sup>1</sup> Type: C=C	opcontration D=D		Poducod Matrix, MS=Macka	d Sand Gra	ina	<sup>2</sup> Location:	PL-Poro Liping M-Matrix
Hydric Soil	Indicators:			u Saliu Gra	1115.	Indicators fo	or Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy Gleved M	atrix (S4)		Coast Pr	airie Redox (A16)
Histic E	pipedon (A2)		Sandy Redox (S	5)		Dark Sur	face (S7)
Black H	istic (A3)		Stripped Matrix (	S6)		Iron-Man	ganese Masses (F12)
Hydroge	en Sulfide (A4)		Loamy Mucky M	ineral (F1)		Very Sha	allow Dark Surface (TF12)
Stratifie	d Layers (A5)		Loamy Gleyed N	latrix (F2)		Other (Ex	xplain in Remarks)
2 cm Mi	uck (A10)		Depleted Matrix	(F3)			
Deplete	d Below Dark Surfa	ace (A11)	Redox Dark Sur	ace (F6)			
Thick D	ark Surface (A12)		Depleted Dark S	urface (F7)		<sup>3</sup> Indicators of	f hydrophytic vegetation and
Sandy M	Mucky Mineral (S1)	20)	Redox Depression	ons (F8)		wetland h	nydrology must be present,
5 cm IVII	Lavor (if obsorver	53)				uniess ai	sturbed or problematic.
Tuno	Layer (II Observed						
Type:						Hydric Soil Pi	resent? Yes No
Depth (In	cnes):						
Remarks:							
The soi	I profile doe	es not m	eet the criteria fo	r any h	ydric	soil indica	tors
				-	-		
HIDROLO	G T						
Wetland Hy	drology indicator	s:				<b>a</b> 1	
Primary Indi	cators (minimum o	r one is requir	ed; check all that apply)			Secondary	Indicators (minimum of two required)
Surface	Water (A1)		Water-Stained Lea	ves (B9)		Surfac	e Soil Cracks (B6)
High Wa	ater Table (A2)		Aquatic Fauna (B1)	3)		Draina	age Patterns (B10)
Saturati	on (A3)		True Aquatic Plants	s (B14)		Dry-Se	eason Water Table (C2)
Water M	larks (B1)		Hydrogen Sulfide C	odor (C1)		Crayfis	sh Burrows (C8)
Sedime	nt Deposits (B2)		Oxidized Rhizosph	eres on Livir	ng Roots	(C3) Satura	ation Visible on Aerial Imagery (C9)
	posits (B3)		Presence of Reduc	ed Iron (C4)	)   0 = '  = (0)	Stunte	d or Stressed Plants (D1)
Algai Ma	at or Crust (B4)		Recent Iron Reduc		Solis (Ce	o) Geom	orphic Position (D2)
Iron Dep	posits (B5)	l less services (D		(07)		FAC-N	Neutral Test (D5)
Inundati	ion visible on Aeria	I Imagery (B	Gauge or Well Data	a (D9)			
Sparser	y vegetated Conca	ive Surface (i	56)Other (Explain in R	emarks)			
Field Obser	vations:	Vac					
Surface vvat	er Present?	res I			-		
Water Table	Present?	Yes I	No Depth (inches):		-		
Saturation P	resent?	Yes I	No Depth (inches):		_   Wetl	and Hydrology F	Present? Yes No
Describe Re	corded Data (strea	m gauge, mo	nitoring well, aerial photos. n	revious inst	pections).	if available:	
No primary	and or second	ary wotlar	hydrology indicators	were pre	sent at	the time of sa	ampling
Remarks:				more pre	Join al		k

Project/Site: AEP North Delphos - Rockhill	City/County: Lima / Allen		Sampling Date:	2021-06-30
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-U
Investigator(s): J. Holmes E. Wilson	_ Section, Township, Range: _	S013 T0	03 R006	
Landform (hillslope, terrace, etc.): Depression	Local relief (conc	ave, convex, none):	Concave	
Slope (%): 1 Lat: 40.781387	Long: -84.119005		Datum: WGS 8	34
Soil Map Unit Name:SkA		NWI classific	ation: N/A	
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes 🔽 No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Norm	al Circumstances" p	present? Yes	✓ №
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed,	explain any answe	rs in Remarks.)	

#### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         V         No           Yes         V         No           Yes         V         No	Is the Sampled Area within a Wetland? Yes _	No
Remarks:			

# Wetland in existing ROW depression .

20.4	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Tatal Number of Deminant
3.				Species Across All Strata: 2 (B)
4				
т				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: <u>IUU</u> (A/B)
Sopling/Shruh Stratum (Plot size: 15 ft r )		= Total Cov	/er	Prevalence Index worksheet:
1				B5 85
2				OBL species $\frac{00}{0}$ $x = \frac{00}{0}$
3				FACW species $0$ x 2 = $0$
4				FAC species 0 x 3 = 0
5				FACU species 0 x 4 = 0
		= Total Cov	/er	UPL species 5 $x_{5} = 25$
Herb Stratum (Plot size: 5 ft r )				Column Totals: 90 (A) 110 (B)
1. Scirpus atrovirens	50	~	OBL	
2. Eupatorium perfoliatum	25	~	OBL	Prevalence Index = B/A = <u>1.2</u>
3. Glyceria striata	10		OBL	Hydrophytic Vegetation Indicators:
4. Dipsacus laciniatus	5		UPL	✓ 1 - Rapid Test for Hydrophytic Vegetation
5.				✓ 2 - Dominance Test is >50%
6.				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7.				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
0				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
9				
10	0.00%			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Weedy Vine Stratum (Plataiza) 30 ft r	90%	= Total Cov	/er	be present, unless disturbed or problematic.
Woody vine Stratum (Plot size)				
1				Hydrophytic
2				Present? Yes No
		= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate s	heet.)			
A preponderance of hydrophytic ve	getatio	on is pr	resent	

	cription: (Describe	to the de	pth needed to docu	ment the	indicator	or confir	m the absence o	f indicators.)
Depth	Matrix		Redo	ox Feature	es1	. 2		
<u>(inches)</u> 0 - 5	Color (moist) 10YR 4/2	_ <u>%</u>	Color (moist)	%	Type'	Loc <sup>2</sup>	_ <u>Texture</u> _ Silt Loam	Remarks
5 <sup>-</sup> 20	10YR 5/1	85	10YR 4/6	15	С	М	Sandy Clay Loam	
-								
-								
-								
-								
-								
<sup>1</sup> Type: C=C	oncentration, D=De	pletion, RM	1=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for	or Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1) ninodon (A2)		Sandy	Gleyed M	atrix (S4)		Coast Pr	airie Redox (A16) faco (S7)
Black Hi	istic (A3)		Sandy Strippe	d Matrix (	5) S6)		Iron-Mar	nganese Masses (F12)
Hydroge	en Sulfide (A4)		Loamy	Mucky Mi	neral (F1)		Very Sha	allow Dark Surface (TF12)
Stratified	d Layers (A5)		Loamy	Gleyed M	atrix (F2)		Other (E	xplain in Remarks)
2 cm Mu	uck (A10)		Deplete	ed Matrix (	(F3)			
Depleter	d Below Dark Surfac	ce (A11)	Redox	Dark Surf	ace (F6)	、 、	<sup>3</sup> Indiantana a	
Thick Da	Ark Surface (A12)		Deplete Bedox	Depressio	unace (F7)	)	wetland l	r hydrophytic vegetation and
5 cm Mi	ucky Peat or Peat (S	33)		Depressio	///3 (I O)		unless d	isturbed or problematic.
Restrictive	Layer (if observed)	):						
Туре:								
Depth (in	ches):						Hydric Soli P	
Remarks: The soi	l profile mee	ets the	criteria for h	aving	a dep	leted	matrix	
Remarks: The soi	l profile mee	ets the	criteria for h	aving	a dep	leted	matrix	
Remarks: The soi	l profile mee	ets the	criteria for h	aving	a dep	leted	matrix	
Remarks: The soi	l profile mee GY drology Indicators	ets the	criteria for h	aving	a dep	leted	matrix	
Remarks: The soi	l profile mee GY drology Indicators cators (minimum of	ets the	criteria for h		a dep	leted	matrix 	/ Indicators (minimum of two required)
Remarks: The soi YDROLO Wetland Hy Primary India Surface	I profile mee GY drology Indicators cators (minimum of Water (A1)	ets the	criteria for h	Deply)	a dep	leted	matrix <u>Secondary</u>	<u>r Indicators (minimum of two required)</u> se Soil Cracks (B6)
Remarks: The soi YDROLO Wetland Hy Primary India Surface High Wa	I profile mee OGY drology Indicators cators (minimum of Water (A1) ater Table (A2)	ets the	criteria for h	pply) auna (B13	a dep	leted	matrix <u>Secondary</u> <u>V</u> Draina	<u>r Indicators (minimum of two required)</u> se Soil Cracks (B6) age Patterns (B10)
Remarks: The soi YDROLO Wetland Hy Primary India Surface High Wa Saturatia	I profile mee GY drology Indicators cators (minimum of e Water (A1) ater Table (A2) on (A3)	ets the	criteria for h	pply) anned Leav auna (B13	a dep //es (B9) 3) 6 (B14)	leted	matrix <u>Secondary</u> <u>V</u> Draina <u>U</u> Dry-S	<u>r Indicators (minimum of two required)</u> ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2)
Remarks: The soi	I profile mee GY drology Indicators cators (minimum of o Water (A1) ater Table (A2) on (A3) farks (B1)	ets the	ired: check all that and Water-Sta Aquatic Fi True Aqua Hydrogen	pply) ained Leav auna (B13 atic Plants Sulfide O	a dep //s (B9) (B14) /dor (C1)	leted	Matrix <u>Secondary</u> <u>Surfac</u> <u>V</u> Draina Dry-S Crayfi	<u>r Indicators (minimum of two required)</u> ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8)
Remarks: The soi YDROLO Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimen	I profile mee GY drology Indicators cators (minimum of of Water (A1) ater Table (A2) on (A3) flarks (B1) nt Deposits (B2) pacita (B2)	ets the	tired: check all that an Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen X Oxidized I	pply) ained Leav auna (B13 atic Plants Sulfide O Rhizosphe	a dep	ing Roots		r Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9)
Remarks: The soi IYDROLO Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	I profile mee OGY drology Indicators cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	ets the	tired: check all that an Water-Sta Water-Sta Aquatic Fi Aquatic Fi True Aqua Hydrogen X Oxidized Presence Becent fr	pply) auna (B13 atic Plants Sulfide O Rhizosphe of Reduct	a dep ves (B9) 3) 5 (B14) vers on Live ed Iron (C-4) ion in Tille	ing Roots	matrix <u>Secondary</u> <u>Surfac</u> <u>V</u> Draina <u>Dry-S</u> <u>Crayfi</u> s (C3) <u>Satura</u> Stunte	<u>r Indicators (minimum of two required)</u> ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) ornhic Position (D2)
Remarks: The soi IYDROLO Wetland Hy Primary India Surface High Wa Saturation Saturation Sediment Drift Dep Algal Ma Iron Des	I profile mee GY drology Indicators cators (minimum of a Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	ets the	tired: check all that and Water-State Aquatic Fa Aquatic Fa Aquatic Fa True Aqua Hydrogen X Oxidized I Presence Recent Iro Thin Mucl	aving pply) and Leav auna (B13 atic Plants Sulfide O Rhizosphe of Reduct on Reduct Surface	a dep ves (B9) (B14) dor (C1) eres on Liv ed Iron (C4) ion in Tille (C7)	ing Roots 4) d Soils (C	matrix <u>Secondary</u> <u>Surfac</u> <u>✓</u> Draina <u>Dry-S</u> <u>Crayfi</u> s (C3) <u>Satura</u> <u>Stunte</u> C6) <u>✓</u> Geom <u>✓</u> FAC-t	<u>r Indicators (minimum of two required)</u> ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) orphic Position (D2) Neutral Test (D5)
Remarks: The soi IYDROLO Wetland Hy Primary India Surface High Wa Saturatia Water M Sedimen Drift Dep Algal Ma Iron Dep Inundati	I profile mee GY drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) fon Visible on Aerial	ets the	tired: check all that an Water-Sta Aquatic Fi Aquatic Fi True Aqua Hydrogen X Oxidized I Presence Recent Iro Thin Muck 37) Gauge or	aving pply) ained Leav auna (B13 atic Plants Sulfide O Rhizosphe of Reduct on Reduct Con Reduct Surface Well Data	a dep ves (B9) b) dor (C1) eres on Liv ed Iron (C4) ion in Tille (C7) a (D9)	ing Roots 4) d Soils (C	matrix <u>Secondary</u> <u>Surfac</u> <u>V</u> Draina <u>V</u> Dry-S <u>Crayfi</u> s (C3) <u>Satura</u> Stunte C6) <u>✓</u> Geom <u>✓</u> FAC-t	y Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) orphic Position (D2) Neutral Test (D5)
Remarks: The soi IYDROLO Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Inundati Sparsely	I profile mee GY drology Indicators cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial y Vegetated Concav	Imagery (E re Surface	tired: check all that an Water-Sta Water-Sta Aquatic Fa Aquatic Fa Hydrogen X Oxidized I Presence Recent Iro Thin Much 37) Gauge or (B8) Other (Ex	pply) auna (B13 atic Plants Sulfide C Rhizosphe of Reduct Surface Well Data plain in Re	a dep ves (B9) (B14) dor (C1) eres on Liv ed Iron (C4) ion in Tille (C7) (C7) (D9) emarks)	ing Roots 4) d Soils (C	matrix <u>Secondary</u> <u>Surfac</u> <u>V</u> Draina <u>Dry-S</u> <u>Crayfi</u> s (C3) <u>Satura</u> <u>Stunte</u> C6) <u>V</u> Geom <u>V</u> FAC-1	<u>r Indicators (minimum of two required)</u> ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) orphic Position (D2) Neutral Test (D5)
Remarks: The soi Primary India Primary India Surface High Wa Saturation Water M Sedimen Drift Dep Algal Ma Iron Dep Inundati Sparsely Field Obser	I profile mee GY drology Indicators cators (minimum of a Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concav vations:	ets the : one is requ Imagery (E re Surface	tired: check all that and Water-Sta Aquatic Fa Aquatic Fa Aquatic Fa True Aqua Hydrogen X Oxidized I Presence Recent Iro Recent Iro Gauge or (B8) Other (Ex	aving pply) ained Leav auna (B13 atic Plants Sulfide O Rhizosphe of Reduct of Reduct on Reduct of Reduct well Data plain in Re	a dep ves (B9) (B14) dor (C1) eres on Liv ed Iron (C4) ion in Tille (C7) (C9) emarks)	ing Roots 4) d Soils (C	matrix <u>Secondary</u> <u>Surfac</u> <u>V</u> Draina Dry-S <u>Crayfi</u> s (C3) <u>Satura</u> <u>Stunte</u> C6) <u>V</u> Geom <u>V</u> FAC-t	<u>r Indicators (minimum of two required)</u> ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) orphic Position (D2) Neutral Test (D5)
Remarks: The soi IYDROLO Wetland Hy Primary India Surface High Wa Saturation Water M Sedimen Drift Dep Algal Ma Iron Dep Inundati Sparsely Field Obser Surface Wat	I profile mee GY drology Indicators cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concav vations: ter Present?	Imagery (E re Surface	ired: check all that and Water-Sta Aquatic F: Aquatic F: True Aqua Hydrogen X Oxidized I Presence Recent Iro Recent Iro Bauge or (B8) Other (Ex No <u>v</u> Depth (ir	oply) ained Leav auna (B13 atic Plants Sulfide O Rhizosphe of Reduct on Reduct Surface Well Data plain in Re	a dep ves (B9) b) c (B14) odor (C1) eres on Liv ed Iron (C4) ion in Tille (C7) a (D9) emarks)	ing Roots 4) d Soils (C	Matrix <u>Secondary</u> <u>Surfac</u> <u>V</u> Draina <u>Dry-S</u> <u>Crayfi</u> s (C3) <u>Satura</u> <u>Stunte</u> C6) <u>V</u> Geom <u>V</u> FAC-N	<u>r Indicators (minimum of two required)</u> ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ad or Stressed Plants (D1) orphic Position (D2) Neutral Test (D5)
Remarks: The soi IYDROLO Wetland Hy Primary India Surface High Wa Saturatia Water M Algal Ma Iron Dep Algal Ma Iron Dep Field Obser Surface Wat Water Table	I profile mee GY drology Indicators cators (minimum of e Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concav vations: ter Present?	Imagery (E re Surface Yes Yes	tired: check all that an water-Sta Aquatic F- Aquatic F- True Aqua Hydrogen X Oxidized I Presence Recent Ira Thin Muck 37) Gauge or (B8) Other (Ex No <u>v</u> Depth (in No <u>v</u> Depth (in	pply) ained Leav auna (B13 atic Plants Sulfide O Rhizosphe of Reduct Surface Well Data plain in Re uches): aches):	a dep ves (B9) (B14) dor (C1) eres on Liv ed Iron (C4) ion in Tille (C7) a (D9) emarks)	ing Roots 4) d Soils (C	matrix <u>Secondary</u> <u>Secondary</u> <u>Surfac</u> <u>V</u> Draina <u>Dry-S</u> <u>Crayfi</u> s (C3) <u>Satura</u> <u>Sturte</u> C6) <u>✓</u> Geom <u>✓</u> FAC-1	v Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) orphic Position (D2) Neutral Test (D5)
Remarks: The soi The soi APPROLO Wetland Hy Primary India Surface High Wa Saturation Water M Sedimen Algal Ma Iron Dep Algal Ma Iron Dep Field Obser Surface Wat Water Table Saturation P	I profile mee	Imagery (E re Surface Yes Yes	criteria for h	pply) ined Leav auna (B13 atic Plants Sulfide C Rhizosphe of Reduct of Reduct Surface Well Data plain in Re uches): aches):	a dep ves (B9) (B14) dor (C1) eres on Liv ed Iron (C4) ion in Tille (C7) (C7) (D9) emarks)	ing Roots 4) d Soils (C	matrix <u>Secondary</u> <u>Surfac</u> <u>Ury-S</u> <u>Crayfi</u> Stunte (C3) <u>Satura</u> Stunte (C3) <u>V</u> Geom <u>V</u> FAC-N <b>tland Hydrology</b>	<u>e Indicators (minimum of two required)</u> the Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) orphic Position (D2) Neutral Test (D5) Present? Yes No
Remarks: The soi IYDROLO Wetland Hy Primary India Surface High Wa Saturation Vater N Sedimen Drift Dep Algal Ma Iron Dep Inundati Sparsely Field Obser Surface Wate Water Table Saturation P (includes caj Describe Re	I profile mee GY drology Indicators cators (minimum of e Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) fon Visible on Aerial y Vegetated Concav vations: ter Present? Present? pillary fringe) corded Data (stream	Imagery (E re Surface Yes Yes n gauge, m	criteria for h	pply) ained Leav auna (B13 atic Plants Sulfide C Rhizosphe of Reduct Sulface Well Data plain in Re uches): aches): photos, p	a dep ves (B9) (B14) odor (C1) eres on Live ed Iron (C4) ion in Tille (C7) a (D9) emarks) revious ins	ing Roots 4) d Soils (C	matrix <u>Secondary</u> <u>V</u> Draina <u>V</u> Dry-S Crayfi s (C3) <u>Satura</u> Stunte (C3) <u>V</u> Geom <u>V</u> FAC-N tland Hydrology ), if available:	<u>v Indicators (minimum of two required)</u> ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) orphic Position (D2) Neutral Test (D5) Present? Yes No
Remarks: The soi IYDROLO Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimen Algal Ma Iron Dep Algal Ma Iron Dep Saturation Per Surface Water Sparsely Field Obser Surface Water Surface Water Surface Water Surface Water Saturation Per (includes car Describe Re Remarks:	I profile mee GY drology Indicators cators (minimum of e Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concav vations: er Present? Present? pillary fringe) corded Data (stream	Imagery (E re Surface Yes Yes n gauge, m	tired: check all that an water-Sta Aquatic F- True Aquatic Hydrogen X Oxidized I Hydrogen X Oxidized I Presence Recent Ira Thin Muck 37) Gauge or (B8) Other (Ex No <u>v</u> Depth (in No <u>v</u> Depth (in No <u>v</u> Depth (in No <u>v</u> Depth (in No <u>v</u> Depth (in	pply) ained Leav auna (B13 atic Plants Sulfide O Rhizosphe of Reduct Con Reduct Co	a dep ves (B9) (B14) dor (C1) eres on Liv ed Iron (C4) ion in Tille (C7) a (D9) emarks) revious ins	ing Roots 4) d Soils (C	matrix <u>Secondary</u> <u>Surfac</u> <u>V</u> Draina <u>Dry-S</u> <u>Crayfi</u> Sturfac <u>Sturfac</u> <u>Sturfac</u> <u>Sturfac</u> <u>FAC-1</u> tland Hydrology ), if available:	<u>v Indicators (minimum of two required)</u> the Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) orphic Position (D2) Neutral Test (D5) Present? Yes No

Project/Site: AEP North Delphos - Rockhill	City/County: Lima / Aller	<u>۱</u>	Sampling Date:	2021-06-30
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-V/W/X UPL
Investigator(s): J. Holmes E. Wilson	Section, Township, Range: _	S013 T0	03 R006	
Landform (hillslope, terrace, etc.): Upland, Flat	Local relief (conca	ave, convex, none):	None	
Slope (%): <u>1</u> Lat: <u>40.781808</u>	Long:84.119620		Datum: WGS 8	34
Soil Map Unit Name:BIg1B1		NWI classific	ation: N/A	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🔽 No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norm	al Circumstances" p	oresent? Yes	✓ №
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locati	ons, transects	, important fe	eatures, etc.

				-	•
Hydrophytic Vegetation Present?	Yes	No			
Hydric Soil Present?	Yes	No	Is the Sampled Area		
Wetland Hydrology Present?	Yes	No	within a Wetland?	Yes	No

Remarks:

# Representative of existing ROW.

20.4	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>3</u> (B)
4				
5				That Are OBL_EACW or EAC: 0 (A/B)
		= Total Cov	ver	
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1				Total % Cover of:Multiply by:
2				OBL species 0 x 1 = 0
3.				FACW species x 2 =
4.				FAC species 0 x 3 = 0
5				FACU species 90 x 4 = 360
		= Total Cov	/er	UPL species $10 \times 5 = 50$
Herb Stratum (Plot size: 5 ft r )		10101 001		Column Totals: 100 (A) 410 (B)
1. Phleum pratense	40	<u> </u>	FACU	
2. Dactylis glomerata	20	~	FACU	Prevalence Index = B/A = 4.1
3. Solidago canadensis	20	~	FACU	Hydrophytic Vegetation Indicators:
4. Dipsacus laciniatus	10		UPL	1 - Rapid Test for Hydrophytic Vegetation
5. Lolium perenne	10		FACU	2 - Dominance Test is >50%
6.				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8	·			data in Remarks or on a separate sheet)
o				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3	·			
10.	100%	- Total Car		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )	10070		ver	be present, unless disturbed or problematic.
1.				Hydronbytic
2				Vegetation
		= Total Cov	/er	Present? Yes No
Remarks: (Include photo numbers here or on a separate	sheet.)			1
A propondoron of budrashitis		on io m	-	ont
A preponderance of hydrophytic ve	getation	on is no	or pres	ent

Profile Desc	ription: (Describ	e to the dep	th needed to document the indicator or	confirm the absence of indicato	rs.)		
Depth	Matrix		Redox Features				
(inches)	<u>Color (moist)</u>	%	<u>Color (moist)</u> <u>%</u> <u>Type'</u>	Loc <sup>*</sup> Texture	Remarks		
6	10YR 4/3	_ 100_		Sandy Clay Loam			
-							
-							
-							
-							
					ining M-Matrix		
Hydric Soil	Indicators:		-Reduced Matrix, MS-Masked Sand Gran	Indicators for Problem	natic Hydric Soils <sup>3</sup> :		
Histosol	(A1)		Sandy Cleved Matrix (S4)	Coast Prairie Red	x (A16)		
Histic Fr	vor) Dipedon (A2)		Sandy Redox (S5)	Dark Surface (S7)	JX (A10)		
Black Hi	stic (A3)		Stripped Matrix (S6)		lasses (F12)		
Hvdroge	en Sulfide (A4)		Loamy Mucky Mineral (F1)	Verv Shallow Dark	Surface (TF12)		
Stratified	d Lavers (A5)		Loamy Gleved Matrix (F2)	Other (Explain in F	Remarks)		
2 cm Mu	ick (A10)		Depleted Matrix (F3)		,		
Depleted	d Below Dark Surfa	ace (A11)	Redox Dark Surface (F6)				
Thick Da	ark Surface (A12)		Depleted Dark Surface (F7)	<sup>3</sup> Indicators of hydrophy	ytic vegetation and		
Sandy M	lucky Mineral (S1)		Redox Depressions (F8)	wetland hydrology	must be present,		
5 cm Mu	icky Peat or Peat (	S3)		unless disturbed o	r problematic.		
Restrictive I	Layer (if observed	d):					
Туре:							
Depth (ind	ches):			Hydric Soll Present?	Yes No		
Remarks:							
		.5 1101 11					
HYDROLO	GY						
Wetland Hv	drology Indicator	s:					
Primary India	ators (minimum o	fone is requi	red: check all that apply)	Secondary Indicator	s (minimum of two required)		
Surface	Water (A1)		Water-Stained Leaves (B0)	Surface Soil Cr	ocke (B6)		
Surface	valer (A1)		Aquatic Found (B13)	Drainage Patter	nc (B10)		
Tight wa	(A2)		True Aquatic Plants (P14)	Dry-Season Water Table (C2)			
Saturation	larka (P1)		True Aqualic Flants (B14)	Dry-Season wa	(02)		
Water W	arks (DT)		Hydrogen Sunde Odor (C1)	Clayisti Burrow	s (Co)		
Sedimer			Oxidized Rhizospheres on Living	GROOLS (C3) Saturation Visib	le on Aenai Imagery (C9)		
	ousits (D3)		Presence of Reduced from (C4)	Stuffied of Stres	sed Plants (DT)		
	at of Crust (D4)		Recent from Reduction in Third S	Geomorphic Po	sition (DZ)		
Iron Dep	oosiis (BD)	l Imagan (D	Thin Muck Surface (C7)	FAC-Neutral Te	st (D5)		
Inundatio	on visible on Aena	ii imagery (в	7) Gauge of Well Data (D9)				
Sparsery	vegetated Conca	ive Surface (		1			
Field Obser	vations:	Maria					
Surface Wate	er Present?	Yes	No Depth (inches):				
Water Table	Present?	Yes	No Depth (inches):				
Saturation Pr (includes cap	resent? pillary fringe)	Yes	No Depth (inches):	Wetland Hydrology Present?	Yes No		
Describe Red	corded Data (strea	m gauge, m	onitoring well, aerial photos, previous inspe	ections), if available:			
No primary	and or second	dary wetla	nd hydrology indicators were pres	ent at the time of sampling			
Remarks:							

Project/Site: AEP North Delphos - Rockhill Delineation	City/County: Lima/Allen		Sampling Date: _	2021-06-30	
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-V	
Investigator(s): E. Wilson, J. Holmes	Section, Township, Range: _	S013, T0	03, R006		
Landform (hillslope, terrace, etc.): Depression	Local relief (conc	ave, convex, none): _	Concave		
Slope (%): 1 Lat: 40.7816040	Long: -84.1192914		Datum: WGS 84	4	
Soil Map Unit Name: Gwg1B1		NWI classifica	ation: None		
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🗾 No	(If no, explain in Re	emarks.)		
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes 🗾 🖊 No					
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed	explain any answers	s in Remarks.)		
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locat	ions, transects,	important fe	atures, etc.	

Hydrophytic Vegetation Present?	Yes No	
Hydric Soil Present?	Yes No	Is the Sampled Area
Wetland Hydrology Present?	Yes 🖌 No	within a Wetland? Yes <u>V</u> No
Remarks:		

# PEM wetland within ROW in depression.

20.64 -	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft r</u> )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Deminent
3.				Species Across All Strata: 2 (B)
A				
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
Sepling/Shruh Stratum (Plat size) 15 ft r		= Total Cov	er	Prevalence Index worksheet:
Saping/Shiub Stratum (Plot size)				
1				<u>1 otal % Cover ot:</u> <u>Wultiply by:</u>
2				OBL species $33$ $x_1 = 33$
3				FACW species $\frac{70}{x^2} = \frac{140}{x^2}$
4				FAC species 0 x 3 = 0
5.				FACU species 0 x 4 = 0
		= Total Cov	er	UPL species 5 $x_{5} = 25$
Herb Stratum (Plot size: 5 ft r)		10101 001	01	Column Totals: 110 (A) 200 (B)
1. Lysimachia ciliata	35	~	FACW	
2. Scirpus atrovirens	25	<ul> <li>✓</li> </ul>	OBL	Prevalence Index = B/A = 1.8
3. Carex vulpinoidea	20		FACW	Hydrophytic Vegetation Indicators:
4. Carex gynandra	15		FACW	✓ 1 - Rapid Test for Hydrophytic Vegetation
5. Carex stricta	10		OBL	✓ 2 - Dominance Test is >50%
6. Dipsacus laciniatus	5		UPL	✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7.				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8.				data in Remarks or on a separate sheet)
0				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
10	110%			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )	110 /₀	= Total Cov	er	be present, unless disturbed or problematic.
1				Ukudan akudin
··				Vegetation
۷		Tatal O		Present? Yes No
Demeriles (Include photo purphere have as an array	he et )		er	
Remarks. (include photo numbers here or on a separate s	neet.)			
Hydrophytic vegetation is present.				

SOIL								Sampling Point:
Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the	indicator	or confin	m the absence	of indicators.)
Depth	Matrix		Redo	ox Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 20	10YR 3/2	95	10YR 5/3	5	С	М	Clay Loam	
						·		
-								
-								
-								
——								
							·	
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, M	S=Maske	d Sand G	rains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators	for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy	Gleyed M	atrix (S4)		Coast F	Prairie Redox (A16)
Histic Ep	pipedon (A2)		Sandy	Redox (S	5)		Dark S	urface (S7)
Black Hi	stic (A3)		Strippe	d Matrix (	S6)		Iron-Ma	anganese Masses (F12)
Hydroge	n Sulfide (A4)		Loamy	Mucky M	ineral (F1)		Very SI	hallow Dark Surface (TF12)
Stratified	Layers (A5)		Loamy	Gleyed N	atrix (F2)		Other (	Explain in Remarks)
Depleter	d Below Dark Surfac	ο (Δ11)	✓ Bedox	Dark Surf	(FS) Jace (F6)			
Thick Da	ark Surface (A12)	c (ATT)	Redox	ed Dark S	urface (F7	0	<sup>3</sup> Indicators	of hydrophytic vegetation and
Sandy M	lucky Mineral (S1)		Redox	Depressio	ons (F8)	,	wetland	hvdrology must be present.
5 cm Mu	icky Peat or Peat (S	3)			( /		unless	disturbed or problematic.
Restrictive I	Layer (if observed):							
Type: N	/A							
Depth (inc	ches):						Hydric Soil	Present? Yes No
Remarks:								
Hydric s	soils are pres	sent.						
HYDROLO	GY							
Wetland Hyd	drology Indicators:							
Primary India	ators (minimum of o	ne is requi	red; check all that a	oply)			Seconda	ry Indicators (minimum of two required)
Surface	Water (A1)		Water-Sta	ined Lea	ves (B9)		Surfa	ace Soil Cracks (B6)
High Wa	ter Table (A2)		Aquatic F	auna (B13	3)		🖌 Drair	nage Patterns (B10)
Saturatio	on (A3)		True Aqua	atic Plants	s (B14)		Dry-	Season Water Table (C2)
Water M	arks (B1)		Hydrogen	Sulfide C	dor (C1)		Cray	fish Burrows (C8)
Sedimer	nt Deposits (B2)		✓ Oxidized	Rhizosph	eres on Li	ving Roots	(C3) 🖌 Satu	ration Visible on Aerial Imagery (C9)
Drift Dep	oosits (B3)		Presence	of Reduc	ed Iron (C	4)	Stun	ted or Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Recent Irc	on Reduct	tion in Tille	ed Soils (C	6) 🖌 Geor	morphic Position (D2)
Iron Dep	oosits (B5)		Thin Mucl	<pre>surface</pre>	(C7)		✓ FAC	-Neutral Test (D5)
Inundati	on Visible on Aerial I	magery (B	7) Gauge or	Well Data	a (D9)			
Sparsely	Vegetated Concave	e Surface (	B8) Other (Ex	plain in R	emarks)			
Field Obser	vations:			-				
Surface Wate	er Present? Y	es	No 🖌 Depth (in	iches):				
Water Table	Present? Y	es	No V Depth (in	iches):				
Saturation P	resent? V	es	No V Depth (in	iches).		Wet	and Hydrology	Present? Yes No
(includes car	pillary fringe)			ones)		_   ""	and nyarology	
Describe Re	corded Data (stream	gauge, m	onitoring well, aerial	photos, p	revious in	spections)	, if available:	

Remarks:

Hydrology indicators are present throughout wetland

Project/Site: AEP North Delphos - Rockhill	City/County: Lima / Allen		Sampling Date:	2021-06-30
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-W
Investigator(s): J. Holmes E. Wilson	Section, Township, Range: _	S013 T00	3 R006	
Landform (hillslope, terrace, etc.): Depression	Local relief (conca	ave, convex, none):	Concave	
Slope (%): <u>1</u> Lat: <u>40.781924</u>	Long: -84.119417		Datum: WGS	84
Soil Map Unit Name:BIg1B1		NWI classific	ation: N/A	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🖌 No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norm	al Circumstances" p	oresent? Yes	✓No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing	y sampling point locati	ions, transects	, important f	eatures, etc.

Hydrophytic Vegetation Present?	Yes No	
Hydric Soil Present?	Yes 🔽 No	Is the Sampled Area
Wetland Hydrology Present?	Yes 🖌 No	within a Wetland? Yes No

Remarks:

# Wetland in existing ROW depression .

<b>20</b> ft -	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				
5.				Percent of Dominant Species
		= Total Co	/er	
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1				Total % Cover of:Multiply by:
2				OBL species <u>60</u> x 1 = <u>60</u>
3.				FACW species <u>35</u> x 2 = <u>70</u>
4.				FAC species $0$ x 3 = $0$
5.				FACU species $0   x 4 = 0$
		= Total Co	/er	UPL species $5_{x 5} = 25$
Herb Stratum (Plot size: 5 ft r )		10101 00		Column Totals: 100 (A) 155 (B)
1. Carex Iupulina	60	<u> </u>	OBL	
2. Impatiens capensis	25	<u> </u>	FACW	Prevalence Index = B/A = <u>1.6</u>
3. Phalaris arundinacea	10		FACW	Hydrophytic Vegetation Indicators:
4. Dipsacus laciniatus	5		UPL	✓ 1 - Rapid Test for Hydrophytic Vegetation
5				✓ 2 - Dominance Test is >50%
6.				$\checkmark$ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7.				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8.				data in Remarks or on a separate sheet)
9.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10				
···	100%	= Total Co		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )		- 101ai 00		be present, unless disturbed or problematic.
1				Hydrophytic
2				Vegetation
		= Total Co	/er	Present? Yes No No
Remarks: (Include photo numbers here or on a separate s	sheet.)			
A preponderance of hydrophytic v	itetop	on ie ni	racant	
~ preportuerance or right opright ve	geratio	on is pi	CSCIII	

Profile Desc	ription: (Describe	to the dep	th needed to docum	nent the i	ndicator	or confirm	the absence of in	dicators.)
Depth	Matrix		Redox	x Features	S			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
0-5	10YR 5/2	95	10YR 4/6				Silt Loam	
<u> </u>	10YR 5/1	85	10YR 4/6	15	<u>C</u>	<u>M</u>	Sandy Clay Loam	
-								
-								
-								
-								
<sup>1</sup> Type: C=Co	oncentration, D=Dep	pletion, RM	=Reduced Matrix, MS	S=Masked	Sand Gr	ains.	<sup>2</sup> Location: PL:	=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for P	Problematic Hydric Soils":
Histosol	(A1)		Sandy G	Bleyed Ma	itrix (S4)		Coast Prairi	e Redox (A16)
Black Hi	stic (A3)		Sandy R	Matrix (SS	) (6)		Dark Surfac	e (57) nese Masses (F12)
Hydroge	n Sulfide (A4)		Loamy N	Aucky Mir	neral (F1)		Very Shallo	w Dark Surface (TF12)
Stratified	d Layers (A5)		Loamy C	Gleyed Ma	atrix (F2)		Other (Expla	ain in Remarks)
2 cm Mu	ıck (A10)		<ul> <li>Depleted</li> </ul>	d Matrix (F	-3)			
Depleted	d Below Dark Surfac	æ (A11)	Redox D	ark Surfa	ice (F6)		3	
Thick Da	ark Surface (A12)		Depleted	d Dark Su	rface (F7)	)	Indicators of hy	drophytic vegetation and
5 cm Mu	iucky Mineral (S1) icky Peat or Peat (S	3)	Redox L	epression	ns (F8)		unless distu	rology must be present,
Restrictive I	Layer (if observed)	:						
Type:	,							
Depth (inc	ches):						Hydric Soil Pres	ent? Yes No
Remarks:	,							
The soil	profile mee	ts the	criteria for h	aving	a dep	leted r	natrix	
HYDROLO	GY							
Wetland Hyd	drology Indicators:	:						
Primary India	cators (minimum of o	one is requi	red; check all that ap	ply)			Secondary Inc	dicators (minimum of two required)
Surface	Water (A1)		Water-Stai	ned Leave	es (B9)		Surface S	Soil Cracks (B6)
High Wa	iter Table (A2)		Aquatic Fa	una (B13)	)		Drainage	Patterns (B10)
Saturatio	on (A3)		True Aquat	tic Plants	(B14)		Dry-Seas	on Water Table (C2)
Water M	arks (B1)		Hydrogen	Sulfide Oc	dor (C1)		Crayfish I	Burrows (C8)
Sedimer	nt Deposits (B2)		X Oxidized R	hizosphe	res on Liv	ing Roots	(C3) <u>Saturation</u>	n Visible on Aerial Imagery (C9)
	DOSITS (B3)		Presence of Descent last	of Reduce		+) + Colle (CC	Stunted o	or Stressed Plants (D1)
	at or Crust (B4)		Recent Irol	Surface (		a Solis (Ce	6) <u>V</u> Geomorp	tral Test (D5)
Inundati	on Visible on Aerial	Imageny (B	7) Gauge or \	Nell Data			PAC-Neu	trai rest (D5)
Sparsely	Vegetated Concav	e Surface (	B8) Other (Exp	lain in Re	(D3) marks)			
Field Obser	vations:				mantoj			
Surface Wat	er Present?	'es	No Cepth (inc	ches):				
Water Table	Present?	/es	No V Depth (inc	ches):		-		
Saturation P	resent?	/es	No V Depth (inc	ches):		Wetl	and Hydrology Pre	sent? Yes 🖌 No
(includes cap	oillary fringe)					_		
Describe Re	corded Data (stream	n gauge, m	onitoring well, aerial p	photos, pro	evious ins	pections),	if available:	
Remarks:								
Multinle	indicators of	of wetl:	and hydrolog	v wer	e pres	sent at	the time of	sampling
				,		, one at		camping

Project/Site: AEP North Delphos - Rockhill	City/County: Lima / Allen		Sampling Date:	2021-06-30
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-X
Investigator(s): J. Holmes E. Wilson	Section, Township, Range: _	S013 T	003 R006	
Landform (hillslope, terrace, etc.): Depression	Local relief (conca	ve, convex, none):	Concave	
Slope (%): 1 Lat: 40.781897	Long: -84.119593		Datum: WGS 8	34
Soil Map Unit Name: Blg1B1		NWI classific	ation: N/A	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🔽 No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	/ disturbed? Are "Norma	I Circumstances" p	oresent? Yes	✓ No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	rs in Remarks.)	

# SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         V         No           Yes         V         No           Yes         V         No	Is the Sampled Area within a Wetland? Yes <u> </u>
Remarks:		

# Wetland in existing ROW depression .

00 ft -	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				
5.				Percent of Dominant Species
		= Total Cov	/er	
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species <u>85</u> x 1 = <u>85</u>
3.				FACW species 0 x 2 = 0
4.				FAC species $0   x 3 = 0$
5				FACU species $10 \times 4 = 40$
		= Total Cov	/er	UPL species $5$ x 5 = $25$
Herb Stratum (Plot size: 5 ft r )		10101 001		Column Totals: 100 (A) 150 (B)
1. Juncus effusus	60	<u> </u>	OBL	
2. Eupatorium perfoliatum	25	<u> </u>	OBL	Prevalence Index = B/A = <u>1.5</u>
3. Solidago canadensis	10		FACU	Hydrophytic Vegetation Indicators:
4. Dipsacus laciniatus	5		UPL	✓ 1 - Rapid Test for Hydrophytic Vegetation
5				✓ 2 - Dominance Test is >50%
6				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7.				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8.				data in Remarks or on a separate sheet)
9.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10.				
	100%	= Total Cov	/er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )		10101 001		be present, unless disturbed or problematic.
1				Hydrophytic
2				Vegetation
		= Total Cov	/er	Present? Yes No No
Remarks: (Include photo numbers here or on a separate s	heet.)			
A preponderance of hydrophytic ve	egetatio	on is pr	resent	

Dopai	IVIGUIA	-	11000	on our our our of the second				
(inches) 0 - 5	Color (moist) 10YR 5/2	95	Color (moist) 10YR 4/6	%	Type <sup>1</sup>	Loc <sup>2</sup>		Remarks
5-20	10YR 5/1	_ <u>85</u>	10YR 4/6	15	<u>с</u>		Sandy Clay Loam	
-	1011(0,1							
-								
·			·					
-			·				· ·	
-			·					
Type: C=Cor	ncentration, D=De	pletion, RN	I=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
Historol (			Sandy	Gloved M	atrix (SA)			rairia Reday (A16)
Histic Epi	pedon (A2)		Sandy Sandy	Redox (S	aurix (34) 5)		Dark Su	rface (S7)
Black His	tic (A3)		Strippe	d Matrix (	S6)		Iron-Ma	nganese Masses (F12)
Hydrogen	Sulfide (A4)		Loamy	Mucky Mi	neral (F1)		Very Sh	allow Dark Surface (TF12)
Stratified	Layers (A5)		Loamy	Gleyed M	atrix (F2)		Other (E	xplain in Remarks)
2 cm Muc	k (A10)		<u> </u>	ed Matrix	(F3)			
Depleted	Below Dark Surfa	ce (A11)	Redox	Dark Surf	ace (F6) urface (F7	``````````````````````````````````````	<sup>3</sup> Indicators	the hydrophytic vocatation and
Sandy Mi	ucky Mineral (S1)		Deplete Redox	Depressio	ons (F8)	)	wetland	hydrology must be present.
5 cm Muc	ky Peat or Peat (	53)		Doprocon			unless c	listurbed or problematic.
Restrictive La	ayer (if observed	):						
-								
Type:							Undria Sail F	Veccent2 Vec V
Type: Depth (incl	hes):						Hydric Soil F	Present? Yes 🖌 No
Type: Depth (incl Remarks: The soil	nes):	ets the	 criteria for h	aving	a dep	leted	Hydric Soil F	Present? Yes 🖌 No
Type: Depth (incl Remarks: The soil	profile mee	ets the	criteria for h	aving	a dep	leted	Hydric Soil F matrix	Present? Yes <u>~</u> No
Type: Depth (incl Remarks: The soil YDROLOG	profile mee	ets the	criteria for h	aving	a dep	leted	Hydric Soil F matrix	Present? Yes <u>~</u> No
Type: Depth (incl Remarks: The soil YDROLOG Wetland Hydi	profile mee	ets the	criteria for h		a dep	leted	Hydric Soil F matrix	Present? Yes <u>V</u> No <u>No</u>
Type: Depth (incl Remarks: The soil YDROLOG Wetland Hydl Primary Indica Surface V	nes): profile mee SY rology Indicators ators (minimum of Vater (A1)	ets the	criteria for h		a dep	leted	Hydric Soil F matrix <u>Secondar</u>	Present? Yes <u>Yes</u> No <u>y Indicators (minimum of two required)</u> Coe Soil Cracks (B6)
Type: Depth (incl Remarks: The soil YDROLOG Wetland Hyd Primary Indica Surface V High Wat	profile mee profile mee SY rology Indicators ators (minimum of Vater (A1) er Table (A2)	ets the	uired: check all that a Water-Sta Water-Sta	pply) ained Leav	a dep	leted	Hydric Soil F matrix Secondar Surfa	Present? Yes <u>Ves</u> No <u>vertical</u> No <u>vertic</u>
Type: Depth (incl Remarks: The soil YDROLOG Wetland Hyde Primary Indica Surface V High Wate Saturation	profile mee profile mee SY rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3)	ets the	uired: check all that a Water-Sta Aquatic F True Aquat	pply) ained Leav auna (B13 atic Plants	a dep //es (B9) 3) 6 (B14)	leted	Hydric Soil F matrix <u>Secondar</u> <u>Surfa</u> <u>V</u> Drain Drv-S	Present?       Yes       No         y Indicators (minimum of two required)         ce Soil Cracks (B6)         age Patterns (B10)         teason Water Table (C2)
Type: Depth (incl Remarks: The soil YDROLOG Wetland Hydl Primary Indica Surface V High Wate Saturation Water Ma	hes): profile mea SY rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) urks (B1)	ets the	uired: check all that a Water-Sta Water-Sta Aquatic F True Aqua Hydrogen	pply) ained Leav auna (B13 atic Plants Sulfide C	a dep //es (B9) 3) 5 (B14) 2000r (C1)	leted	Hydric Soil F matrix Secondar Surfa V Drain Dry-S Crayf	vindicators (minimum of two required) vindicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) leason Water Table (C2) ish Burrows (C8)
Type: Depth (incl Remarks: The soil YDROLOG Wetland Hydd Primary Indica Carter of the solution Water Ma Saturation Water Ma Sediment	nes): profile mee SY rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) urks (B1) Deposits (B2)	ets the	uired: check all that an Water-Sta Aquatic F True Aqua Hydrogen X Oxidized	pply) ained Leav auna (B13 atic Plants Sulfide C Rhizosphe	a dep //es (B9) 3) 5 (B14) bdor (C1) eres on Liv	leted	Hydric Soil F matrix <u>Secondar</u> <u>Surfa</u> <u>Drain</u> Dry-S — Crayf ; (C3) Satur	Present?       Yes       No         y Indicators (minimum of two required)         cc Soil Cracks (B6)         age Patterns (B10)         eason Water Table (C2)         ish Burrows (C8)         ation Visible on Aerial Imagery (C9)
Type: Depth (incl Remarks: The soil YDROLOG Wetland Hyde Primary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo	profile mee profile mee SY rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) urks (B1) : Deposits (B2) osits (B3)	ets the	uired: check all that a Water-Sta Aquatic F True Aqua Hydrogen X Oxidized Presence	pply) ained Leav auna (B13 atic Plants Sulfide C Rhizosphe of Reduc	a dep ves (B9) (B14) odor (C1) eres on Liv ed Iron (C-1)	leted	Hydric Soil F matrix Secondar Surfa Surfa Drain Dry-S Crayf s (C3) Satur Stunt	Present?       Yes       No         y Indicators (minimum of two required)         cce Soil Cracks (B6)         age Patterns (B10)         reason Water Table (C2)         ish Burrows (C8)         ation Visible on Aerial Imagery (C9)         ed or Stressed Plants (D1)
Type: Depth (incl Remarks: The soil YDROLOG Wetland Hyde Primary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat	hes): profile mee SY rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) irks (B1) : Deposits (B2) osits (B3) or Crust (B4)	ets the	tired: check all that a Water-Sta Aquatic F Aquatic F True Aqua Hydrogen X Oxidized Presence Recent Iro	pply) ained Leav auna (B13 atic Plants Sulfide C Rhizosphe of Reduc on Reduct	a dep ves (B9) 3) 5 (B14) bdor (C1) eres on Liv ed Iron (C- ion in Tille	ring Roots 4) d Soils (C	Hydric Soil F matrix Secondar Surfa V Drain Dry-S Crayf (C3) Satur Stunt 6) V Geon	Present?       Yes       No         y Indicators (minimum of two required)         ce Soil Cracks (B6)         age Patterns (B10)         eason Water Table (C2)         ish Burrows (C8)         ation Visible on Aerial Imagery (C9)         ed or Stressed Plants (D1)         norphic Position (D2)
Type: Depth (incl Remarks: The soil YDROLOG Wetland Hydi Primary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo	hes): profile mee by rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) urks (B1) : Deposits (B2) osits (B3) or Crust (B4) osits (B5)	ets the	Lired: check all that a water-Sta Aquatic F Aquatic F True Aquatic Hydrogen X Oxidized Presence Recent Ira Thin Much	pply) ained Leav auna (B13 atic Plants Sulfide C Rhizosphe of Reduc on Reduct k Surface	a dep ves (B9) 3) 5 (B14) odor (C1) eres on Liv ed Iron (C- ion in Tille (C7)	ring Roots 4) d Soils (C	Hydric Soil F matrix <u>Secondar</u> <u>Surfa</u> <u>V</u> Drain Dry-S (C3) Satur Stunt (C3) Satur Stunt (C3) <u>V</u> Geon <u>V</u> FAC-	versent? Yes No v Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) teason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) horphic Position (D2) Neutral Test (D5)
Type: Depth (incl Remarks: The soil YDROLOG Wetland Hydl Primary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio	hes): profile mea profile mea ators (minimum of Vater (A1) er Table (A2) n (A3) urks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) n Visible on Aerial	ets the	Lired: check all that a Lired: check all that a Water-Sta Aquatic F Aquatic F True Aquatic Hydrogen X Oxidized Presence Recent Ira Chin Mucl 37) Gauge or	pply) ained Leav auna (B13 atic Plants Sulfide C Rhizosphe of Reduct on Reduct k Surface Well Data	a dep ves (B9) (B14) bdor (C1) eres on Liv ed Iron (C- ion in Tille (C7) a (D9)	ring Roots 4) d Soils (C	Hydric Soil F matrix Secondar Surfa V Drain Dry-S G (C3) Satur Stunt (C3) Satur Stunt (C3) Satur Stunt (C3) Satur Stunt (C3) Satur	vresent?       Yes       No         v       Indicators (minimum of two required)         cc       Soil Cracks (B6)         age Patterns (B10)       eason Water Table (C2)         ish Burrows (C8)       ation Visible on Aerial Imagery (C9)         ed or Stressed Plants (D1)       horphic Position (D2)         No
Type: Depth (incl Remarks: The soil YDROLOG Wetland Hyde Primary Indica Water Ma Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely	profile mee profile mee SY rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) urks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) n Visible on Aerial Vegetated Concar	ets the .: one is requ lmagery (I ve Surface	Lired: check all that a Lired: check all that a Water-Sta Aquatic F Aquatic F True Aqua Hydrogen X Oxidized Presence Recent Iru Recent Iru Gauge or (B8) Other (Ex	pply) ained Leav auna (B13 atic Plants Sulfide C Rhizosphe of Reduc on Reduct k Surface Well Data plain in R	a dep ves (B9) 3) 5 (B14) bdor (C1) eres on Liv ed Iron (C- ion in Tille (C7) a (D9) emarks)	ring Roots 4) d Soils (C	Hydric Soil F matrix Secondar Surfa Surfa Drain Dry-S Crayf (C3) Satur Stunt (C3) Satur Stunt (C3) FAC-	Present?       Yes       No         y       Indicators (minimum of two required)         cc       Soil Cracks (B6)         age Patterns (B10)       Image Patterns (B10)         ieason Water Table (C2)       Image Patterns (B10)         ish Burrows (C8)       Imagery (C9)         ation Visible on Aerial Imagery (C9)       Imagery (C9)         ed or Stressed Plants (D1)       Imagery (D2)         Noutral Test (D5)       Imagery (D5)
Type: Depth (incl Remarks: The soil YDROLOG Wetland Hydd Primary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio Sparsely	profile mee profile mee Frology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) irks (B1) : Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Vegetated Concar ations:	ets the .: one is requ Imagery (I ve Surface	Lired: check all that a Lired: check all that a Water-Sta Aquatic F True Aquatic Hydrogen X Oxidized Presence Recent Ira Thin Mucl 37) Gauge or (B8) Other (Ex	pply) ained Leav auna (B13 atic Plants Sulfide C Rhizosphe of Reduc on Reduct k Surface Well Data plain in R	a dep ves (B9) 3) 6 (B14) bdor (C1) eres on Live eres on Live ion in Tille (C7) a (D9) emarks)	ring Roots 4) d Soils (C	Hydric Soil F matrix <u>Secondar</u> <u>Surfa</u> <u>V</u> Drain Dry-S <u>Crayf</u> (C3) Satur Stunt (6) <u>V</u> Geon <u>V</u> FAC-	Present?       Yes       No         y Indicators (minimum of two required)         cc Soil Cracks (B6)         age Patterns (B10)         teason Water Table (C2)         ish Burrows (C8)         ation Visible on Aerial Imagery (C9)         ed or Stressed Plants (D1)         norphic Position (D2)         Neutral Test (D5)
Type: Depth (incl Remarks: The soil YDROLOG Wetland Hyd Primary Indica Surface V High Water Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely Field Observ Surface Water	hes): profile mea profile mea ators (minimum of Vater (A1) er Table (A2) n (A3) urks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) n Visible on Aerial Vegetated Concar ations: r Present?	ets the	ired: check all that a Water-Sta Aquatic F True Aquatic F Aquatic F True Aquatic F Aquatic F Constraints Mode Constraints Cons	pply) ained Leav auna (B13 atic Plants Sulfide C Rhizosphe of Reduct of Reduct k Surface Well Data plain in R	a dep ves (B9) (B14) odor (C1) eres on Liv ed Iron (C- ion in Tille (C7) a (D9) emarks)	ring Roots 4) d Soils (C	Hydric Soil F matrix Secondar Surfa V Drain Dry-S Crayf S(C3) Satur Stunt (C3) Satur Stunt (C3) FAC-	y Indicators (minimum of two required)         cc Soil Cracks (B6)         age Patterns (B10)         eason Water Table (C2)         ish Burrows (C8)         ation Visible on Aerial Imagery (C9)         ed or Stressed Plants (D1)         norphic Position (D2)         Neutral Test (D5)
Type: Depth (incl Remarks: The soil YDROLOG Wetland Hyde Primary Indica Water Ma Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely Field Observa Surface Water Water Table F	hes): profile mea Frology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) urks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) n Visible on Aerial Vegetated Concar ations: r Present? Present?	ets the	criteria for h  ired: check all that a  Water-Sta Aquatic F True Aquatic F True Aquatic F True Aquatic F Recent Ira Recent Ira Thin Mucl 37) Gauge or (B8) Other (Ex No Depth (ir No Depth (ir	pply) ained Leav auna (B13 atic Plants Sulfide C Rhizosphe of Reduct k Surface Well Data plain in R uches): nches):	a dep ves (B9) 3) 5 (B14) bdor (C1) eres on Liv ed Iron (C- ion in Tille (C7) a (D9) emarks)	ring Roots 4) d Soils (C	Hydric Soil F matrix <u>Secondar</u> <u>Surfa</u> <u>V</u> Drain Dry-S Crayf (C3) Satur Stunt (C3) Satur FAC-	y Indicators (minimum of two required)         cc Soil Cracks (B6)         age Patterns (B10)         eason Water Table (C2)         ish Burrows (C8)         ation Visible on Aerial Imagery (C9)         ed or Stressed Plants (D1)         norphic Position (D2)         Neutral Test (D5)
Type: Depth (incl Remarks: The soil YDROLOG Wetland Hyde Primary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Nalgal Mat Iron Depo Sparsely Field Observ Surface Wate Water Table F Saturation Pre (includes capi	hes): profile mee SY rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) rrks (B1) : Deposits (B2) or Crust (B4) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Vegetated Concar ations: r Present? Present? Easent? llary fringe)	ets the		pply) ained Leav auna (B13 atic Plants Sulfide C Rhizosphe of Reduc on Reduct k Surface Well Data plain in Re uches): nches):	a dep ves (B9) bdor (C1) eres on Liv ed Iron (C- ion in Tille (C7) a (D9) emarks)	ring Roots 4) d Soils (C	Hydric Soil F matrix <u>Secondar</u> <u>Surfa</u> <u>Y</u> Drain Dry-S <u>Crayf</u> (C3) Satur Stunt (6) <u>Y</u> Geon <u>Y</u> FAC-	Present?       Yes        No
Type: Depth (incl Remarks: The soil YDROLOG Wetland Hyde Primary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio Sparsely Field Observe Surface Water Water Table F Saturation Pre (includes capi Describe Reco	hes): profile mee by rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) urks (B1) : Deposits (B2) or Crust (B4) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Vegetated Concar ations: r Present? Present? esent? llary fringe) orded Data (streat	ets the		pply) ained Leav auna (B13 atic Plants Sulfide C Rhizosphe of Reduct k Surface Well Data plain in R uches): nches): photos, p	a dep ves (B9) (B14) ved Iron (C-1) ion in Tille (C7) a (D9) emarks) revious ins	ring Roots 4) d Soils (C	Hydric Soil F matrix <u>Secondar</u> <u>Surfa</u> <u>Y</u> Drain Dry-S (C3) Satur Stunt (C3) Satur Stunt (C3) Satur FAC- Stand Hydrology , if available:	Present?       Yes No         y Indicators (minimum of two required)         cc Soil Cracks (B6)         age Patterns (B10)         teason Water Table (C2)         ish Burrows (C8)         ation Visible on Aerial Imagery (C9)         ed or Stressed Plants (D1)         horphic Position (D2)         Neutral Test (D5)
Type: Depth (incl Remarks: The soil YDROLOG Vetland Hydl Primary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely Surface Wate Vater Table F Saturation Pre includes capi Describe Rect	hes): profile mea profile mea ators (minimum of Vater (A1) er Table (A2) n (A3) urks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) n Visible on Aerial Vegetated Concar ations: r Present? Expresent Expresent	ets the	criteria for h  ired: check all that a  ired: check all that a  Water-Sta Aquatic F Aquatic F Aquatic F Aquatic F C Recent Ira Attributerial  No V Depth (ir No V Depth (i	pply) ained Leav auna (B13 atic Plants Sulfide C Rhizosphe of Reduct on Reduct k Surface Well Data plain in Re uches): nches): photos, p	a dep ves (B9) (B14) odor (C1) eres on Liv ed Iron (C- ion in Tille (C7) a (D9) emarks) revious ins	ring Roots 4) d Soils (C	Hydric Soil F matrix <u>Secondar</u> <u>Surfa</u> <u>V</u> Drain Dry-S Crayf (C3) Satur Stunt (C3) Satur FAC- Crayf (C3) Satur Stunt (C3) Satur (C3) Sa	Present?       Yes        No

Project/Site: AEP North Delphos - Rockhill Delineation	City/County: Lima/Allen		Sampling Date:	2021-06-30
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-Y
Investigator(s): E. Wilson, J. Holmes	Section, Township, Range: _	S013, T0	03, R006	
Landform (hillslope, terrace, etc.): Depression	Local relief (conca	ave, convex, none):	Concave	
Slope (%): 0 Lat: 40.7821446	Long: -84.1197331		Datum: WGS 8	34
Soil Map Unit Name: BIg1B1		NWI classific	ation: None	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🔽 No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances" p	present? Yes	No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locati	ons, transects	, important fe	atures, etc.

Hydrophytic Vegetation Present?	Yes No	In the Sampled Area
Hydric Soil Present?	Yes No	is the Sampled Area
Wetland Hydrology Present?	Yes 🔽 No	within a Wetland? Yes No
Remarks:		

# PEM wetland within ROW in depression.

00 (i	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 3 (A)
2.				
3				Total Number of Dominant
				Species Across All Strata: <u>5</u> (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
15 4 -		= Total Cov	/er	
Sapling/Shrub Stratum (Plot size: 15111 )				Prevalence Index worksheet:
1				Total % Cover of:Multiply by:
2.				OBL species <u>10</u> x 1 = <u>10</u>
3				FACW species 85 $x_2 = 170$
۵				EAC species $0$ $x_3 = 0$
4				$\frac{1}{1} = \frac{1}{1} = \frac{1}$
5				FACO species $\underline{0}$ $x = \underline{0}$
5 ft r		= Total Cov	/er	UPL species $5$ $x 5 = 25$
Herb Stratum (Plot size: 5111)	40	./		Column Totals: 100 (A) 205 (B)
	40			0.1
2. Solidago gigantea	25	<u> </u>	FACW	Prevalence Index = B/A = 2.1
3. Carex vulpinoidea	20	<u> </u>	FACW	Hydrophytic Vegetation Indicators:
4. Carex lurida	10		OBL	✓ 1 - Rapid Test for Hydrophytic Vegetation
5. Dipsacus laciniatus	5		UPL	✓ 2 - Dominance Test is >50%
6.				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
				data in Remarks or on a separate sheet)
8				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
9				
10				Indianten of hydric coll and wetland hydrology much
00 ft -	100%	= Total Cov	/er	be present unless disturbed or problematic.
Woody Vine Stratum (Plot size: 30 ft r )				
1				Hydrophytic
2.				Vegetation
		= Total Cov	/er	Present? Yes No No
Remarks: (Include photo numbers here or on a separate s	sheet.)			1
	,			
Hydrophytic vegetation is present.				

SOIL								Sampling Point:Y
Profile Desc	cription: (Describ	be to the de	pth needed to docur	nent the	indicator	or confir	m the absence o	of indicators.)
Depth	Matrix		Redo	x Featur	es			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 20	10YR 3/1	95	10YR 5/4	5	<u> </u>	М	Clay Loam	
-								
							· ·	
-								
1							2	
'Type: C=C	oncentration, D=D	epletion, RM	I=Reduced Matrix, M	S=Maske	ed Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
Hydric Soll	Indicators:						Indicators f	or Problematic Hydric Solis :
Histosol	(A1)		Sandy (	Gleyed N	Matrix (S4)		Coast P	rairie Redox (A16)
Block H	pipedon (A2)		Sandy P	Kedox (S	(56)		Dark Su	
	ISUC (AS) on Sulfide (AA)			Mucky M	(30) lineral (F1)		Iron-Ma	allow Dark Surface (TE12)
Stratifie	d Lavers (A5)		Loamy		Matrix (F2)		Other (F	Explain in Remarks)
2 cm Mu	uck (A10)		Deplete	d Matrix	(F3)			
Deplete	d Below Dark Surf	ace (A11)	Redox I	Dark Sur	face (F6)			
Thick Da	ark Surface (A12)		Deplete	d Dark S	Surface (F7)	)	<sup>3</sup> Indicators of	of hydrophytic vegetation and
Sandy N	Aucky Mineral (S1)	)	Redox I	Depressi	ons (F8)		wetland	hydrology must be present,
5 cm Mu	ucky Peat or Peat	(S3)					unless c	listurbed or problematic.
Restrictive	Layer (if observe	d):						
Type: <u>N</u>	/A						Hudria Sail F	
Depth (in	ches):						Hydric Soli P	
Remarks:								
Hydric :	soils are pr	esent.						
	drology Indicator							
	arology indicator	5. f an a la vari	vivadu abaals all that av	(mha)			Casandar	
Primary India	cators (minimum o	t one is requ	lired; check all that ap	<u>ppiy)</u>			<u>Secondar</u>	y Indicators (minimum of two required)
Surface	Water (A1)		Water-Sta	ined Lea	ives (B9)		Surfa	ce Soll Cracks (B6)
High Wa	ater Table (A2)		Aquatic Fa	auna (B1	3)		Drain	age Patterns (B10)
Saturati	on (A3)		True Aqua	tic Plant	s (B14)		Dry-S	Season Water Table (C2)
Water N	larks (B1)		Hydrogen	Sulfide	Jdor (C1)		Crayf	Ish Burrows (C8)
Sedimer	nt Deposits (B2)			knizosph	eres on Liv	ing Roots	(C3) Satur	ation Visible on Aerial Imagery (C9)
	posits (B3)		Presence	of Reduc	ced Iron (C4	+) -  0 - ''- (0		ed or Stressed Plants (D1)
	at or Crust (B4)		Recent Iro	n Reduc		a Solis (C	Geon	Northal Test (D5)
Iron Dep	DOSITS (BD)	-					FAC-	Neutral Test (D5)
	on visible on Aeria	al imagery (i	(DP) Gauge or	vveli Dat	a (D9) Namarka)			
Sparser	y vegetated Conca	ave Surrace	(B8) Other (Exp	Diain in F	kemarks)			
Field Obser	vations:	Vee		ala a A				
Surface Wat	er Present?	res	No Depth (in	cnes):				
Water Table	Present?	Yes	No Depth (in	cnes):		-		
Saturation P	resent?	Yes	No Depth (in	ches):		_   Wet	land Hydrology	Present? Yes No

Remarks:

Hydrology indicators are present throughout wetland

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

(includes capillary fringe)

Project/Site: AEP North Delphos - Rockhill Delineation	City/County: Lima/ Allen		Sampling Date:	2021-06-30
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-Y UPL
Investigator(s): E. Wilson, J. Holmes	Section, Township, Range:	S013, T00	3, R006	
Landform (hillslope, terrace, etc.): Upland	Local relief (conc	ave, convex, none): _	None	
Slope (%): 0 Lat: 40.7824602	Long: -84.1200519		Datum: WGS 8	34
Soil Map Unit Name: Blg1B1		NWI classifica	ation: None	
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes 🗾 No	(If no, explain in Re	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Norm	al Circumstances" pr	esent? Yes	✓ No
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed	, explain any answers	s in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locat	ions, transects,	important fe	eatures, etc.
	1			

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes	No No	Is the Sampled Area within a Wetland?	Yes	No 🖌
Remarks:	163				

# Upland sample point for PEM wetland 1-Y.

00 (i	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2.				
3				Total Number of Dominant Species Across All Strata: 2 (P)
۵				$\frac{2}{  }$
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
a in table to the table of the second s		= Total Cov	er	Dravalance Index worksheets
Sapling/Shrub Stratum (Plot size:)				Prevalence index worksneet:
1				I otal % Cover of: Multiply by:
2				OBL species 0 x 1 = 0
3				FACW species <u>5</u> x 2 = <u>10</u>
4.				FAC species 5 $x_3 = 15$
5				FACU species $45$ x 4 = 180
<u> </u>		- Total Car		$\frac{1121}{1121} \text{ species}  \frac{45}{45}  x_5 = \frac{225}{225}$
Herb Stratum (Plot size: 5 ft r )		- Total Cov	er	$\frac{1}{100} = \frac{1}{100} = \frac{1}$
1 Dipsacus laciniatus	45	~	UPL	
2 Solidago canadensis	20	<u> </u>	FACU	Prevalence index = $B/A = 4.3$
2. Pubus allegheniensis	15		FACU	Hydrophytic Vegetation Indicators:
3. Rubus allegrieniensis	10			1. Danid Tast for Understation Versetation
4. Rosa multinora	10		FACU	1 - Rapid Test for Hydrophytic Vegetation
5. Rumex crispus	5		FAC	2 - Dominance Test is >50%
6. Solidago gigantea	5		FACW	3 - Prevalence Index is ≤3.0 <sup>1</sup>
7.				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
0				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
9				
10	100%			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Weeder Vine Stratum (Plataine, 30 ft r	100%	= Total Cov	er	be present, unless disturbed or problematic.
Woody vine Stratum (Plot size)				
1				Hydrophytic
2				Vegetation Present2 Ves No
		= Total Cov	er	
Remarks: (Include photo numbers here or on a separate s	sheet.)			
No hydrophytic vogotation procent				
iso nyurophytic vegetation present	•			

Profile Desc	ription: (Describ	e to the de	oth needed to d	ocument the	indicator	or confirm	n the absence of in	dicators.)
Depth	Matrix			Redox Feature	es			
(inches)	Color (moist)	%	Color (mois	t)%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 20	10YR 3/2	95	10YR 5/4	5	<u>C</u>	<u>M</u>	Silt Loam	
-								
-								
-								
-								
<sup>1</sup> Type: C=Co	oncentration. D=D	epletion, RM	Reduced Matri	ix. MS=Maske	d Sand G	ains.	<sup>2</sup> Location: PL=	=Pore Lining, M=Matrix,
Hydric Soil I	indicators:	· · · · · ·					Indicators for P	Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sa	ndy Gleyed M	atrix (S4)		Coast Prairi	e Redox (A16)
Histic Ep	pipedon (A2)		Sa	ndy Redox (S	5)		Dark Surfac	e (S7)
Black Hi	stic (A3)		Str	ipped Matrix (	S6)		Iron-Mangai	nese Masses (F12)
Hydroge	n Sulfide (A4)		Lo:	amy Mucky Mi	neral (F1)		Very Shallov	w Dark Surface (TF12)
Stratified	Layers (A5)		Los	amy Gleyed M	atrix (F2)		Other (Explanation)	ain in Remarks)
2 cm Mu	ick (A10) I Dalaus Dark Surf	(0.1.1)	<u>v</u> De	pleted Matrix (	(F3)			
Depleted	Below Dark Suna	ace (ATT)	Re	dox Dark Sur	ace (F6) urface (E7	)	<sup>3</sup> Indicators of by	drophytic vegetation and
Sandy M	lucky Mineral (S1)		De	dox Depressio	ons (F8)	)	wetland hvd	rology must be present
5 cm Mu	icky Peat or Peat (	S3)		den Depresen			unless distu	rbed or problematic.
Restrictive L	_ayer (if observed	d):						
Type: N/	/A	-						
Depth (inc	ches):						Hydric Soil Pres	ent? Yes No
Remarks:								
Hydric s	soils are pro	esent. l	Jpland sai	mple poi	nt.			
HYDROLO	GY							
Wetland Hyd	drology Indicator	s:						
Primary Indic	ators (minimum o	fone is requ	ired; check all th	at apply)			Secondary Inc	dicators (minimum of two required)
Surface	Water (A1)		Wate	r-Stained Leav	<b>/es (</b> B9)		Surface S	Soil Cracks (B6)
High Wa	ter Table (A2)		Aqua	tic Fauna (B13	3)		Drainage	Patterns (B10)
Saturatio	on (A3)		True	Aquatic Plants	(B14)		Dry-Seas	on Water Table (C2)
Water M	arks (B1)		Hydro	ogen Sulfide O	dor (C1)		Crayfish I	Burrows (C8)
Sedimer	nt Deposits (B2)		Oxidi	zed Rhizosphe	eres on Li	ing Roots	(C3) Saturation	n Visible on Aerial Imagery (C9)
Drift Dep	oosits (B3)		Prese	ence of Reduc	ed Iron (C	4)	Stunted of	or Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Rece	nt Iron Reduct	ion in Tille	ed Soils (C	6) Geomorp	hic Position (D2)
Iron Dep	oosits (B5)		Thin	Muck Surface	(C7)		FAC-Neu	itral Test (D5)
Inundatio	on Visible on Aeria	I Imagery (E	87) Gaug	e or Well Data	ı (D9)			
Sparsely	Vegetated Conca	ve Surface	(B8) Other	r (Explain in Re	emarks)			
Field Observ	vations:							
Surface Wate	er Present?	Yes	No Dept	th (inches):		_		
Water Table	Present?	Yes	No Dept	th (inches):		_		
Saturation Pr (includes cap	resent? pillary fringe)	Yes	No <u>P</u> Dept	th (inches):		Wet	land Hydrology Pre	sent? Yes No
Describe Rec	corded Data (strea	m gauge, m	onitoring well, a	erial photos, p	revious in	spections),	if available:	
Remarks:								
No hydr	ology prese	ent						

Project/Site: AEP North Delphos - Rockhill	City/County: Lima / Allen		Sampling Date:	2021-06-30
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-Z
Investigator(s): J. Holmes E. Wilson	Section, Township, Range: _	S013 T0	003 R006	
Landform (hillslope, terrace, etc.): Depression	Local relief (conca	ave, convex, none):	Concave	
Slope (%): <u>1</u> Lat: <u>40.776070</u>	Long: -84.113624		Datum: WGS 8	34
Soil Map Unit Name:PmA		NWI classific	ation: N/A	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🔽 No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances" p	present? Yes	✓No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	ers in Remarks.)	

# SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u>	Is the Sampled Area
Wetland Hydrology Present?	Yes No	within a Wetland? Yes <u>V</u> No
Remarks:		

# Wetland in existing ROW depression .

20.64 -	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft r</u> )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				
5.				Percent of Dominant Species
		= Total Cov	/er	
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2.				OBL species x 1 =
3.				FACW species 80 $x_2 = 160$
۵ ۵				FAC species $0$ x 3 = $0$
5				FACIL species $20$ $x = 80$
J				$\frac{1}{10} \text{ species } \frac{0}{0} \text{ x 5 = } 0$
Herb Stratum (Plot size: 5 ft r )			/er	Column Tatala: $100$ (A) $240$ (B)
1 Phalaris arundinacea	60	~	FACW	Column rotals. $(A)$ $(A)$ $(B)$
2. Impatiens capensis	20	~	FACW	Prevalence Index = B/A = 2.4
3. Phleum pratense	10		FACU	Hydrophytic Vegetation Indicators:
4 Cirsium arvense	5		FACU	1 - Rapid Test for Hydrophytic Vegetation
5. Dactylis glomerata	5		FACU	✓ 2 - Dominance Test is >50%
6.				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
0				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3 10				
10.	100%			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )	100%		/er	be present, unless disturbed or problematic.
1				Under shuffe
2				Vegetation
£		- Total Ca		Present? Yes No
Remarks: (Include photo numbers here or on a congrate s	(heat )			
Nemana. (molude prioto numbers here or on a separate s	neet.)			
A preponderance of hydrophytic ve	egetatio	on is pr	resent	

nches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 5	10YR 5/2	95	10YR 4/6				Silt Loam	
<u>5 <sup>-</sup> 20</u>	10YR 5/1	85	10YR 4/6	15	<u>C</u>	Μ	Sandy Clay Loam	
-								
pe: C=Cor	ncentration, D=De	pletion, RN	/I=Reduced Matrix, N	IS=Maske	d Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
lric Soil In	dicators:						Indicators f	or Problematic Hydric Soils <sup>3</sup> :
Histosol (/	A1)		Sandy	Gleyed M	atrix (S4)		Coast P	Prairie Redox (A16)
Histic Epip	pedon (A2)		Sandy	Redox (St	5)		Dark Su	Irface (S7)
Hvdrogen	(A3) Sulfide (A4)		Strippe	Mucky Mi	oo) neral (F1)		Iron-Ma Verv Sh	nganese Masses (F12) allow Dark Surface (TE12)
Stratified I	Layers (A5)		Loamy	Gleyed M	atrix (F2)		Other (E	Explain in Remarks)
2 cm Muc	k (A10)		✓ Deplet	ed Matrix (	(F3)			
Depleted	Below Dark Surfa	ce (A11)	Redox	Dark Surf	ace (F6)		3	
Thick Darl	k Surface (A12)		Deplet	ed Dark Si	urface (F7	)	Indicators	of hydrophytic vegetation and
5 cm Muc	kv Peat or Peat (S	33)		Depressio	JIIS (FO)		unless o	disturbed or problematic.
o on made		,						
trictive La	ayer (if observed	):						
trictive La	ayer (if observed	):						
strictive La Type: Depth (inch marks: 16 SOII	ayer (if observed	ets the	criteria for h	naving	a dep	leted	Hydric Soil F matrix	Present? Yes <u> </u>
strictive La Type: Depth (inch marks: ne soil	ayer (if observed	ets the	criteria for h	naving	a dep	leted	Hydric Soil F matrix	Present? Yes <u> </u>
Depth (inch narks: De SOII	profile mee	ets the	criteria for h	naving	a dep	leted	Hydric Soil F matrix	Present? Yes <u>v</u> No
berining strictive La Type: Depth (inch narks: ne Soil DROLOG tland Hydr	ayer (if observed nes): profile mee SY rology Indicators	ets the	criteria for h	naving	a dep	leted	Hydric Soil F matrix	Present? Yes <u>~</u> No
trictive La Type: Depth (inch- narks: De SOII DROLOG Iand Hydr nary Indica Surface W	ayer (if observed nes): profile mee SY rology Indicators itors (minimum of vater (A1)	): ets the	criteria for h	pply)	a dep	leted	Hydric Soil F matrix <u>Secondar</u>	Present? Yes <u>V</u> No <u>v</u> No <u>v</u> No <u>v</u> Indicators (minimum of two requi
trictive La Type: Depth (inch- narks: PROLOG land Hydr nary Indica Surface W High Wate	profile mee	): ets the :: one is requ	uired: check all that a	pply) ained Leav	a dep	leted	Hydric Soil F matrix 	Present? Yes <u>V</u> No <u>v</u> No <u>v Indicators (minimum of two requinates Soil Cracks (B6)</u>
PROLOG Iand Hydr Depth (inch Depth (inch	profile mee profile mee SY rology Indicators tors (minimum of Vater (A1) er Table (A2) (A3)	): ets the :: one is requ	uired: check all that a Water-Sta Water-Sta Aquatic F True Aqu	pply) ained Leav auna (B13 atic Plants	a dep //es (B9) 3) 5 (B14)	leted	Hydric Soil F matrix 	Present? Yes <u>V</u> No <u>v</u> Indicators (minimum of two requinates Soil Cracks (B6) Present (B10) Season Water Table (C2)
rictive La     rype: Depth (inch narks:         E SOII         E SOII         Arks:         E SOII         And Hydr nary Indica         Surface W High Wate         Saturation Water Ma	ayer (if observed hes): profile means profile means prology Indicators tors (minimum of Vater (A1) er Table (A2) h (A3) rks (B1)	): ets the .: one is requ	uired: check all that a Water-Str Aquatic F True Aqu Hydroger	pply) ained Leav auna (B13 atic Plants	a dep //es (B9) 3) 5 (B14) 2000r (C1)	leted	Hydric Soil F matrix Secondar Surfa V Drain Dry-S Crayf	Present? Yes <u>Ves</u> No <u>versions</u> No <u>version</u>
Control of the second sec	ayer (if observed hes): profile means profile means prology Indicators tors (minimum of Vater (A1) er Table (A2) h (A3) rks (B1) Deposits (B2)	): ets the	uired: check all that a Water-Sta Aquatic F Aquatic F Hydroger X Oxidized	pply) ained Leav auna (B13 atic Plants a Sulfide O Rhizosphe	a dep //es (B9) 3) 5 (B14) idor (C1) eres on Liv	leted	Hydric Soil F matrix Secondar Surfa V Drain Dry-S Crayfa S(C3) Satur	Present? Yes <u>Ves</u> No <u>versions</u> No <u>version</u>
Depth (inch narks: Depth (inch narks: De SOII DROLOG tland Hydr nary Indica Surface W High Wate Saturation Water Ma Sediment Drift Depo	ayer (if observed hes): profile means profile means profile means profile means prology Indicators tors (minimum of Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) visits (B3)	): ets the	uired: check all that a — Water-Str — Vater-Str — True Aqua — Hydroger X Oxidized — Presence	pply) ained Leav auna (B13 atic Plants a Sulfide O Rhizosphe of Reduce	a dep ves (B9) 3) 5 (B14) bdor (C1) eres on Liv ed Iron (C	leted	Hydric Soil F matrix <u>Secondar</u> <u>Surfa</u> <u>Crayfa</u> s (C3) Satur Sturt	Present? Yes <u>Ves</u> No <u>vertical description</u>
Strictive La     Type: Depth (inch marks:     De SOII     DROLOG     tland Hydr mary Indica     Surface W High Water     Saturation Water Ma     Sediment Drift Depo Algal Mat	profile mee profile mee profile mee SY rology Indicators ttors (minimum of Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4)	): ets the	uired: check all that a Water-Sta Aquatic F Aquatic F True Aqu Hydroger X Oxidized Presence Recent Ir	pply) ained Leav auna (B13 atic Plants a Sulfide O Rhizosphe of Reduce on Reduct	a dep ves (B9) 3) 5 (B14) bdor (C1) eres on Live ed Iron (C ion in Tille	leted ing Roots 4) d Soils (C	Hydric Soil F matrix <u>Secondar</u> <u>Surfa</u> <u>V</u> Drain <u>Dry-S</u> (C3) Satur Stunt (6) <u>V</u> Geon	Present? Yes <u>No</u> No y Indicators (minimum of two requi ice Soil Cracks (B6) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9 red or Stressed Plants (D1) norphic Position (D2)
Depth (inch marks: Depth (inch marks: De SOII DE SOII DE SOII DE SOII DE SOII DE SOII DE SOII DE SOII DE SOII DE SOII DE SOII DE SOII DE SOII DE SOII DE SOII DE SOII DE SOII DE SOII DE SOII	ayer (if observed hes): profile means profile means by rology Indicators tors (minimum of Vater (A1) er Table (A2) h (A3) rks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) posits (B5)	): ets the .: one is requ	uired: check all that a Water-St Aquatic F Aquatic F True Aqu Hydroger X Oxidized Presence Recent Ir Thin Muc	pply) ained Leav auna (B13 atic Plants a Sulfide O Rhizosphe of Reduct on Reduct k Surface	a dep ves (B9) 3) 5 (B14) bdor (C1) eres on Liv ed Iron (C- ion in Tille (C7)	leted ring Roots 4) d Soils (C	Hydric Soil F matrix Secondar Surfa Dry-S Crayfa (C3) Satur Stunt (C3) Satur Stunt (C3) Satur Stunt (C3) Satur (C3) Satur (C3) Satur	Present? Yes No y Indicators (minimum of two required y Indicators (minimum of two required y Indicators (Binimum of two required y Indicators (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) red or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)
Control of the second sec	ayer (if observed hes): profile mea profile mea by rology Indicators tors (minimum of Vater (A1) er Table (A2) h (A3) rks (B1) Deposits (B2) posits (B3) or Crust (B4) sits (B5) h Visible on Aerial	): ets the 		pply) ained Leav auna (B13 atic Plants of Reduct of Reduct k Surface Well Data	a dep ves (B9) (B14) odor (C1) eres on Lived ion in Tille (C7) a (D9) omerko	ing Roots 4) d Soils (C	Hydric Soil F matrix Secondar Surfa V Drain Dry-S Crayf s (C3) Satur Stunt (C3) Satur Stunt (C3) Satur Stunt (C3) Satur (C3) Satur	Present? Yes No y Indicators (minimum of two requires the second se
Depth (inch narks: Depth (inch narks: De SOII DE SOII	profile mee profile mee profile mee profile mee prology Indicators tors (minimum of Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) usits (B5) n Visible on Aerial Vegetated Concar ations:	): ets the .: one is requ Imagery (I /e Surface		pply) ained Leav auna (B13 atic Plants Sulfide O Rhizosphe of Reduct k Surface Well Data splain in Re	a dep ves (B9) 3) 6 (B14) bdor (C1) eres on Liv ed Iron (C ion in Tille (C7) a (D9) emarks)	ring Roots 4) d Soils (C	Hydric Soil F matrix <u>Secondar</u> <u>Surfa</u> <u>Y</u> Drain <u>Dry-S</u> <u>Crayf</u> s (C3) <u>Satur</u> Stunt 26) <u>Y</u> Geon <u>Y</u> FAC-	Present? Yes No y Indicators (minimum of two requi tice Soil Cracks (B6) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9 red or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)
Depth (inch narks: Depth (inch narks: De SOII DE SOII	ayer (if observed hes): profile means profile means by rology Indicators tors (minimum of Vater (A1) er Table (A2) h (A3) rks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) h Visible on Aerial Vegetated Concar ations: Present?	): ets the .: one is requ Imagery (I /e Surface		pply) ained Leav auna (B13 atic Plants a Sulfide O Rhizosphe of Reduct k Surface Well Data splain in Re	ves (B9) (B14) (C1) eres on Lived Iron (C- ion in Tille (C7) (C7) (C9) emarks)	leted ring Roots 4) d Soils (C	Hydric Soil F matrix Secondar Surfa V Drain Dry-S Crayf s (C3) Satur Stunt (C3) Satur Stunt (C3) Y Geon V FAC-	Present? Yes No y Indicators (minimum of two requires a solution of two requires a solutio
Strictive La     Type: Depth (inch marks:     De SOII     De SOII     De SOII     DROLOG     tland Hydr mary Indica     Surface W High Wate     Saturation     Water Ma     Sediment     Drift Depo     Algal Mat     Iron Depo     Inundatior     Sparsely V Id Observa face Water ter Table P	profile mee profile mee profile mee profile mee profile mee prology Indicators tors (minimum of Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) posits (B3) or Crust (B4) sits (B5) n Visible on Aerial Vegetated Concar ations: Present?	): ets the i: one is requ lmagery (I /e Surface Yes Yes		pply) ained Leav auna (B13 atic Plants a Sulfide O Rhizosphe of Reduct k Surface Well Data con Reduct k Surface Well Data con Reduct k Surface	a dep ves (B9) 3) 5 (B14) bdor (C1) eres on Liv ed Iron (C ion in Tille (C7) a (D9) emarks)	ing Roots 4) d Soils (C	Hydric Soil F matrix Secondar Surfa L Dry-S Crayf G (C3) Satur Stunt G (C3) Satur Stunt Crayf G (C3) Satur Stunt Crayf G (C3) Satur Stunt Crayf	Present? Yes No y Indicators (minimum of two required the Soil Cracks (B6) hage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) red or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)
strictive La Type: Depth (inch marks: <b>ne soil</b> <b>ne soil</b> <b>n</b>	profile mee profile mee profile mee prology Indicators tors (minimum of Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) isits (B5) n Visible on Aerial Vegetated Concar ations: Present? Present?	): ets the i: one is requ lmagery (I /e Surface Yes Yes Yes		pply) ained Leav auna (B13 atic Plants a Sulfide O Rhizosphe of Reduct k Surface Well Data splain in Re well Data plain in Re mches): nches):	a dep ves (B9) (B14) odor (C1) eres on Live ed Iron (C ion in Tille (C7) a (D9) emarks)	ring Roots 4) d Soils (C	Hydric Soil F matrix Secondar Surfa V Drain Dry-S Crayf s (C3) Satur Stunt (C3) Satur Stunt (C3) V Geon V FAC-	Present? Yes No y Indicators (minimum of two requi tice Soil Cracks (B6) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) red or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5) Present? Yes No
Strictive La     Strictive La     Type: Depth (inch marks:     Te Soil     DROLOG     tland Hydr     nary Indica     Surface W High Water Ma     Sediment     Drift Depo     Algal Mat     Iron Depo     Inundatior     Sparsely V     Id Observa face Water ter Table P     uration Pre     ludes capil	ayer (if observed hes): profile mee profile mee by rology Indicators itors (minimum of Vater (A1) er Table (A2) h (A3) rks (B1) Deposits (B2) or Crust (B4) isits (B5) h Visible on Aerial Vegetated Concar ations: Present? resent? resent? lary fringe) profed Data (stread	): ets the i: one is requ lmagery (l /e Surface Yes Yes Yes		pply) ained Leav auna (B13 atic Plants a Sulfide O Rhizosphe of Reduct k Surface Well Data plain in Re well Data plain in Re nches): nches):	a dep ves (B9) 3) 5 (B14) bdor (C1) eres on Liv ed Iron (C ion in Tille (C7) a (D9) emarks)	ing Roots 4) d Soils (C	Hydric Soil F matrix <u>Secondar</u> <u>Surfa</u> <u>V</u> Drain <u>Dry-S</u> (C3) <u>Satur</u> Stunt Stunt Store FAC- tland Hydrology	Present?       Yes No         y Indicators (minimum of two requires the second secon

Project/Site: AEP North Delphos - Rockhill	City/County: Lima / Allen		Sampling Date:	2021-06-30
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-AA
Investigator(s): J. Holmes E. Wilson	Section, Township, Range: _	S013 T0	03 R006	
Landform (hillslope, terrace, etc.): Depression	Local relief (conca	ave, convex, none):	Concave	
Slope (%): <u>1</u> Lat: <u>40.777303</u>	Long: -84.114950		Datum: WGS 8	84
Soil Map Unit Name: PmA		NWI classific	ation: N/A	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🗾 No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances" p	present? Yes	✓ №
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	ers in Remarks.)	

# SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes V Yes V	No No	Is the Sampled Area	Yes 🗸	Νο
Remarks:	res				

# Wetland in existing ROW depression .

<b>20 ft</b> -	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				
5.				Percent of Dominant Species
		= Total Cov	/er	
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species <u>10</u> x 1 = <u>10</u>
3.				FACW species 90 x 2 = 180
4				FAC species $0$ x 3 = $0$
5				FACU species $0$ x 4 = $0$
···	·	= Total Cov		UPL species $0$ x 5 = $0$
Herb Stratum (Plot size: 5 ft r )		- 10(a) 00		Column Totals: 100 (A) 190 (B)
1. Phalaris arundinacea	60	~	FACW	
2. Impatiens capensis	20	~	FACW	Prevalence Index = B/A = <u>1.9</u>
3. Carex frankii	10		OBL	Hydrophytic Vegetation Indicators:
4. Carex scoparia	10		FACW	✓ 1 - Rapid Test for Hydrophytic Vegetation
5.				✓ 2 - Dominance Test is >50%
6.				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7.				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
0				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10				
10	100%	- Total Co		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )	10070	- 101ai Co	/ei	be present, unless disturbed or problematic.
1.				Hydrophytic
2				Vegetation
		= Total Cov	/er	Present? Yes No No
Remarks: (Include photo numbers here or on a separate	sheet.)		•	1
		•		
A preponderance of hydrophytic ve	egetation	on is pi	resent	

Profile Desc	ription: (Describ	e to the de	oth needed to docun	nent the	indicator	or confirm	n the absence of i	ndicators.)		
Depth	Matrix		Redo	x Feature	s					
(inches)	Color (moist)	%	Color (moist)	%	_Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks		
0-5	10YR 5/2	95	10YR 4/6				Silt Loam			
<u>5 <sup>-</sup> 20</u>	10YR 5/1	85	10YR 4/6	15	С	Μ	Sandy Clay Loam			
-										
-										
					·					
-										
<sup>1</sup> Type: C=Co	oncentration, D=D	epletion, RM	I=Reduced Matrix, MS	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location: PL	_=Pore Lining, M=Matrix.		
Hydric Soil	Indicators:						Indicators for	Problematic Hydric Soils':		
Histosol	(A1) Dipodop (A2)		Sandy G	Sleyed Ma	atrix (S4)		Coast Prail	rie Redox (A16)		
Black Hi	stic (A3)		Stripped	Matrix (S	56)		Iron-Manga	anese Masses (F12)		
Hydroge	en Sulfide (A4)		Loamy N	Mucky Mi	neral (F1)		Very Shallo	ow Dark Surface (TF12)		
Stratified	d Layers (A5)		Loamy (	Gleyed M	atrix (F2)		Other (Exp	lain in Remarks)		
2 cm Mu	ıck (A10)		Deplete	d Matrix (	F3)					
Depleted	d Below Dark Surfa	ace (A11)	Redox D	Dark Surfa	ace (F6)		3			
Thick Da	ark Surface (A12)		Deplete	d Dark Su		)	Indicators of h	hydrophytic vegetation and		
5 cm Mi	Sandy Mucky Mineral (S1) Redox Depressions (F8) v					unless dist	urbed or problematic.			
Restrictive	Layer (if observed	d):								
Туре:										
Depth (in	ches):						Hydric Soil Pre	sent? Yes No		
Remarks:										
The sol	l profile me	ets the	criteria for h	aving	a dep	leted i	matrix			
HYDROLO	GY									
Wetland Hy	drology Indicator	s:								
Primary India	cators (minimum o	f one is requ	ired; check all that ap	ply)			Secondary Ir	ndicators (minimum of two required)		
Surface	Water (A1)		Water-Stai	ned Leav	es (B9)		Surface	Soil Cracks (B6)		
High Wa	ater Table (A2)		Aquatic Fa	una (B13	;)		🖌 Drainage	e Patterns (B10)		
Saturatio	on (A3)		True Aqua	tic Plants	(B14)		Dry-Season Water Table (C2)			
Water M	larks (B1)		Hydrogen	Sulfide O	dor (C1)		Crayfish	Burrows (C8)		
Sedimer	nt Deposits (B2)		X Oxidized R	hizosphe	eres on Liv	ing Roots	(C3) Saturatio	on Visible on Aerial Imagery (C9)		
Drift Dep	posits (B3)		Presence of	of Reduce	ed Iron (C	1) 	Stunted	or Stressed Plants (D1)		
	at or Crust (B4)		Recent Iro	n Reduct		a Solis (Ce	b) <u>V</u> Geomor	phic Position (D2)		
Inundati	on Visible on Aeria	l Imagery (F	27) Gauge or V	Nell Data			PAC-Ne	utrai Test (D5)		
Sparsely	Vegetated Conca	ive Surface	(B8) Other (Exp	lain in Re	emarks)					
Field Obser	vations:				, included a second					
Surface Wat	er Present?	Yes	No V Depth (ind	ches):						
Water Table	Present?	Yes	No V Depth (ind	ches):		_				
Saturation P	resent?	Yes	No Depth (ind	ches):		Wetl	and Hydrology Pr	esent? Yes 🔽 No		
(includes cap Describe Re	oillary fringe) corded Data (strea	m dauge m	onitoring well aerial r	photos pr	evious ins	pections)	if available.			
		in gaage, m	ionitoring won, aonar p	notoo, pi	evieue inc	pooliono),	in available.			
Remarks:										
Multiple	indicators	of wetl	and hydrolog	y wer	e pres	sent at	t the time of	sampling		
				-	•					

Project/Site: AEP North Delphos - Rockhill	City/County: Lima / Allen		Sampling Date:	2021-06-30
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-AA/Z UPL
Investigator(s): J. Holmes E. Wilson	Section, Township, Range: _	S013 T00	3 R006	
Landform (hillslope, terrace, etc.): Upland, Flat	Local relief (conca	ave, convex, none):	None	
Slope (%): <u>1</u> Lat: <b>40.776704</b>	Long: -84.114303		Datum: WGS 8	34
Soil Map Unit Name: PmA		NWI classific	ation: N/A	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🔽 No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances" p	oresent? Yes	✓ №
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	rs in Remarks.)	

# SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	Is the Sampled Area within a Wetland?	Yes	No
Remarks:					

# Representative of existing ROW.

20.64 -	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4				
5.				Percent of Dominant Species
		= Total Cov	er	
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species 0 x 1 = 0
3.				FACW species 0 x 2 = 0
4.				FAC species $0   x 3 = 0$
5				FACU species 90 x 4 = 360
···		= Total Cov	er	UPL species $10 \times 5 = 50$
Herb Stratum (Plot size: 5 ft r )		- 10(a) 001		Column Totals: $100$ (A) $410$ (B)
1. Phleum pratense	40	~	FACU	
2. Dactylis glomerata	20	~	FACU	Prevalence Index = B/A = 4.1
3. Solidago canadensis	20	~	FACU	Hydrophytic Vegetation Indicators:
4. Dipsacus laciniatus	10		UPL	1 - Rapid Test for Hydrophytic Vegetation
5. Lolium perenne	10		FACU	2 - Dominance Test is >50%
6.				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7.				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
Q				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10				
10.	100%	- Total Car		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )	10070			be present, unless disturbed or problematic.
1.				Hudronbutio
2				Vegetation
<b>a</b> • •		= Total Cov	er	Present? Yes No
Remarks: (Include photo numbers here or on a separate s	heet.)		••	1
		•		
A preponderance of hydrophytic ve	egetatio	on is no	ot pres	ent

Profile Desc	ription: (Describe	to the dept	h needed to docum	ent the indicator of	r confirm	the absence of in	dicators.)			
Depth	Matrix		Redox	Features						
(inches)	Color (moist)	%	Color (moist)	<u>%</u> <u>Type</u> <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0 - 6	10YR 4/3	100				Sandy Clay Loam				
-										
		·								
-										
-										
		·								
		·								
<sup>1</sup> Type: C=Co	oncentration, D=Dep	oletion, RM=	Reduced Matrix, MS	=Masked Sand Grai	ns.	<sup>2</sup> Location: PL	=Pore Lining, M=Matrix.			
Hydric Soil I	ndicators:					Indicators for F	Problematic Hydric Soils <sup>3</sup> :			
Histosol	(A1)		Sandy G	leyed Matrix (S4)		Coast Prair	ie Redox (A16)			
Histic Ep	ipedon (A2)		Sandy R	edox (S5)		Dark Surfac	ce (S7)			
Black His	stic (A3)		Stripped	Matrix (S6)		Iron-Manga	nese Masses (F12)			
Hydroge	n Sulfide (A4)		Loamy M	lucky Mineral (F1)		Very Shallo	w Dark Surface (TF12)			
Stratified	Layers (A5)		Loamy G	Bleyed Matrix (F2)		Other (Expl	ain in Remarks)			
2 cm Mu	ck (A10)		Depleted	d Matrix (F3)						
Depleted	Below Dark Surfac	e (A11)	Redox D	ark Surface (F6)						
Thick Da	rk Surface (A12)		Depleted	d Dark Surface (F7)		<sup>3</sup> Indicators of h	ydrophytic vegetation and			
Sandy M	ucky Mineral (S1)		Redox D	epressions (F8)		wetland hyd	Irology must be present,			
5 cm Mu	cky Peat or Peat (S	3)				unless distu	urbed or problematic.			
Restrictive L	ayer (if observed).	:								
Туре:										
Depth (inc	hes):					Hydric Soil Pres	sent? Yes No			
Remarks:										
THE SOIL		s not m	eet the chite	Tha for any n	yunc		15			
HYDROLO	GY									
Wetland Hyd	rology Indicators:									
Primary Indic	ators (minimum of o	one is requir	ed: check all that ap	olv)		Secondary In	dicators (minimum of two required)			
Surface V	Water (A1)		Water-Stair	ped Leaves (B9)		Surface 9	Soil Cracks (B6)			
	tor Table (A2)			upo (P12)		Surface v	Patterna (B10)			
Fight wa				una (DTS)		Drainage Patterns (BT0)				
	arka (D1)		True Aquat			Dry-Season Water Table (C2)				
Water Ma	arks (B1)		Hydrogen a	Suifide Odor (C1)		Crayfish	Burrows (C8)			
Sedimen	t Deposits (B2)			nizospheres on Livin	ig Roots (	C3) Saturatio	on Visible on Aerial Imagery (C9)			
Drift Dep	osits (B3)		Presence c	of Reduced Iron (C4)		Stunted o	or Stressed Plants (D1)			
Algal Ma	t or Crust (B4)		Recent Iror	n Reduction in Tilled	Soils (C6	) Geomorp	phic Position (D2)			
Iron Dep	osits (B5)		Thin Muck	Surface (C7)		FAC-Net	utral Test (D5)			
Inundatio	on Visible on Aerial	Imagery (B7	) Gauge or V	Vell Data (D9)						
Sparsely	Vegetated Concav	e Surface (E	88) Other (Exp	lain in Remarks)						
Field Observ	vations:									
Surface Wate	er Present?	′es N	lo Depth (inc	:hes):	_					
Water Table	Present? Y	′es N	lo 🗾 Depth (inc	:hes):	_					
Saturation Pr	esent?	es N	lo V Depth (inc	thes):	Wetla	and Hydrology Pre	esent? Yes No 🗸			
(includes cap	illary fringe)									
Describe Rec	corded Data (stream	n gauge, mo	nitoring well, aerial p od bydrology indi	hotos, previous insp	ections), i	if available: the time of som	pling			
Remarke		ary weudi			sent at		ihuna			
NonialN3.										

Project/Site: AEP North Delphos - Rockhill Deline	ation (	City/County	Lima/ A	Ilen Sampling Date: 2021-07-01
Applicant/Owner: AEP				State: Ohio Sampling Point: 1-AB
Investigator(s): E. Wilson, J. Holmes		Section, To	wnship, Rai	nge: S019, T003, R007
Landform (hillslope, terrace, etc.): Depression			Local relief	(concave, convex, none): Concave
Slope (%): 0 Lat: 40.7630999		Long: -84	.0931995	5 Datum: WGS 84
Soil Map Unit Name: Ble1A1		•		NWI classification: None
Are climatic / hydrologic conditions on the site typical for thi	is time of yea	ar? Yes	No	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly	disturbed?	Are "	Normal Circumstances" present? Yes No_
Are Vegetation . Soil . or Hydrology r	naturally pro	blematic?	(If ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing	samplin	a point le	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes V				
Hydric Soil Present? Yes N	lo	ls th	e Sampled	Area
Wetland Hydrology Present? Yes V	lo	with	in a Wetlar	nd? Yes 🔽 No
Remarks:		I		
Small PEM wetland alongside road.	. Wetlar	nd is di	sturbe	d due to fire hydrant leaking.
VEGETATION – Use scientific names of plants	•			
Tree Stratum (Plateize: 30 ft r	Absolute	Dominant	Indicator	Dominance Test worksheet:
1	-70 Cover	Species?	Status	Number of Dominant Species
2				
3.				Total Number of Dominant Species Across All Strata: 2 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
Operations (Charles Andrews (Charles 15 ft r		= Total Cov	/er	
Sapling/Shrub Stratum (Plot size: 1911)				Total % Cover of: Multiply by:
1				$\begin{array}{c c} \hline
2				FACW species $0$ $x^2 = 0$
3				FAC species $40$ x 3 = 120
5				FACU species $0$ $x = 0$
···		= Total Cov	/er	UPL species $0 \times 5 = 0$
Herb Stratum (Plot size: <u>5 ft r</u> )		_		Column Totals: 100 (A) 180 (B)
1. Eleocharis obtusa	- 55			18
2. Hordeum Jubatum	- 25	<u> </u>	FAC	Prevalence Index = B/A = 1.0
3. Rumex crispus	- 13			Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
5				$\checkmark$ 3 - Prevalence Index is <3.0 <sup>1</sup>
0				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
o				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10.				
····	100%	= Total Cov	/er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )				be present, unless disturbed or problematic.
1				Hydrophytic
2				Vegetation Present? Yes No
		= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate	sheet.)			
nyurophytic vegetation is present.				

L

Profile Desc	ription: (Describe	to the dep	th needed to docur	nent the i	indicator	or confirr	n the absence of	indicators.)		
Depth	Matrix		Redo	x Feature	s1	. 2	-			
(inches)	Color (moist)		Color (moist)	%	Type'	Loc	Texture	Remarks		
0 - 20	10YR 5/1	96	10YR 4/6	4	<u>C</u>	<u>M</u>	Silty Clay			
-										
-										
-										
			Peduced Metrix M	- <u> </u>	l Sand Ci		<sup>2</sup> Leastion: R			
Hydric Soil	Indicators:		Reduced Matrix, M	5-Masket	a Sanu Gi	ams.	Indicators for	Problematic Hydric Soils <sup>3</sup>		
History	(A 1)		Sandy	Cloved Me	striv (CA)		Coost Pro	virio Rodov (A16)		
Histic Er	(AT) binedon (A2)		Sandy G	Peday (S5	aurix (34)		Coast Pra			
Black Hi	stic (A3)		Stripper	Matrix (S	~/) S6)		Dark Guna	ace (07) nanese Masses (F12)		
Hvdroge	n Sulfide (A4)		Loamv	Mucky Mir	neral (F1)		Verv Shal	low Dark Surface (TF12)		
Stratified	Layers (A5)		Loamy	Gleyed Ma	atrix (F2)		Other (Explain in Remarks)			
2 cm Mu	2 cm Muck (A10) Depleted Matrix (F3)									
Depleted Below Dark Surface (A11)										
Thick Dark Surface (A12) Depleted Dark Surface (F7)					<sup>3</sup> Indicators of hydrophytic vegetation and					
Sandy M	Sandy Mucky Mineral (S1) Redox Depressions (F8)					wetland hydrology must be present,				
5 cm Mu	5 cm Mucky Peat or Peat (S3)						unless dis	turbed or problematic.		
Restrictive I	_ayer (if observed)	:								
	A						Hydric Soil Pro	asant? Yas 🗸 No		
Depth (ind	ches):						Thyunc boint to			
Remarks:										
Hydric s	soils are pre	sent.								
HYDROLO	GY									
Wetland Hyd	drology Indicators:									
Primary Indic	ators (minimum of o	one is requi	ed; check all that ap	ply)			Secondary	Indicators (minimum of two required)		
<ul> <li>Surface</li> </ul>	Water (A1)		Water-Sta	ined Leav	es (B9)		Surface	e Soil Cracks (B6)		
🗹 High Wa	ter Table (A2)		Aquatic Fa	una (B13	)		Drainage Patterns (B10)			
<ul> <li>Saturation</li> </ul>	on (A3)		True Aqua	tic Plants	(B14)		Dry-Sea	ason Water Table (C2)		
Water M	arks (B1)		Hydrogen	Sulfide O	dor (C1)		Crayfis	h Burrows (C8)		
Sedimer	nt Deposits (B2)		Oxidized F	Rhizosphe	res on Liv	ing Roots	(C3) Saturat	ion Visible on Aerial Imagery (C9)		
Drift Dep	oosits (B3)		Presence	of Reduce	ed Iron (C	4)	Stunted	or Stressed Plants (D1)		
Algal Ma	at or Crust (B4)		Recent Iro	n Reducti	on in Tille	d Soils (C	6) 🖌 Geomo	rphic Position (D2)		
Iron Dep	osits (B5)		Thin Muck	Surface (	(C7)		🖌 FAC-Ne	eutral Test (D5)		
Inundatio	on Visible on Aerial	Imagery (B	) Gauge or	Well Data	(D9)					
Sparsely	Vegetated Concav	e Surface (I	38) Other (Exp	lain in Re	emarks)					
Field Obser	vations:									
Surface Wate	er Present?	′es	No Depth (in	ches): 2						
Water Table	Present?	′es 🗸	No Depth (in	ches); 0		_				
Saturation P	resent?	ves V	No Depth (in	ches): 0		Wet	land Hydrology P	resent? Yes 🖌 No		
(includes cap	oillary fringe)		10 Dopin (iii				ana nyarorogy i			
Describe Red	corded Data (stream	n gauge, mo	nitoring well, aerial	photos, pr	evious in	spections),	, if available:			
Remarks:										
Hydrolo	gy indicator	s are p	resent.							

Project/Site:	, S_ City/County:iêõ □	), ĺĺ_ñ	Sampling Date:H_H
Applicant/Owner:^t		State: _ > Ž j	Sampling Point: H H
Investigator(s): _^q, Æ į ĺ ] ñ p , q , ĺ ê _ ]	Section, Township, Ra	<sub>nge:</sub> S019, T0	03, R007
Landform (hillslope, terrace, etc.): <u>S_5?_]];</u> ñ	Local relief	(concave, convex, none):	Η ñΒõž_
Slope (%): Lat: Q	Long: H q		Datum:_ÆŒ‰,
Soil Map Unit Name: t ê		NWI classifica	ation:_) ñ _
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes 🗾 No _	(If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology signific	antly disturbed? Are	'Normal Circumstances" pr	resent? Yes No
Are Vegetation, Soil, or Hydrology natural	ly problematic? (If ne	eded, explain any answer	s in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ving sampling point I	ocations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes No			
Hydric Soil Present? Yes No	Is the Sampled	Area	
Wetland Hydrology Present? Yes <u>V</u> No	within a Wetlan	1d? Yes	No
% êõ1Í∱,!, ¢_n ĺõñõŃ, ñ "] ¡№_õ№Ę VEGETATION – Use scientific names of plants.	<u>,</u> n ĺ õ ῆ] <b>Ņ</b> ,; ] n } ′	?; <b>№№_n, •</b> ;?ް;	ː N ? õĺñ_rõ,Å ¡ ñ " q
Abso	olute Dominant Indicator	Dominance Test works	sheet:
Tree Stratum (Plot size: , • n , ? ) <u>% C</u>	over Species? Status	Number of Dominant Sp	ecies
1		That Are OBL, FACW, o	r FAC: (A)
2		Total Number of Domina	ant
3		Species Across All Strate	a: (B)
5		Percent of Dominant Spe	ecies
	= Total Cover	That Are OBL, FACW, o	(A/B)
Sapling/Shrub Stratum (Plot size:, • n , ?)		Prevalence Index work	sheet:
1		Total % Cover of:	Multiply by:
2		OBL species	x 1 =
3		FACW species	x 2 =
4		FAC species	X 3 =
5	- Total Osuar	FACU species	X 4 =
Herb Stratum (Plot size:, • n , ?)	= Total Cover	Column Totals:	(A) (B)
1‰B;?5}],õn? ž;?_ñ]	✓ > @		(A)(D)
2. Hõ?_«,ĺ}?¡Nõ	✓ > @	Prevalence Index	= B/A =
3. <u>Hõ?_</u> «,ž}ĺ5;ñ ;N_õ	<b>/ / / / / / / /</b> / / / / / / / / / / /	Hydrophytic Vegetation	n Indicators:
4êñõ,ê;ñ ?	> @	1 - Rapid Test for H	ydrophytic Vegetation
5		2 - Dominance Test	is >50%
6		3 - Prevalence Index	x is ≤3.0'
7		4 - Morphological Ad	daptations' (Provide supporting or on a separate sheet)
8		Problematic Hydrop	hytic Vegetation <sup>1</sup> (Explain)
9			
10	P = Total Cover	<sup>1</sup> Indicators of hydric soil be present, unless distur	and wetland hydrology must rbed or problematic.
1.		Hydrophytic	
2		Vegetation	
	= Total Cover	Present? Yes	No
Remarks: (Include photo numbers here or on a separate sheet.)	)		
°N? 5ްpžiB.nõn⊪15ñ? 1 ñn	a		

(inches)       Color (moist)       %       Type¹       Loc²       Texture       Remain the main texture         -       Ó   , D       Ó   , D       H       !       H Í õ °       Image: texture       Image: texture	arks
-     Ó , D     H     HÍõ°       -     -     -       -     -     -       -     -     -       -     -     -	
_	
<sup>1</sup> Type: C=Concentration D=Depletion PM=Peduced Matrix MS=Macked Sand Crains <sup>2</sup> Location: PL=Pere Lining M	-Motrix
Hydric Soil Indicators: Indicators:	rdric Soils <sup>3</sup>
Histosol (A1) Sandy Gleved Matrix (S4) Coast Brainia Beday (A16)	
Histic Eninedon (A2) Sandy Bedox (S5) Dark Surface (S7)	
Black Histic (A3) Stripped Matrix (S6) Iron-Manganese Masses (I	F12)
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Very Shallow Dark Surface	e (TF12)
Stratified Layers (A5) Loamy Gleyed Matrix (F2) Other (Explain in Remarks	)
2 cm Muck (A10) Depleted Matrix (F3)	
Depleted Below Dark Surface (A11) 🛛 🖌 Redox Dark Surface (F6)	
Thick Dark Surface (A12) Depleted Dark Surface (F7) 3 <sup>3</sup> Indicators of hydrophytic vege	tation and
Sandy Mucky Mineral (S1) Redox Depressions (F8) wetland hydrology must be	present,
5 cm Mucky Peat or Peat (S3) unless disturbed or problem	natic.
Restrictive Layer (if observed):	
Hydric Soil Present? Yes	No
Depth (inches):	
νν ; jjΒ; i jo, ; <u>5</u> ,; _ j _ n n q	
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minim	um of two required)
✓ Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6	)
High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)	
<ul> <li>High Water Table (A2)</li> <li>Aquatic Fauna (B13)</li> <li>Drainage Patterns (B10)</li> </ul> ✓ Saturation (A3)                  ✓ True Aquatic Plants (B14)         Dry-Season Water Table	e (C2)
<ul> <li>High Water Table (A2)</li> <li>Aquatic Fauna (B13)</li> <li>Drainage Patterns (B10)</li> </ul> <ul> <li>Saturation (A3)</li> <li>True Aquatic Plants (B14)</li> <li>Dry-Season Water Table</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Crayfish Burrows (C8)</li> </ul>	e (C2)
<ul> <li>High Water Table (A2)</li> <li>Aquatic Fauna (B13)</li> <li>Drainage Patterns (B10)</li> </ul> <ul> <li>Saturation (A3)</li> <li>True Aquatic Plants (B14)</li> <li>Dry-Season Water Table</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Crayfish Burrows (C8)</li> <li>Sediment Deposits (B2)</li> <li>Oxidized Rhizospheres on Living Roots (C3)</li> <li>Saturation Visible on Ae</li> </ul>	e (C2) rial Imagery (C9)
<ul> <li>High Water Table (A2)</li> <li>Aquatic Fauna (B13)</li> <li>Drainage Patterns (B10)</li> </ul> <ul> <li>Saturation (A3)</li> <li>True Aquatic Plants (B14)</li> <li>Dry-Season Water Table</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Crayfish Burrows (C8)</li> <li>Oxidized Rhizospheres on Living Roots (C3)</li> <li>Saturation Visible on Ae</li> <li>Drift Deposits (B3)</li> <li>Presence of Reduced Iron (C4)</li> <li>Stunted or Stressed Plant</li> </ul>	e (C2) rial Imagery (C9) nts (D1)
✓ High Water Table (A2)           ✓ Aquatic Fauna (B13)           ✓ Drainage Patterns (B10)             ✓ Saturation (A3)            True Aquatic Plants (B14)        Dry-Season Water Table              Water Marks (B1)            Hydrogen Sulfide Odor (C1)        Crayfish Burrows (C8)              Sediment Deposits (B2)            Oxidized Rhizospheres on Living Roots (C3)        Saturation Visible on Ae              Drift Deposits (B3)            Presence of Reduced Iron (C4)        Stunted or Stressed Plant             ✓ Algal Mat or Crust (B4)            Recent Iron Reduction in Tilled Soils (C6)            Geomorphic Position (D2)	∍ (C2) rial Imagery (C9) nts (D1) 2)
<ul> <li>High Water Table (A2)</li> <li>Aquatic Fauna (B13)</li> <li>Drainage Patterns (B10)</li> </ul> <ul> <li>Saturation (A3)</li> <li>True Aquatic Plants (B14)</li> <li>Dry-Season Water Table</li> <li>Water Marks (B1)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Crayfish Burrows (C8)</li> <li>Sediment Deposits (B2)</li> <li>Oxidized Rhizospheres on Living Roots (C3)</li> <li>Saturation Visible on Ae</li> <li>Drift Deposits (B3)</li> <li>Presence of Reduced Iron (C4)</li> <li>Stunted or Stressed Plant</li> <li>Algal Mat or Crust (B4)</li> <li>Recent Iron Reduction in Tilled Soils (C6)</li> <li>FAC-Neutral Test (D5)</li> </ul>	∍ (C2) rial Imagery (C9) nts (D1) 2)
<ul> <li>High Water Table (A2)</li> <li>Aquatic Fauna (B13)</li> <li>Drainage Patterns (B10)</li> </ul> <ul> <li>Saturation (A3)</li> <li>True Aquatic Plants (B14)</li> <li>Dry-Season Water Table</li> <li>Water Marks (B1)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Crayfish Burrows (C8)</li> <li>Sediment Deposits (B2)</li> <li>Oxidized Rhizospheres on Living Roots (C3)</li> <li>Saturation Visible on Ae</li> <li>Drift Deposits (B3)</li> <li>Presence of Reduced Iron (C4)</li> <li>Stunted or Stressed Plant</li> <li>Algal Mat or Crust (B4)</li> <li>Recent Iron Reduction in Tilled Soils (C6)</li> <li>Geomorphic Position (D2)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Gauge or Well Data (D9)</li> </ul>	∍ (C2) rial Imagery (C9) nts (D1) 2)
<ul> <li>High Water Table (A2)</li> <li>Aquatic Fauna (B13)</li> <li>Drainage Patterns (B10)</li> </ul> <ul> <li>Saturation (A3)</li> <li>True Aquatic Plants (B14)</li> <li>Dry-Season Water Table</li> <li>Water Marks (B1)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Crayfish Burrows (C8)</li> <li>Sediment Deposits (B2)</li> <li>Oxidized Rhizospheres on Living Roots (C3)</li> <li>Saturation Visible on Ae</li> <li>Drift Deposits (B3)</li> <li>Presence of Reduced Iron (C4)</li> <li>Stunted or Stressed Plant</li> </ul> <ul> <li>Algal Mat or Crust (B4)</li> <li>Recent Iron Reduction in Tilled Soils (C6)</li> <li>FAC-Neutral Test (D5)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Gauge or Well Data (D9)</li> <li>Sparsely Vegetated Concave Surface (B8)</li> <li>Other (Explain in Remarks)</li> </ul>	∍ (C2) rial Imagery (C9) nts (D1) 2)
<ul> <li>High Water Table (A2)</li> <li>Aquatic Fauna (B13)</li> <li>Drainage Patterns (B10)</li> </ul> <ul> <li>Saturation (A3)</li> <li>True Aquatic Plants (B14)</li> <li>Dry-Season Water Table</li> <li>Water Marks (B1)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Crayfish Burrows (C8)</li> <li>Sediment Deposits (B2)</li> <li>Oxidized Rhizospheres on Living Roots (C3)</li> <li>Saturation Visible on Ae</li> <li>Drift Deposits (B3)</li> <li>Presence of Reduced Iron (C4)</li> <li>Stunted or Stressed Plant</li> </ul> <ul> <li>Algal Mat or Crust (B4)</li> <li>Recent Iron Reduction in Tilled Soils (C6)</li> <li>FAC-Neutral Test (D5)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Gauge or Well Data (D9)</li> <li>Sparsely Vegetated Concave Surface (B8)</li> <li>Other (Explain in Remarks)</li> </ul>	e (C2) rial Imagery (C9) nts (D1) 2)
✓ High Water Table (A2)           ✓ Aquatic Fauna (B13)           ✓ Drainage Patterns (B10)             ✓ Saturation (A3)            True Aquatic Plants (B14)        Dry-Season Water Table              Water Marks (B1)        Hydrogen Sulfide Odor (C1)        Crayfish Burrows (C8)              Sediment Deposits (B2)        Oxidized Rhizospheres on Living Roots (C3)        Saturation Visible on Ae              Drift Deposits (B3)            Presence of Reduced Iron (C4)        Stunted or Stressed Plant             ✓ Algal Mat or Crust (B4)            Recent Iron Reduction in Tilled Soils (C6)           ✓ Geomorphic Position (D2              Iron Deposits (B5)            Thin Muck Surface (C7)            FAC-Neutral Test (D5)              Inundation Visible on Aerial Imagery (B7)            Gauge or Well Data (D9)            FAC-Neutral Test (D5)              Field Observations:            Ves            No        Depth (inches):	∋ (C2) rial Imagery (C9) nts (D1) 2)
✓ High Water Table (A2)           ✓ Aquatic Fauna (B13)           ✓ Drainage Patterns (B10)             ✓ Saturation (A3)             True Aquatic Plants (B14)        Dry-Season Water Table               Water Marks (B1)             Hydrogen Sulfide Odor (C1)        Crayfish Burrows (C8)               Sediment Deposits (B2)            Oxidized Rhizospheres on Living Roots (C3)        Saturation Visible on Ae               Drift Deposits (B3)             Presence of Reduced Iron (C4)        Stunted or Stressed Plant               Algal Mat or Crust (B4)             Recent Iron Reduction in Tilled Soils (C6)             Geomorphic Position (D2               Inon Deposits (B5)             Thin Muck Surface (C7)             FAC-Neutral Test (D5)               Inundation Visible on Aerial Imagery (B7)             Gauge or Well Data (D9)             FAC-Neutral Test (D5)               Surface Water Present?             Yes             No             Depth (inches):               Water Table Present?             Yes             No             Depth (inches):	∋ (C2) rial Imagery (C9) nts (D1) 2)
✓ High Water Table (A2)           ✓ Aquatic Fauna (B13)           ✓ Drainage Patterns (B10)             ✓ Saturation (A3)             True Aquatic Plants (B14)        Dry-Season Water Table               Water Marks (B1)             Hydrogen Sulfide Odor (C1)        Crayfish Burrows (C8)              Sediment Deposits (B2)            Oxidized Rhizospheres on Living Roots (C3)        Saturation Visible on Ae              Drift Deposits (B3)             Presence of Reduced Iron (C4)        Stunted or Stressed Plant             ✓ Algal Mat or Crust (B4)             Recent Iron Reduction in Tilled Soils (C6)           ✓ Geomorphic Position (D2              Inundation Visible on Aerial Imagery (B7)            Gauge or Well Data (D9)                Sparsely Vegetated Concave Surface (B8)            Other (Explain in Remarks)                Field Observations:            Yes            No        Depth (inches):            Water Table Present?           Yes            No        Depth (inches):            Wetland Hydrology Present?           Yes	(C2) rial Imagery (C9) nts (D1) 2) ✓ No _
✓ High Water Table (A2)           ✓ Aquatic Fauna (B13)           ✓ Drainage Patterns (B10)             ✓ Saturation (A3)            True Aquatic Plants (B14)        Dry-Season Water Table              Water Marks (B1)            Hydrogen Sulfide Odor (C1)        Crayfish Burrows (C8)              Sediment Deposits (B2)            Oxidized Rhizospheres on Living Roots (C3)        Saturation Visible on Ae              Drift Deposits (B3)            Presence of Reduced Iron (C4)        Stunted or Stressed Plant             ✓ Algal Mat or Crust (B4)            Recent Iron Reduction in Tilled Soils (C6)           ✓ Geomorphic Position (D2              Iron Deposits (B5)            Thin Muck Surface (C7)            FAC-Neutral Test (D5)              Inundation Visible on Aerial Imagery (B7)            Gauge or Well Data (D9)                Sparsely Vegetated Concave Surface (B8)            Other (Explain in Remarks)            Wetland Hydrology Present? Yes              Water Table Present?           Yes            No            Depth (inches):            Wetland Hydrology Present? Yes              Saturation Present?             Yes <td>e (C2) rial Imagery (C9) nts (D1) 2)  No</td>	e (C2) rial Imagery (C9) nts (D1) 2) No
✓ High Water Table (A2)       ✓ Aquatic Fauna (B13)       ✓ Drainage Patterns (B10)         ✓ Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Ae         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plant         ✓ Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       ✓ Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       ✓ FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       FAC-Neutral Test (D5)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)       Wetland Hydrology Present? Yes         ✓ No       Depth (inches):       Water Table Present? Yes       ✓ No       Depth (inches):         Saturation Present?       Yes       ✓ No       Depth (inches):       Wetland Hydrology Present? Yes         ✓ Includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Yes	e (C2) rial Imagery (C9) nts (D1) 2) No
✓       High Water Table (A2)       ✓       Aquatic Fauna (B13)       ✓       Drainage Patterns (B10)         ✓       Saturation (A3)	e (C2) rial Imagery (C9) nts (D1) 2) No

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Project/Site: AEP North Delphos - Rockhill	City/County: Lima / Allen		Sampling Date:	2021-07-01
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-AB/AC UPL
Investigator(s): J. Holmes E. Wilson	Section, Township, Range: _		R007	
Landform (hillslope, terrace, etc.): Upland, Flat	Local relief (conca	ave, convex, none):	None	
Slope (%): <u>1</u> Lat: <u>40.763124</u>	Long: -84.093158		Datum: WGS 8	34
Soil Map Unit Name:Ble1A1		NWI classific	ation: N/A	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🖍 No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Norma	al Circumstances" p	present? Yes	✓ №
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	rs in Remarks.)	

# SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No <u>v</u> No <u>v</u> No <u>v</u>	ls the Sampled Area within a Wetland?	Yes	No
Remarks:			·		

# Representative of maintained mowed area.

20.4	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: <u>30 ft r</u> )	% Cover	Species?	Status	Number of Dominant Species	
1				That Are OBL, FACW, or FAC: 0 (A)	
2				Total Number of Dominant	
3				Species Across All Strata: 2 (B)	
4.				(=,	
5				Percent of Dominant Species	
		- Total Ca		That Are OBL, FACW, or FAC: 0 (A/B)	
Sapling/Shrub Stratum (Plot size: 15 ft r )		- 10tai C0	/ei	Prevalence Index worksheet:	
1				Total % Cover of: Multiply by:	
2				$\frac{1}{OBI \text{ species } 0} \frac{1}{x_{1} = 0}$	
2				EACW species $0$ $x^2 = 0$	
3				FACtive species $0$ $x^2 = 0$	
4				FAC species $0$ $x_3 = 0$	
5				FACU species $100 \times 4 = 400$	
5 ft r		= Total Cov	/er	UPL species $0 \times 5 = 0$	
Trifolium ropons	60		FACU	Column Totals: 100 (A) 400 (B)	
1. Thiolidin repens	00				
2. Dactylis glomerata	20	<u> </u>	FACU	Prevalence Index = B/A = 4.0	
3. Lolium perenne	10		FACU	Hydrophytic Vegetation Indicators:	
4. Plantago lanceolata	10		FACU	1 - Rapid Test for Hydrophytic Vegetation	
5				2 - Dominance Test is >50%	
6.				3 - Prevalence Index is ≤3.0 <sup>1</sup>	
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting	
8				data in Remarks or on a separate sheet)	
0				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
9					
10	1000/			<sup>1</sup> Indicators of hydric soil and wetland hydrology must	
Weedy Vine Stratum (Plataize: 30 ft r	100% = Total Cover		/er	be present, unless disturbed or problematic.	
Woody vine Stratum (Plot size)					
1				Hydrophytic	
2				Present? Yes No	
		= Total Cov	/er		
Remarks: (Include photo numbers here or on a separate s	sheet.)				
A preponderance of hydrophytic ve	egetatio	on is no	ot pres	ent	

Profile Desc	inpuon. (Describe	to the depth	needed to docun	lent the malcato		in the absence of mulca	1013./
Depth	Matrix		Redox	Features			
(inches)	Color (moist)	%	Color (moist)	<u>%</u> Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-6	10YR 4/3	100				Sandy Clay Loam	
-							
-							
-							
-							
-							
	ncentration D=Der	letion RM=R	educed Matrix MS		rains	<sup>2</sup> Location: PL=Po	re Lining M=Matrix
Hydric Soil	ndicators:				nams.	Indicators for Prob	lematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy G	leved Matrix (S4)		Coast Prairie R	edox (A16)
Histic Er	pipedon (A2)		Sandy B	edox (S5)		Dark Surface (S	57)
Black Hi	stic (A3)		Stripped	Matrix (S6)		Iron-Manganese	e Masses (F12)
Hydroge	n Sulfide (A4)		Loamy N	/lucky Mineral (F1	)	Very Shallow D	ark Surface (TF12)
Stratified	Layers (A5)		Loamy O	Bleyed Matrix (F2)		Other (Explain i	n Remarks)
2 cm Mu	ck (A10)		Depleted	d Matrix (F3)			
Depleted	Below Dark Surfac	ce (A11)	Redox D	ark Surface (F6)			
Thick Da	ark Surface (A12)		Depleted	d Dark Surface (F	7)	<sup>3</sup> Indicators of hydro	phytic vegetation and
Sandy M	lucky Mineral (S1)		Redox D	epressions (F8)		wetland hydrolo	gy must be present,
5 cm Mu	cky Peat or Peat (S	3)				unless disturbe	d or problematic.
Restrictive	ayer (if observed)	:					
Type:			_			Hydric Soil Present	?Yes No 🗸
Depth (inc	ches):		_				
Remarks:							
The soil	nrofile doe	s not me	at the crite	ria for any	hydric	soil indicators	
	prome doe.	3 not me	et the onte	na ioi any	i i y u i i c	Soli indicators	
				•			
				-	2		
				-	2		
HYDROLO	GY						
	GY						
HYDROLO Wetland Hyd	GY drology Indicators:		I <sup>,</sup> check all that an			Secondary Indica	tors (minimum of two required)
HYDROLO Wetland Hyd Primary Indic	GY drology Indicators: cators (minimum of c	: one is required	t: check all that ap	ply)		Secondary Indica	tors (minimum of two required)
HYDROLO Wetland Hyd Primary Indic Surface	GY drology Indicators: eators (minimum of of Water (A1) tor Table (A2)	: one is required	<u>t: check all that ap</u> Water-Stai	ply) ned Leaves (B9)		Secondary Indica Surface Soil	tors (minimum of two required) Cracks (B6)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatio	GY drology Indicators: cators (minimum of c Water (A1) ter Table (A2)	: one is required	<u>l: check all that ap</u> Water-Stai Aquatic Fa	ply) ned Leaves (B9) una (B13) tis Plante (B14)		<u>Secondary Indica</u> Surface Soil Drainage Pat	tors (minimum of two required) Cracks (B6) Iterns (B10)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic	<b>GY</b> drology Indicators: eators (minimum of of Water (A1) ter Table (A2) on (A3) orke (B1)	: one is required	<u>d: check all that ap</u> Water-Stai Aquatic Fa True Aquat	ply) ned Leaves (B9) una (B13) tic Plants (B14)		<u>Secondary Indica</u> Surface Soil Drainage Pat Dry-Season	tors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M	<b>GY</b> drology Indicators: ators (minimum of of Water (A1) ter Table (A2) on (A3) arks (B1) the Depending (B2)	: one is required	<u>d: check all that ap</u> Water-Stain Aquatic Fa True Aquat Hydrogen S	ply) ned Leaves (B9) una (B13) tic Plants (B14) Sulfide Odor (C1)		<u>Secondary Indica</u> Surface Soil Drainage Pat Dry-Season V Crayfish Burr	tors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer	<b>GY</b> drology Indicators: <u>cators (minimum of c</u> Water (A1) ter Table (A2) on (A3) arks (B1) tt Deposits (B2) use it (B2)	: one is required	<u>l: check all that ap</u> Water-Stai Aquatic Fa True Aquat Hydrogen S Oxidized R	ply) ned Leaves (B9) una (B13) tic Plants (B14) Sulfide Odor (C1) hizospheres on L	iving Roots	<u>Secondary Indica</u> Surface Soil Drainage Pat Dry-Season V Crayfish Burr (C3) Saturation Vi	tors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) sible on Aerial Imagery (C9)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep	GY drology Indicators: eators (minimum of of Water (A1) ter Table (A2) on (A3) arks (B1) arks (B1) at Deposits (B2) posits (B3) tor crut (B4)	: one is required	<u>d: check all that ap</u> Water-Stai Aquatic Fa True Aquati Hydrogen S Oxidized R Presence co	ply) ned Leaves (B9) una (B13) tic Plants (B14) Sulfide Odor (C1) hizospheres on L of Reduced Iron (C	iving Roots (24)	<u>Secondary Indica</u> Surface Soil Drainage Pat Dry-Season V Crayfish Burr (C3) Saturation Vi Stunted or St	tors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) sible on Aerial Imagery (C9) tressed Plants (D1) Bosition (D2)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma	GY drology Indicators: eators (minimum of of Water (A1) ter Table (A2) on (A3) arks (B1) arks (B1) th Deposits (B2) posits (B3) it or Crust (B4) posits (DE)	: one is required	t: check all that ap Water-Stai Aquatic Fa True Aquati Hydrogen S Oxidized R Presence c Recent Iron	ply) ned Leaves (B9) una (B13) ic Plants (B14) Sulfide Odor (C1) hizospheres on L of Reduced Iron (C n Reduction in Till	iving Roots C4) ed Soils (Ci	<ul> <li><u>Secondary Indica</u></li> <li>Surface Soil</li> <li>Drainage Pat</li> <li>Dry-Season N</li> <li>Crayfish Burr</li> <li>(C3) Saturation Vi</li> <li>Stunted or St</li> <li>Geomorphic</li> </ul>	tors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) sible on Aerial Imagery (C9) tressed Plants (D1) Position (D2)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep	GY drology Indicators: eators (minimum of of Water (A1) ter Table (A2) on (A3) arks (B1) th Deposits (B2) posits (B3) at or Crust (B4) posits (B5) posits (B5)	: one is required	t: check all that ap Water-Stai Aquatic Fa True Aquat Hydrogen S Oxidized R Presence c Recent Iror Thin Muck	ply) ned Leaves (B9) una (B13) tic Plants (B14) Sulfide Odor (C1) hizospheres on L of Reduced Iron (C n Reduction in Till Surface (C7)	iving Roots C4) ed Soils (Cd	<ul> <li><u>Secondary Indica</u></li> <li>Surface Soil</li> <li>Drainage Pat</li> <li>Dry-Season V</li> <li>Crayfish Burr</li> <li>(C3) Saturation Vi</li> <li>Stunted or St</li> <li>Geomorphic</li> <li>FAC-Neutral</li> </ul>	tors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) sible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep	GY drology Indicators: actors (minimum of of Water (A1) ter Table (A2) on (A3) arks (B1) th Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial	: one is required Imagery (B7)	<u>d: check all that ap</u> Water-Stain Aquatic Fa True Aquat Hydrogen S Oxidized R Presence co Recent Iron Thin Muck Gauge or V	ply) ned Leaves (B9) una (B13) tic Plants (B14) Sulfide Odor (C1) hizospheres on L of Reduced Iron (C n Reduction in Till Surface (C7) Vell Data (D9)	iving Roots C4) ed Soils (Cr	<ul> <li><u>Secondary Indica</u></li> <li>Surface Soil</li> <li>Drainage Pat</li> <li>Dry-Season V</li> <li>Crayfish Burr</li> <li>(C3) Saturation Vi</li> <li>Stunted or St</li> <li>Geomorphic</li> <li>FAC-Neutral</li> </ul>	tors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) sible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely	GY trology Indicators: ators (minimum of c Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial v Vegetated Concav	: one is required Imagery (B7) e Surface (B8	I: check all that ap Water-Stain Aquatic Fa True Aquat Hydrogen S Oxidized R Presence co Recent Iron Thin Muck Gauge or W ) Other (Exp	ply) ned Leaves (B9) una (B13) tic Plants (B14) Sulfide Odor (C1) hizospheres on L of Reduced Iron (C n Reduction in Till Surface (C7) Vell Data (D9) lain in Remarks)	iving Roots C4) ed Soils (C4	<ul> <li><u>Secondary Indica</u></li> <li>Surface Soil</li> <li>Drainage Pat</li> <li>Dry-Season V</li> <li>Crayfish Burr</li> <li>(C3) Saturation Vi</li> <li>Stunted or St</li> <li>Geomorphic</li> <li>FAC-Neutral</li> </ul>	tors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) sible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely Field Obsen	GY drology Indicators: eators (minimum of of Water (A1) ter Table (A2) on (A3) arks (B1) arks (B1) arks (B2) posits (B3) art or Crust (B4) posits (B5) on Visible on Aerial v Vegetated Concav vations:	: one is required Imagery (B7) e Surface (B8	I: check all that ap Water-Stai Aquatic Fa True Aquatic Hydrogen S Oxidized R Presence c Recent Iror Recent Iror Thin Muck Gauge or V Other (Exp	ply) ned Leaves (B9) una (B13) tic Plants (B14) Sulfide Odor (C1) hizospheres on L of Reduced Iron (C n Reduction in Till Surface (C7) Vell Data (D9) lain in Remarks)	iving Roots C4) ed Soils (Cr	Secondary Indica	tors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) sible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely Field Obsen Surface Wate	GY drology Indicators: eators (minimum of of Water (A1) ter Table (A2) on (A3) arks (B1) arks (B1) to Deposits (B2) posits (B3) art or Crust (B4) posits (B5) on Visible on Aerial v Vegetated Concav vations: er Present?	imagery (B7) e Surface (B8 /es No	d: check all that ap Water-Stai Aquatic Fa True Aquatic Hydrogen S Oxidized R Presence co Recent Iron Thin Muck Gauge or V ) Other (Exp Depth (inc	ply) ned Leaves (B9) una (B13) tic Plants (B14) Sulfide Odor (C1) hizospheres on L of Reduced Iron (C n Reduction in Till Surface (C7) Vell Data (D9) lain in Remarks)	iving Roots C4) ed Soils (Cf	<u>Secondary Indica</u> Surface Soil Drainage Pat Dry-Season V Crayfish Burr (C3) Saturation Vi Stunted or St 6) Geomorphic FAC-Neutral	tors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) sible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Drift Dep Algal Ma Iron Dep Inundatic Sparsely Field Obsen Surface Wate Water Table	GY drology Indicators: eators (minimum of of Water (A1) ter Table (A2) on (A3) arks (B1) arks (B1) th Deposits (B2) posits (B3) arks (B3) arks (B4) osits (B5) on Visible on Aerial v Vegetated Concav vations: er Present? Y	Imagery (B7) e Surface (B8 /es No /es No	d: check all that ap	ply) ned Leaves (B9) una (B13) ic Plants (B14) Sulfide Odor (C1) hizospheres on L of Reduced Iron (C n Reduction in Till Surface (C7) Vell Data (D9) lain in Remarks) shes):	iving Roots C4) ed Soils (Ci	Secondary Indica Surface Soil Drainage Pat Dry-Season V Crayfish Burr (C3) Saturation Vi Stunted or St 6) Geomorphic FAC-Neutral	tors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) sible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)
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HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely Field Obsen Surface Water Water Table Saturation Pr (includes cap Describe Red	GY trology Indicators: ators (minimum of of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) osits (B5) on Visible on Aerial vegetated Concav vations: er Present? Present? Y resent? Y resent? Y resent? Y	Imagery (B7) e Surface (B8 (es No (es No (es No (es No	d: check all that ap	ply) ned Leaves (B9) una (B13) tic Plants (B14) Sulfide Odor (C1) hizospheres on L of Reduced Iron (C n Reduction in Till Surface (C7) Vell Data (D9) lain in Remarks) thes): thes): thotos, previous in	iving Roots C4) ed Soils (Ci	Secondary Indica	tors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) sible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely Field Obsern Surface Wate Water Table Saturation Pr (includes cap Describe Red	GY trology Indicators: ators (minimum of o Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial vegetated Concav vations: er Present? Present? Present? Source of the formation of the formation of the formation of the formation of the formation of the formation ter Present? Present? Source of the formation of the formation ter Present? Source of the formation of the formation of the formation ter Present? Source of the formation of the formation of the formation ter Present? Source of the formation	Imagery (B7) e Surface (B8 (es No (es No (es No (es No	d: check all that ap	ply) ned Leaves (B9) una (B13) tic Plants (B14) Sulfide Odor (C1) hizospheres on L of Reduced Iron (C n Reduction in Till Surface (C7) Vell Data (D9) lain in Remarks) thes): thes): thes): thes):	iving Roots C4) ed Soils (Ci 	Secondary Indica 	tors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) sible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely Field Obsen Surface Water Water Table Saturation Pr (includes cap Describe Rec No primary Remarket	GY drology Indicators: ators (minimum of of Water (A1) ter Table (A2) on (A3) arks (B1) arks (B1) arks (B2) oosits (B3) arks (B3) arks (B4) oosits (B5) on Visible on Aerial vegetated Concav vations: er Present? Present? Present? vesent vesent vesent	Imagery (B7) e Surface (B8 (es No (es No	d: check all that ap	ply) ned Leaves (B9) una (B13) tic Plants (B14) Sulfide Odor (C1) hizospheres on L of Reduced Iron (C n Reduction in Till Surface (C7) Vell Data (D9) lain in Remarks) thes): thes) = 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0 =	iving Roots C4) ed Soils (Cf 	Secondary Indica 	tors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) sible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely Field Obsen Surface Wate Water Table Saturation Pr (includes cap Describe Red No primary Remarks:	GY drology Indicators: ators (minimum of of Water (A1) ter Table (A2) on (A3) arks (B1) arks (B1) to Deposits (B2) posits (B3) at or Crust (B4) osits (B5) on Visible on Aerial v Vegetated Concav vations: er Present? Present? Present? Y resent? Y	Imagery (B7) e Surface (B8 (es No (es ))))))))))))))))))))))))))))))))	d: check all that ap	ply) ned Leaves (B9) una (B13) ic Plants (B14) Sulfide Odor (C1) hizospheres on L of Reduced Iron (C n Reduction in Till Surface (C7) Vell Data (D9) lain in Remarks) thes): thes): thotos, previous in icators were p	iving Roots (24) ed Soils (Cr wet ispections), resent at	Secondary Indica 	tors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) sible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5) trest (D5)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Field Obsen Surface Wate Water Table Saturation Pr (includes cap Describe Rec No primary Remarks:	GY drology Indicators: eators (minimum of of Water (A1) ter Table (A2) on (A3) arks (B1) arks (B1) arks (B2) oosits (B3) arks (B3) arks (B4) oosits (B5) on Visible on Aerial v Vegetated Concav vations: er Present? Present? Present? Present? arks (B1) or Crust (B4) oosits (B5) on Visible on Aerial v Vegetated Concav vations: er Present? Present? arks (B1) arks (B1) oosits (B2) oosits (B3) arks (B1) oosits (B5) on Visible on Aerial v Vegetated Concav vations: er Present? Y resent? arks (B1) arks (B1) oosits (B2) oosits (B2) oosit	Imagery (B7) e Surface (B8 (es No (es No (es No (es No n gauge, monif ary wetland	d: check all that ap	ply) ned Leaves (B9) una (B13) iic Plants (B14) Sulfide Odor (C1) hizospheres on L of Reduced Iron (C n Reduction in Till Surface (C7) Vell Data (D9) lain in Remarks) ches): ches): thotos, previous in icators were p	iving Roots C4) ed Soils (C4 	Secondary Indica 	tors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) sible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5) tt? Yes No
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely Field Obsern Surface Wate Water Table Saturation Pr (includes cap Describe Rec No primary Remarks:	GY rology Indicators: ators (minimum of of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) bosits (B3) at or Crust (B4) osits (B5) on Visible on Aerial vegetated Concav vations: er Present? Present? Present? Y resent? or definition of the formation of the formation or definition of the formation of the formation of the formation of the formation of the formation of the formation of the formation of the formation and or second at the formation of the formation of the formation of the formation of the formation of the formation of the formation of the formation of the formation of the formation of the format	Imagery (B7) e Surface (B8 (es No (es No (es No (es No n gauge, monit ary wetland	d: check all that ap	ply) ned Leaves (B9) una (B13) tic Plants (B14) Sulfide Odor (C1) hizospheres on L of Reduced Iron (C n Reduction in Till Surface (C7) Vell Data (D9) lain in Remarks) thes): thes): thes): thotos, previous in icators were p	iving Roots C4) ed Soils (C4 	Secondary Indica 	tors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) sible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)

Project/Site: AEP North Delphos - Rockhill	City/County: Lima / Allen		Sampling Date:	2021-07-01
Applicant/Owner: AEP		<sub>State:</sub> Ohio	Sampling Point:	1-AD
Investigator(s): J. Holmes E. Wilson	Section, Township, Range: _	S020 T003 F	R007	
Landform (hillslope, terrace, etc.): Depression	Local relief (conca	ave, convex, none):	Concave	
Slope (%): <u>1</u> Lat: <u>40.7625811</u>	Long: -84.0865026		Datum: WGS 8	34
Soil Map Unit Name:Ble1A1		NWI classific	cation: N/A	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🔽 No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances" p	present? Yes	✓ №
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locati	ons, transects	, important f	eatures, etc.

Hydrophytic Vegetation Present?	Yes	No			
Hydric Soil Present?	Yes	No	is the Sampled Area	,	
Wetland Hydrology Present?	Yes 🖌	No	within a Wetland?	Yes	No

Remarks:

# Wetland in existing Station depression .

00 ft -	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Deminant
3				Species Across All Strata: 2 (B)
4.				(-,
5				Percent of Dominant Species
J		- Total Ca		That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft r )			/er	Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
				$OBL species 60$ $x_1 = 60$
2				EACW species $\frac{40}{40}$ x 2 = $\frac{80}{80}$
3				FACtive species $\frac{10}{2}$ $\frac{12}{2}$ $\frac{10}{2}$
4				FAC species $0$ $x^3 = 0$
5				FACU species $0 \times 4 = 0$
Hash Obstance (Distained 5 ft r		= Total Cov	/er	UPL species $0 \times 5 = 0$
Herb Stratum (Plot size: <u>510</u> )	60	~	OBI	Column Totals: <u>100</u> (A) <u>140</u> (B)
2. Carex cristatella	20		FACW	
3. Carex scoparia	10		FACW	Hydrophytic Vegetation Indicators:
4. Phragmites australis	10		FACW	✓ 1 - Rapid Test for Hydrophytic Vegetation
5				🖌 2 - Dominance Test is >50%
6				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7.				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
o				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
10	100%			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r	100 %	= Total Cov	/er	be present, unless disturbed or problematic.
1				
1				Hydrophytic Vegetation
2				Present? Yes No No
		= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate s	neet.)			
A preponderance of hydrophytic ve	getatio	on is pr	resent	

Profile Desc	ription: (Describe	to the de	oth needed to docun	nent the	indicator	or confirm	n the absence of i	indicators.)	
Depth	Matrix		Redo	x Feature	S				
(inches)	Color (moist)	%	Color (moist)	%	_Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks	
0-5	10YR 5/2	95	10YR 4/6				Silt Loam		
<u> </u>	10YR 5/1	85	10YR 4/6	15	<u> </u>	<u>M</u>	Sandy Clay Loam		
-									
-									
					·				
					·				
		·			·				
'Type: C=C	oncentration, D=Dep	letion, RM	I=Reduced Matrix, MS	S=Masked	d Sand Gr	ains.	<sup>2</sup> Location: P	L=Pore Lining, M=Matrix.	
Hydric Soll	(A1)		Sandu C		atrix (CA)			Problematic Hydric Solls :	
Histic Fr	(AT) Dipedon (A2)		Sandy G	edox (SF	a(nx (54) 5)		Coast Pra	ace (S7)	
Black Hi	stic (A3)		Stripped	Matrix (S	56)		Iron-Mang	anese Masses (F12)	
Hydroge	en Sulfide (A4)		Loamy M	Jucky Mi	neral (F1)		Very Shal	low Dark Surface (TF12)	
Stratified	d Layers (A5)		Loamy (	Gleyed M	atrix (F2)		Other (Ex	plain in Remarks)	
2 cm Mu	ick (A10)		Depleted	d Matrix (	F3)				
Depleter	d Below Dark Surfac	e (A11)	Redox L	ark Surfa	ace (F6) urface (E7)		<sup>3</sup> Indicators of	hydrophytic vegetation and	
Sandy M	lucky Mineral (S1)		Depleted Redox D	)epressio	ns (F8)		wetland bydrology must be present		
5 cm Mu	icky Peat or Peat (S	3)			( - ,		unless dis	turbed or problematic.	
Restrictive	Layer (if observed)								
Туре:							Undria Cail Dry		
Depth (in	ches):						Hydric Soll Pre	esent? Yes No	
Remarks:									
The soi	l nrofile mee	ts the	criteria for h	avina	a den	leted r	matrix		
				aving	u ucp		natix		
HYDROLO	GY								
Wetland Hy	drology Indicators:								
Primary India	cators (minimum of c	ne is requ	<u>iired; check all that ap</u>	ply)			<u>Secondary I</u>	Indicators (minimum of two required)	
Surface	Water (A1)		Water-Stai	ned Leav	res (B9)		Surface	e Soil Cracks (B6)	
High Wa	ater Table (A2)		Aquatic Fa	una (B13	5) (D4.4)			ge Patterns (B10)	
Saturation	Saturation (A3) True Aquatic Plants (B14)						Dry-Sea	ason Water Table (C2)	
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)							ion Visible on Aerial Imagery (CQ)		
Sediment Deposits (B2)     A Oxidized Knizospheres on Living Koots (C3) Saturation Visible on Aerial Imagery (C9     Drift Deposits (B3)     Presence of Reduced Iron (C4)     Studied or Stressed Plants (D1)								or Stressed Plants (D1)	
Algal Mat or Crust (B4)							6) 🖌 Geomo	rphic Position (D2)	
Iron Deposits (B5) Thin Muck Surface (C7)								eutral Test (D5)	
Inundati	on Visible on Aerial	magery (E		Nell Data	(D9)				
Sparsely	Vegetated Concav	e Surface	(B8) Other (Exp	lain in Re	emarks)				
Field Obser	vations:								
Surface Wat	er Present? Y	es	No Depth (inc	ches):		_			
Water Table	Water Table Present? Yes No 🖍 Depth (inches):								
Saturation P	resent? Y	es	No Depth (ind	ches):		_ Wetl	and Hydrology P	resent? Yes 🗹 No	
(includes capillary fringe)									
Describe Recorded Data (stream gauge, monitoring well, aerial protos, previous inspections), if available:									
Remarks:									
Multiple	indicators of	f wetl	and hydrolog	v wer	e pres	sent af	t the time o	f sampling	
				,	- 10, 00			3	
Project/Site: AEP North Delphos - Rockhill	City/County: Lima/ ALLEN	Sampling Date:	2021-07-01						
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Applicant/Owner: AEP	State: Ohio	Sampling Point:	1-AD UPL						
Investigator(s): J. Holmes E. Wilson	Section, Township, Range:								
Landform (hillslope, terrace, etc.): Upland, Flat	Local relief (concave, convex, none)	None							
Slope (%): <u>1</u> Lat: <u>40.7625139</u>	Long: -84.0864839	Datum: WGS 8	34						
Soil Map Unit Name:Ble1A1	NWI classifi	cation:							
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🔽 No (If no, explain in F	Remarks.)							
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Circumstances"	present? Yes	✓ No						
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, explain any answe	ers in Remarks.)							
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects	s, important fe	eatures, etc.						

	Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         No         V           Yes         No         V           Yes         No         V	ls the Sampled Area within a Wetland?	Yes	No
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Remarks:

Representative of Areas outside wetland within existing Station footprint. Existing road and grading have impacted the area

**VEGETATION** – Use scientific names of plants.

20.64 -	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>2</u> (B)
4				
5				Percent of Dominant Species
		= Total Cov	/er	
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x 1 =
3.				FACW species $0$ x 2 = $0$
4				FAC species $0$ x 3 = $0$
5				FACU species $100 \times 4 = 400$
		- Total Cox		$\frac{1}{100} \text{ species}  0 \qquad x = 0$
Herb Stratum (Plot size: 5 ft r )		- 10(a) C0	/ei	Column Totals: $100$ (A) $400$ (B)
1. Bromus inermis	45	~	FACU	
2. Dactylis glomerata	30	~	FACU	Prevalence Index = $B/A = 4.0$
3. Lolium perenne	15		FACU	Hydrophytic Vegetation Indicators:
4. Plantago lanceolata	10		FACU	1 - Rapid Test for Hydrophytic Vegetation
5.				2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				data in Remarks or on a separate sheet)
0				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
9				
10	100%			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r	100 %	= Total Cov	/er	be present, unless disturbed or problematic.
1				
1				Hydrophytic Vegetation
۷				Present? Yes No
Dementar (Include abote numbers have an error error		= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate s	sneet.)			
A preponderance of hydrophytic ve	egetatio	on is no	ot pres	ent

Profile Desc	ription: (Describe	to the dep	th needed to docur	nent the i	ndicator	or confirr	n the absence of indicators.)	
Depth	Matrix		Redo	x Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture Remark	S
0-7	10YR 4/3	100					Sandy Clay Loam	
-								
-								
-								
-								
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM:	=Reduced Matrix, MS	S=Masked	I Sand Gra	ains.	<sup>2</sup> Location: PL=Pore Lining, M=N	latrix.
Hydric Soil	Indicators:						Indicators for Problematic Hydr	ic Soils <sup>3</sup> :
Histosol	(A1)		Sandy (	Gleyed Ma	atrix (S4)		Coast Prairie Redox (A16)	
Histic Ep	pipedon (A2)		Sandy F	Redox (S5	)		Dark Surface (S7)	
Black Hi	stic (A3)		Stripped	d Matrix (S	66)		Iron-Manganese Masses (F12	2)
Hydroge	en Sulfide (A4)		Loamy I	Mucky Mir	neral (F1)		Very Shallow Dark Surface (T	F12)
Stratified	d Layers (A5)		Loamy	Gleyed Ma	atrix (F2)		Other (Explain in Remarks)	
2 cm Mu	ıck (A10)		Deplete	d Matrix (I	F3)			
Depleted	d Below Dark Surfac	e (A11)	Redox [	Dark Surfa	ace (F6)			
Thick Da	ark Surface (A12)		Deplete	d Dark Su	rface (F7)		<sup>3</sup> Indicators of hydrophytic vegetat	ion and
Sandy M	lucky Mineral (S1)		Redox [	Depressio	ns (F8)		wetland hydrology must be pre	esent,
5 cm Mu	icky Peat or Peat (S	3)					unless disturbed or problemat	ic.
Restrictive I	Layer (if observed):							
Туре:								
Depth (ind	ches):						Hydric Soil Present? Yes	No
Remarks:								

# The soil profile does not meet the criteria for any hydric soil indicators. Rock refusal at 7 inches

HYDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is require	red; check all that apply)	Secondary Indicators (minimum of two required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> </ul>	<ul> <li>Water-Stained Leaves (B9)</li> <li>Aquatic Fauna (B13)</li> <li>True Aquatic Plants (B14)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres on Living Roots</li> <li>Presence of Reduced Iron (C4)</li> <li>Recent Iron Reduction in Tilled Soils (C</li> </ul>	<ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>Geomorphic Position (D2)</li> </ul>
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B2 Sparsely Vegetated Concave Surface (I	Thin Muck Surface (C7) Gauge or Well Data (D9) B8) Other (Explain in Remarks)	FAC-Neutral Test (D5)
Surface Water Present? Yes	No <u>v</u> Depth (inches):	
Saturation Present? Yes I (includes capillary fringe) Describe Recorded Data (stream gauge, mo	No <u>V</u> Depth (inches): <u>We</u> ponitoring well, aerial photos, previous inspections)	tland Hydrology Present? Yes No
No primary and or secondary wetlar Remarks:	nd hydrology indicators were present a	t the time of sampling

Project/Site: AEP North Delphos - Rockhill		City/County:	Lima / A	Allen	Sampling Date: 20	21-07-01
Applicant/Owner: AEP				State: Ohio	Sampling Point: 1-	AE PEM
nvestigator(s): J. Holmes E. Wilson		Section, To	wnship, Ra	nge:S020 T003 R	R007	
andform (hillslope, terrace, etc.): <u>Depression</u>		l	ocal relief	(concave, convex, none):	Concave	
Slope (%): <u>1</u> Lat: _ <b>40.763241</b>		Long:84.	.087114		Datum: WGS 84	
Soil Map Unit Name:Ble1A1				NWI classific	cation: N/A	
Are climatic / hydrologic conditions on the site typical for th	is time of ye	ar? Yes	No	(If no, explain in R	(emarks.)	
Are Vegetation, Soil, or Hydrology	significantly	disturbed?	Are	"Normal Circumstances" p	oresent?Yes 🖌	No
Are Vegetation, Soil, or Hydrology	naturally pro	oblematic?	(lf ne	eeded, explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map	showing	samplin	a point l	ocations. transects	. important feat	ures. etc.
Hydrophytic Vegetation Present? Yes	No	/ · · · ·	51			,
Hydric Soil Present? Yes N	No	Is the	e Sampled	l Area		
Wetland Hydrology Present? Yes 🖌	No	with	in a Wetla	nd? Yes 🗸	No	
Remarks:						
Wetland in existing Station depres	sion. Pl	EM port	ion of	wetland comple	ex	
		•		•		
VEGETATION – Use scientific names of plants	3.					
Tree Stratum (Plataize: 30 ft r )	Absolute	Dominant	Indicator	Dominance Test work	sheet:	
1	% Cover	Species?	Status	Number of Dominant S	pecies	(A)
2					011A0	(<)
3.				Total Number of Domin	nant ata: 2	(B)
4						(5)
5				Percent of Dominant S That Are OBL, FACW,	pecies or FAC: 100	(A/B)
15 ft r		= Total Cov	er	Drevelance lader war	due la cente	
Sapling/Shrub Stratum (Plot size: 13111 )				Prevalence Index wor	Ksheet:	
1				OBL species 60	<u>ividitiply b</u>	<u>y.</u>
2				EACW species 40	$x^{2} = \frac{80}{80}$	
۸				FAC species 0	$x_3 = 0$	
5				FACU species 0	x = 0	
		= Total Cov	er	UPL species 0	x 5 = 0	
Herb Stratum (Plot size: 5 ft r )			0.01	Column Totals: 100	(A) 140	(B)
1. I ypha angustifolia	$-\frac{60}{20}$	·	OBL		14	
2. Phragmites australis	$-\frac{30}{10}$	· _ /	FACW	Prevalence Index	x = B/A = 1.4	
3. Eutnamia graminirolia			FACW	Hydropnytic vegetatio	on Indicators:	
4				2 - Dominance Tes	Hydrophylic vegelalio	ווכ
5				2 - Dominance res	r = 15 - 50%	
ö				4 - Morphological A	Adaptations <sup>1</sup> (Provide	supporting
8	_			data in Remark	s or on a separate sh	eet)
9				Problematic Hydro	phytic Vegetation <sup>1</sup> (E	xplain)
10.	_					
	100%	= Total Cov	er	<sup>1</sup> Indicators of hydric soi	il and wetland hydrol	ogy must
Woody Vine Stratum (Plot size: 30 ft r )				be present, unless dist	urbed or problematic.	
1				Hydrophytic		
2				Vegetation Present? Ye	No No	
		= Total Cov	er			_
Remarks: (Include photo numbers here or on a separate	sheet.)					
A preponderance of hydrophytic v	egetati	on is pr	esent			
	-	•				

Profile Desc	ription: (Describe	to the de	pth needed to docum	ent the	indicator	or confirm	n the absence of i	ndicators.)	
Depth	Matrix		Redox	Feature	s				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks	
0 - 5	10YR 5/2	95	10YR 4/6				Silt Loam		
<u> </u>	10YR 5/1	85	10YR 4/6	15	<u>C</u>	<u>M</u>	Sandy Clay Loam		
-									
-									
-									
<sup>1</sup> Type: C=Co	oncentration, D=Dep	pletion, RM	I=Reduced Matrix, MS	=Maske	d Sand Gr	ains.	<sup>2</sup> Location: PL	_=Pore Lining, M=Matrix.	
Hydric Soil	Indicators:						Indicators for	Problematic Hydric Soils <sup>*</sup> :	
Histosol	(A1)		Sandy G	leyed M	atrix (S4)		Coast Prai	rie Redox (A16)	
Histic Ep	olpedon (A2)		Sandy R	edox (St Matrix /	2) 26)		Dark Surfa	Ce (S7)	
Hvdroge	n Sulfide (A4)		Supped	lucky Mi	neral (F1)		Very Shall	ow Dark Surface (TE12)	
Stratified	Layers (A5)		Loamy G	Bleyed M	atrix (F2)		Other (Exp	lain in Remarks)	
2 cm Mu	ick (A10)		Depleted	Matrix (	(F3)			,	
Depleted	d Below Dark Surfac	e (A11)	Redox D	ark Surf	ace (F6)				
Thick Da	ark Surface (A12)		Depleted	Dark Si	urface (F7)		<sup>3</sup> Indicators of h	nydrophytic vegetation and	
Sandy N	lucky Mineral (S1)	•	Redox D	epressio	ons (F8)		wetland hy	drology must be present,	
5 cm Mu	icky Peat or Peat (S	3)					unless dist	urbed or problematic.	
Tupo	ayer (il observeu)								
Depth (in	abaa):						Hydric Soil Pre	sent? Yes 🦯 No	
Depth (inches): NO									
The soil	profile mee	ts the	criteria for ha	aving	a dep	leted I	matrix		
HYDROLO	GY								
Wetland Hyd	drology Indicators:								
Primary Indic	ators (minimum of o	one is requ	iired; check all that app	oly)			Secondary Ir	ndicators (minimum of two required)	
Surface	Water (A1)		Water-Stair	ned Leav	/es (B9)		Surface	Soil Cracks (B6)	
High Wa	ter Table (A2)		Aquatic Fat	una (B13	3)		Drainage	e Patterns (B10)	
Saturatio	on (A3)		True Aquat	ic Plants	(B14)		Dry-Sea	son Water Table (C2)	
Water M	arks (B1)		Hydrogen a	sulfide O	dor (C1)	ing Deate	Crayfish	Burrows (C8)	
Sedimer	it Deposits (B2)			nizospne f Doduo	eres on Liv	Ing Roots	(C3) Saturation	on Visible on Aerial Imagery (C9)	
	ousits (D3)		Presence o		ion in Tille	t) d Soile (Ci		of Stressed Plants (DT)	
	(B5)		Thin Muck	Surface	(C7)		Cecinici ✓ FAC-Ne	utral Test (D5)	
Inundatio	on Visible on Aerial	Imagery (E	Gauge or V	Vell Data	(O))				
Sparsely	Vegetated Concav	e Surface	(B8) Other (Expl	ain in Re	emarks)				
Field Obser	vations:		· / <u> </u>						
Surface Wate	er Present?	′es	No Depth (inc	hes):		_			
Water Table	Present?	'es	No Depth (inc	hes):					
Saturation Pr	resent?	'es	No _ Depth (inc	hes):		_ Wet	land Hydrology Pr	esent? Yes 🖌 No	
Describe Red	corded Data (stream	n gauge, m	onitoring well, aerial p	hotos, p	revious ins	pections),	, if available:		
Remarks:									
Multiple	indicators o	of wetl	and hydrolog	y wei	re pres	sent at	t the time of	sampling	

Project/Site: AEP North Delphos - R	ockhill		City/County	Lima / /	Allen	Sampling Date: 2021-07-01
Applicant/Owner: AEP					State: Ohio	Sampling Point: 1-AE PFO
Investigator(s): J. Holmes E. Wilson			Section, To	wnship, Ra	nge:S020 T003 F	2007
Landform (hillslope, terrace, etc.): Depre	ssion		I	_ocal relief	(concave, convex, none):	Concave
Slope (%): 1 Lat: 40.76316	691		Long: -84	.087037	4	Datum: WGS 84
Soil Map Unit Name: Ble1A1					NWI classific	ation: PSS1A
Are climatic / hydrologic conditions on the	site typical	for this time of y	ear? Yes	No_	(If no, explain in R	emarks.)
Are Vegetation, Soil, or Hy	drology	significantl	y disturbed?	Are	"Normal Circumstances" p	present? Yes No
Are Vegetation, Soil, or Hy	drology	naturally pr	oblematic?	(lf ne	eeded, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS - Atta	ach site r	map showing	a samplin	a point l	ocations, transects	. important features, etc.
Hydronhytic Vegetation Present?	Ves V	No	<u> </u>	510000	,	, <b>p</b>
Hydric Soil Present?	Yes 🗸	No	ls th	e Sampled	l Area	
Wetland Hydrology Present?	Yes 🖌	No	with	in a Wetla	nd? Yes 🗹	No
Remarks:						
Wetland outside of existi	ng stat	tion . PFO	portion	of wet	tland complex	
			pertien	0		
VEGETATION – Use scientific na	mes of pl	ants.				
20 ft -		Absolute	Dominant	Indicator	Dominance Test work	sheet:
Tree Stratum (Plot size: 30 TL F	)	<u>% Cove</u>	r <u>Species?</u>	Status	Number of Dominant S	pecies
1. Populus deitoides		<u> </u>			That Are OBL, FACW, o	or FAC: / (A)
2. Ouercus palustris		<u> </u>			Total Number of Domin	ant
		10		FACW	Species Across All Stra	ta: <u>/</u> (B)
4					Percent of Dominant Sp	pecies
5		40%	= Total Cov		That Are OBL, FACW, o	or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size: 15 f	tr	_)	_ = 10(a) 000		Prevalence Index wor	ksheet:
1. Fraxinus pennsylvanica		15	· /	FACW	Total % Cover of:	Multiply by:
2. Cornus racemosa		10	· /	FAC	OBL species 60	x 1 = <u>60</u>
3					FACW species 80	x 2 = <u>160</u>
4					FAC species 25	x 3 = <u>75</u>
5					FACU species	$x 4 = \frac{0}{0}$
Harb Stratum (Plat size: 5 ft r	`	25%	_ = Total Cov	ver	UPL species 0	x 5 = <u>0</u>
1 Typha angustifolia	)	60	~	OBL	Column Totals: 105	(A) <u>295</u> (B)
2. Phragmites australis		30	- <u> </u>	FACW	Prevalence Index	= B/A = <u>1.8</u>
3. Euthamia graminifolia		10		FACW	Hydrophytic Vegetatio	on Indicators:
4.					1 - Rapid Test for H	Hydrophytic Vegetation
5					2 - Dominance Tes	it is >50%
6					✓ 3 - Prevalence Inde	ex is ≤3.0 <sup>1</sup>
7					4 - Morphological A	daptations <sup>1</sup> (Provide supporting
8					Droblemetic Hudrey	3 or on a separate sneet)
9						phytic vegetation (Explain)
10					<sup>1</sup> Indicators of hydric soi	l and wetland hydrology must
Weedy Vine Stratum (Plataire, 30 ft	r	<u>100%</u>	_ = Total Cov	ver	be present, unless distu	urbed or problematic.
Woody Vine Stratum (Plot size: 0011		)				
2					Hydrophytic Vegetation	
£			= Total Cov	/er	Present? Yes	s No
Remarks: (Include photo numbers here	or on a sep	arate sheet.)			1	
A propondorance of hud	rophyti	o voqotot	ion io ne	occet		
A preponderance of hyd	opnyti	c vegetat	ion is pr	esent		

L

Profile Desc	ription: (Describe	to the dep	oth needed to docur	nent the	indicator	or confirm	n the absence of ind	icators.)
Depth	Matrix		Redo	x Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-5	10YR 4/2	95	10YR 4/6				Silt Loam	
<u> </u>	10YR 6/1	85	10YR 4/6	15	<u>C</u>	<u>M</u>	Silty Clay Loam	
-								
-								
-								
-								
				- Maaka			<sup>2</sup> Location: DL=	Poro Lipipa M-Motrix
Hydric Soil	Indicators:			5-Masked	a Sanu Gi	ams.	Indicators for Pr	oblematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy (	Sleved Ma	atrix (S4)		Coast Prairie	Redox (A16)
Histic Er	pipedon (A2)		Sandy F	Redox (S5	5)		Dark Surface	(S7)
Black Hi	stic (A3)		Stripped	Matrix (	56)		Iron-Mangan	ese Masses (F12)
Hydroge	en Sulfide (A4)		Loamy	Mucky Mi	neral (F1)		Very Shallow	Dark Surface (TF12)
Stratified	d Layers (A5)		Loamy	Gleyed M	atrix (F2)		Other (Explai	n in Remarks)
2 cm Mu	ıck (A10)		🖌 Deplete	d Matrix (	F3)			
Depleted	d Below Dark Surfa	ce (A11)	Redox [	Dark Surfa	ace (F6)		2	
Thick Da	ark Surface (A12)		Deplete	d Dark Su	Inface (F7	)	Indicators of hyc	Irophytic vegetation and
Sandy M	lucky Mineral (S1)	22	Redox I	Depressio	ns (F8)		wetland hydro	blogy must be present,
5 cm ML	aver (if observed)	· ·						bed of problematic.
Type <sup>-</sup>								_
Depth (in	ches):						Hydric Soil Prese	nt? Yes 🦯 No
Remarke:								
The soi	l profile mee	ets the	criteria for h	aving	a dep	leted ı	matrix	
	GY							
Wetland Hv	drology Indicators	:						
Primary India	cators (minimum of	one is requ	ired: check all that an	(vla			Secondary Indi	cators (minimum of two required)
Surface	Water (A1)		✓ Water-Sta	ined Leav	es (B9)		✓ Surface So	bil Cracks (B6)
High Wa	ater Table (A2)		Aquatic Fa	una (B13	)		Drainage F	Patterns (B10)
Saturatio	on (A3)		True Aqua	tic Plants	, (B14)		Drv-Seaso	n Water Table (C2)
Water M	larks (B1)		Hydrogen	Sulfide O	dor (C1)		Cravfish B	urrows (C8)
Sedimer	nt Deposits (B2)		Oxidized F	Rhizosphe	res on Liv	ing Roots	(C3) Saturation	Visible on Aerial Imagery (C9)
Drift Dep	posits (B3)		Presence	of Reduce	ed Iron (C	4)	Stunted or	Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Recent Iro	n Reduct	on in Tille	d Soils (C	6) 🔽 Geomorph	ic Position (D2)
Iron Dep	oosits (B5)		Thin Muck	Surface	(C7)		FAC-Neutr	al Test (D5)
Inundati	on Visible on Aerial	Imagery (B	(7) Gauge or	Well Data	(D9)			
Sparsely	Vegetated Concav	e Surface (	(B8) Other (Exp	olain in Re	emarks)			
Field Obser	vations:							
Surface Wat	er Present?	res	No Depth (in	ches):		_		
Water Table	Present?	res	No Depth (in	ches):		_		
Saturation P	resent?	Yes	No Depth (in	ches):		_ Wet	land Hydrology Pres	ent? Yes 🦯 No
Describe Re	corded Data (stream	n gauge, m	onitoring well, aerial	photos, pr	evious ins	spections),	, if available:	
Domorkov								
	indiaatara	f wat	and hudrals		0 0 0	ont of	t the time of a	ampling
wuttple	mulcators (	o weth	and hydrolog	jy wei	e pres	sent al	t the time of s	sampling

Project/Site: <u>^t,) ? n Ž, S _ Í 5 Ž</u> ], H,   B Å Ž	<u>iĺĺ,S</u> (	City/County	/:;êõD	D, ÍÍ_ñSampling Date:H_H
Applicant/Owner: <u>^ t</u>				State: _ > Ž i Sampling Point: H^ , 2 t ‰
Investigator(s): _^q,Æ;ĺ] ñp, q, ĺê_]		Section, To	ownship, Rai	nge: S020, T003, R007
Landform (hillslope, terrace, etc.): <u>S 5 ? ]];</u> ñ			Local relief	(concave, convex, none): <u>H ñ B õ ž _</u>
Slope (%): Lat:9	I	Long: H	q	Datum:Æ Œ ‰ ,
Soil Map Unit Name: Ble1A1				NWI classification: _)  ñ _
Are climatic / hydrologic conditions on the site typical for this	time of yea	ar? Yes	No	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology sig	nificantly o	disturbed?	Are "	Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology na	turally pro	blematic?	(If ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map s	howing	samplin	ng point le	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No				
Hydric Soil Present? Yes 🖌 No		ls th	ne Sampled	Area
Wetland Hydrology Present? Yes Ves No		with	nin a Wetlar	nd? Yes V No
Remarks:				
t‰%a,_nĺõĩn.NŽi,õõn;,}n]n, t,^!D t^:	>¢_n	ÍõnBN	lệ5Í_	« q
VEGETATION – Use scientific names of plants.				
	Absolute	Dominant	t Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:, • n , ?) 1	% Cover	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5		- Total Ca		That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size:, • n , ?)		- Total Co	ver	Prevalence Index worksheet:
1. <u>H</u> ?ñ}],õê ê}ê		<u> </u>	<u>^ HÆ</u>	Total % Cover of:Multiply by:
2. <u> Žõêñ}], ÍõñB_ Íõnõ</u>		<u> </u>	<u>^ HÆ</u>	OBL species x 1 =
3. t 5}l}], N_ln ; N_]			<u> </u>	FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
Herb Stratum (Plot size: , • n , ? )	P	= Total Co	ver	UPL species         x 5 =           Ophuma Tatalaa         (b)
1. ‰ Í į Nõ", "į "õñn_õ		~	^ΗÆ	Column Totals: (A) (B)
2.   ?;55õ,]°ĺž_]n?;]		~	> @	Prevalence Index = B/A =
3			> @	Hydrophytic Vegetation Indicators:
4 ° 5 Ž õ , õ ñ " } ] n ¡ • ĺ ¡ õ			> @	✓ 1 - Rapid Test for Hydrophytic Vegetation
5				✓ 2 - Dominance Test is >50%
6				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
8				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
9				
10				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:, • n , ?)		= Total Co	ver	be present, unless disturbed or problematic.
1				Hydrophytic
2				Vegetation
		= Total Co	ver	Present? Yes No
Remarks: (Include photo numbers here or on a separate sh	neet.)			
°N? 5Z°nži_B,_nõnii]5ñ?,_]_ŕ	ňnq			

Frome Description. (Describe to the depti		,
Depth <u>Matrix</u>	Redox Features	
(inches) Color (moist) % _	<u>Color (moist)</u> <u>%</u> <u>Type</u>	Loc <sup>*</sup> Texture Remarks
<u>q_Ó, D</u>	<u>q Ó , D</u> <u>H</u> !	<u> </u>
-		
-		
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=F	Reduced Matrix, MS=Masked Sand Grain	s. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soll Indicators:		Indicators for Problematic Hydric Solis :
Histosol (A1)	Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
Black Histic (A3)	Salidy Redux (SS)	Dark Surface (S7)
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (E1)	Very Shallow Dark Surface (TE12)
Stratified Lavers (A5)	Loamy Gleved Matrix (F2)	Other (Explain in Remarks)
2 cm Muck (A10)	Depleted Matrix (F3)	
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)	,	unless disturbed or problematic.
Restrictive Layer (if observed):		
Туре: _ ) D		
Depth (inches):		Hydric Soil Present? Yes No
Remarks:		
м : Потик : <u>o</u> ,: _ ] _ III	1 q	
HYDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is require	ed; check all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)
Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living	Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled S	Soils (C6) V Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	✓ FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)	_
Sparsely Vegetated Concave Surface (B	8) Other (Explain in Remarks)	
Field Observations:		
Surface Water Present? Ves N	o <b>Depth (inches)</b> :	
Water Table Present? Yes N	o Depth (inches):	
Water Table Present? Yes N Saturation Present? Yes N	Depth (inches):	Wetland Hydrology Present? Yes 🗸 No
Water Table Present?     Yes N       Water Table Present?     Yes N       Saturation Present?     Yes N       (includes capillary fringe)     N	Io         Io<	Wetland Hydrology Present? Yes No
Water Table Present?       Yes N         Water Table Present?       Yes N         Saturation Present?       Yes N         (includes capillary fringe)       Describe Recorded Data (stream gauge, monopole	lo Depth (inches): lo Depth (inches): itoring well, aerial photos, previous inspe	Wetland Hydrology Present? Yes No ctions), if available:
Water Table Present?       Yes N         Water Table Present?       Yes N         Saturation Present?       Yes N         (includes capillary fringe)       Describe Recorded Data (stream gauge, mon         Remarks:       Remarks:	lo Depth (inches): lo Depth (inches): itoring well, aerial photos, previous inspe	Wetland Hydrology Present? Yes No ctions), if available:
Water Table Present?       Yes N         Water Table Present?       Yes N         Saturation Present?       Yes N         (includes capillary fringe)       Describe Recorded Data (stream gauge, monogrammed path)         Remarks:       ° N ? Í "°ñ, N ¡ B õ rõ ?? 5]	lo Depth (inches): lo Depth (inches): nitoring well, aerial photos, previous inspe ,?] ñ n q	Wetland Hydrology Present? Yes No ctions), if available:

Project/Site: AEP North Delphos - Rockhill Delinea	ition	City/County	Lima/Al	en	Sampling Date:	2021-07-01
Applicant/Owner: AEP				State: Ohio	Sampling Point:	1-AE (PEM/PSS/PFO) UPL
nvestigator(s): E. Wilson, J. Holmes		Section, To	wnship, Ra	nge:S020, T(	003, R007	
andform (hillslope, terrace, etc.): Upland		1	_ocal relief	(concave, convex, none)	None	
Slope (%): 0 Lat: 40.7631615		Long: -84	.0883516	5	Datum: WGS 8	84
Soil Map Unit Name: Ble1A1		•		NWI classifi	<sub>cation:</sub> None	
Are climatic / hydrologic conditions on the site typical for this	s time of ve	ar? Yes	No	(If no, explain in F	Remarks.)	
Are Vegetation Soil or Hydrology s	ignificantly	disturbed?	Are "	Normal Circumstances"	present? Yes	✓ No
Are Vegetation, con, or Hydrology c	aturally pro	blematic?	(If ne	eded explain any answe	ers in Remarks )	No
SUMMARY OF FINDINGS – Attach site map	showing	samplin	g point le	ocations, transects	s, important f	eatures, etc.
Hydrophytic Vegetation Present? Yes N	· ·					
Hydric Soil Present? Yes N	₀_∕_	ls th	e Sampled	Area		
Wetland Hydrology Present? Yes N	• <b>_ ⁄</b>	with	in a Wetlar	d? Yes	No	_
Remarks:			(050)			
Upland sample point for wetland 1-	AE (PE	M/PSS/	/PFO) (	complex.		
VEGETATION – Use scientific names of plants.						
20 ft -	Absolute	Dominant	Indicator	Dominance Test wor	ksheet:	
Tree Stratum (Plot size: 30 ft f )	<u>% Cover</u>	Species?	Status	Number of Dominant S	species	<i>(</i> <b>1</b> )
1				That Are OBL, FACW,	or FAC:	(A)
2				Total Number of Domi	nant	
3				Species Across All Str	ata: <u>s</u>	(B)
45				Percent of Dominant S	pecies	
0		= Total Cov	/er	That Are OBL, FACVV,	or FAC: 33	(A/B)
Sapling/Shrub Stratum (Plot size: 15 ft r )		10101 001		Prevalence Index wo	rksheet:	
1				Total % Cover of:	Multip	y by:
2				OBL species 0	x 1 = <u>0</u>	
3				FACW species 0	x 2 = <u>0</u>	
4				FAC species 35	x 3 = <u>10</u>	5
5				FACU species 65	$x 4 = \frac{26}{2}$	0
Harb Stratum (Diataira) 5 ft r		= Total Cov	ver	UPL species 0	$x_{5} = \frac{0}{0}$	
Poa pratensis	35	~	FAC	Column Totals: 100	(A) <u>36</u>	5 (B)
2 Trifolium repens	25	<u> </u>	FACU	Prevalence Index	c = B/A = 3.7	
3 Asclepias svriaca	20		FACU	Hvdrophytic Vegetati	on Indicators:	
↓ Lotus tenuis	15		FACU	1 - Rapid Test for	Hydrophytic Vege	etation
5 Achillea millefolium	5		FACU	2 - Dominance Te	st is >50%	
6				3 - Prevalence Ind	ex is ≤3.0 <sup>1</sup>	
7				4 - Morphological	Adaptations <sup>1</sup> (Pro	vide supporting
8.				data in Remark	s or on a separate	e sheet)
9.				Problematic Hydro	phytic Vegetation	<sup>1</sup> (Explain)
10.						
Weath Vine Stratum (Plateiza: 30 ft r )	100%	= Total Cov	ver	<sup>1</sup> Indicators of hydric so be present, unless dist	il and wetland hyd urbed or problema	drology must atic.
1						
2				Hydrophytic Vegetation		
۷		= Total Cor		Present? Ye	es No_	<u>~</u>
Remarks: (Include photo numbers here or on a separate of	sheet )	- 10(a) 000				
No hydrophytic vegetation present	•					

Profile Description: (Describe to the depth needed to document the indicator or of	confirm the absence of indicators.)
Depth Matrix Redox Features	
	<u>.oc lexture</u> <u>Remarks</u>
<u> </u>	
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<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains	2 Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:	Indicators for Problematic Hydric Soils':
Histosol (A1) Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
Histic Epipedon (A2) Sandy Redox (S5)	Dark Surface (S7)
Hydrogen Sulfide (A4)     Loamy Mucky Mineral (E1)	Very Shallow Dark Surface (TE12)
Stratified Lavers (A5) Loamy Gleved Matrix (F2)	Other (Explain in Remarks)
2 cm Muck (A10) Depleted Matrix (F3)	
Depleted Below Dark Surface (A11) Redox Dark Surface (F6)	
Thick Dark Surface (A12) Depleted Dark Surface (F7)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Redox Depressions (F8)	wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)	unless disturbed or problematic.
Type: IV/A	Hydric Soil Present? Yes No
Remarks:	
No hydric soils present	
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required: check all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1) Water-Stained Leaves (B0)	Surface Soil Cracks (B6)
High Water Table (A2)	Drainage Patterns (B10)
Saturation (A3) True Aquatic Plants (B14)	Dry-Season Water Table (C2)
Water Marks (B1) Hvdrogen Sulfide Odor (C1)	Cravfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living	Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	bils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9)	
Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks)	
Field Observations:	
Surface Water Present? Yes No 🔽 Depth (inches):	
Water Table Present? Yes No 🔽 Depth (inches):	
Saturation Present? Yes No _ Depth (inches):	Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

No hydrology present

Saturation Present? (includes capillary fringe)

Remarks:

Project/Site: AEP North Delphos - Rockhill Delinea	tion	City/County:	Lima/Al	len Sampling Date: 2021-07-01
Applicant/Owner: AEP				State: Ohio Sampling Point: 1-AF
Investigator(s): E. Wilson, J. Holmes		Section, Tov	wnship, Rai	nge: S019, T003, R007
Landform (hillslope, terrace, etc.): Depression		L	ocal relief	(concave, convex, none): Concave
Slope (%): 0 Lat: 40.7627545		Long: -84.	.0975409	9 Datum: WGS 84
Soil Map Unit Name: _GuB				NWI classification: PEM1A
Are climatic / hydrologic conditions on the site typical for this	time of ye	ar? Yes	No	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology si	gnificantly	disturbed?	Are "	Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology na	aturally pro	blematic?	(If ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map s	howing	sampling	g point le	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	)			
Hydric Soil Present? Yes No		Is the	e Sampled	Area
Wetland Hydrology Present? Yes <u>Ves</u> No		with	in a Wetlar	nd? Yes <u>V</u> No
Remarks:				
Small PEM wetland alongside railroad and road.	Norther	n part of	mapped	wetland polygon extends into NWI PEM1A.
<b>VEGETATION</b> – Use scientific names of plants.				
The Olectric (Distring 30 ft r	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>Sort 1</u> )	<u>% Cover</u>	Species?	Status	Number of Dominant Species
2				
3.				Total Number of Dominant Species Across All Strata: 2 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
15 ft r		= Total Cov	er	
Sapling/Shrub Stratum (Plot size: 15111 )				Prevalence Index worksheet:
1				OPL appaging 20 v 1 = 20
2				$\frac{\text{OBL species } \underline{-5}}{540} \times 1 = \underline{-5}$
3				FAC species $0$ $x_3 = 0$
4				FACU species $5$ $x = 20$
		= Total Cov	er.	UPL species $0$ $x = 0$
Herb Stratum (Plot size: 5 ft r )				Column Totals: 100 (A) 190 (B)
1. Phalaris arundinacea	50	<u> </u>	FACW	10
2. Carex lurida	20	<u> </u>	OBL	Prevalence Index = B/A = <u>1.9</u>
3. Juncus torreyi	15		FACW	Hydrophytic Vegetation Indicators:
4. Carex vulpinoidea	<u> </u>		FACW	1 - Rapid Test for Hydrophytic Vegetation
	5		FACU	$\sim$ 2 - Dominance Test is >50%
6				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
o				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10.				
	100%	= Total Cov	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: <u>30 ft r</u> )				be present, unless disturbed of problematic.
1				Hydrophytic
2				Vegetation Present? Yes No
Demoster (lask de marte sur tras tras tras	he et )	= Total Cov	er	
Remarks: (Include photo numbers here or on a separate s	neet.)			
Hydrophytic vegetation is present.				

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#### 001

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Fatures (inches) Color (moist) % Color	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)         Depth       Matrix       Redox Features         (inches)       Color (moist)       %       Type <sup>1</sup> Loc <sup>2</sup> Texture       Remarks         0 - 20       10YR 4/2       90       10YR 4/6       10       C       M       Clay         -       -       -       -       -       -       -       -       -         -       -       -       -       -       -       -       -       -         -       -       -       -       -       -       -       -       -       -         -<	
Depth         Matrix         Redox Fatures           (nches)         0:20         10YR 4/2         90         10YR 4/6         10         C         M         Clay           0:20         10YR 4/2         90         10YR 4/6         10         C         M         Clay           0:20         10YR 4/2         90         10YR 4/6         10         C         M         Clay           0:20         10YR 4/2         90         10YR 4/6         10         C         M         Clay           0:20         10YR 4/2         90         10YR 4/6         10         C         M         Clay           0:20         10YR 4/2         90         10YR 4/6         10         C         M         Clay	Depth (inches)       Matrix       Redox Features         0 - 20       10YR 4/2       90       10YR 4/6       10       C       M       Clay         -       -       -       -       -       -       -       -       -         -       -       -       -       -       -       -       -       -         -       -       -       -       -       -       -       -       -         -       -       -       -       -       -       -       -       -       -         -	
Color (moist)         %         Color (moist)         %         Type         Loc <sup>2</sup> Texture         Remarks           0 - 20         10 YR 4/2         90         10 YR 4/6         10         C         M         Clay           -	(inches)       Color (moist)       %       Type1       Loc2       Texture       Remarks         0 - 20       10YR 4/2       90       10YR 4/6       10       C       M       Clay         -       -       -       -       -       -       -       -       -         -       -       -       -       -       -       -       -       -         -       -       -       -       -       -       -       -       -       -         - <td></td>	
0 - 20       10YR 4/2       90       10YR 4/6       10       C       M       Clay	0 - 20       10YR 4/2       90       10YR 4/6       10       C       M       Clay         -	
	-       -         -	
<td< td=""><td>-      </td><td></td></td<>	-	
''Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       ''Location: PL=Pore Lining, M=Matrix, MS=Masked Sand Grains.         ''Hydric Soil Indicators:       Indicators for Problematic Hydric Soils':         - Histoc [A1]	-       -	
'Type: C=Concentration, D=Depetetion, RM=Reduced Matrix, MS=Masked Sand Grains.       *Location: PL=Pore Lining, M=Matrix.         'Type: C=Concentration, D=Depetetion, RM=Reduced Matrix, MS=Masked Sand Grains.       *Location: PL=Pore Lining, M=Matrix.         'Histosol (A1)	-       -         -	
''ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       *Location: PL=Pore Lining, M=Matrix, MS=Masked Sand Grains.         ''type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       *Location: PL=Pore Lining, M=Matrix, MS=Masked Sand Grains.         ''Histosol (A1)	-       -         1 <sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.         Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :	
'Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.         'Hydric Soil Indicators:       Indicators for Problematic Hydric Soils':         'Histic Eppedon (A2)       Sandy Redvo (S5)         Black Histic (A3)       Sandy Redvo (S5)         'Hydrig Soil Matrix (S4)       Coast Printi Redox (A16)         'Hydrigen Sulfide (A4)       Learny Mucky Minaral (F1)       Very Shalfide Names (F12)         'Hydrigen Sulfide (A4)       Learny Mucky Minaral (F1)       Very Shalfide Names (F12)         2 cm Muck (A10)       Depleted Matrix (F2)       Other (Explain in Remarks)         2 cm Muck (A10)       Depleted Matrix (F3)	-       -	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>1</sup> Location: PL=Pore Lining, M=Matrix, Mydre Soil a <sup>1</sup> :         Hidtosol (A1)	<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.         Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :	
Type: C-Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       ?Location: PL=Pore Lining, M=Matrix.         Hydric Soil Indicators:       Indicators for Problematic Hydric Soils?:         Histic Epipedon (A2)       Sandy Gleyed Matrix (S4)       Coast Prainie Redox (A16)         Histic Epipedon (A2)       Sandy Merkov (S5)       Dark Surface (S7)         Hydrogen Sufface (A4)       Loamy Mucky Mineral (F1)       Very Shallow Dark Surface (TF12)         Stratified Layers (A5)       Loamy Mucky Mineral (F2)       Other (Explain in Remarks)         2 cm Muck (A10)       Depleted Matrix (F3)       Other (Explain in Remarks)         2 cm Muck (A10)       Depleted Dark Surface (F6)       Indicators of hydrophytic vegetation and wetland hydrology must be present, os or Mucky Peet or Peat (S3)         Restrictive Layer (if Observed):       Type: N/A       unless disturbed or problematic.         Type: N/A       Mydrology Indicators:       No       Sturface Nater (S1)         Staturation (A3)       True Aquatic Piants (B14)       Dry-Season Aveter Table (C2)       No         High Water Table (A2)       Aquatic Fauna (B13)       Dry-Season Aveter Table (C2)       Crayfish Burrows (C8)         Staturation (A3)       True Aquatic Piants (B14)       Dry-Season Aveter Casks (B6)       Staturation (S2)         High Water Table (A2)       Oxidite Reduce Inin Rifel Soils C(5) <t< td=""><td><sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       <sup>2</sup>Location: PL=Pore Lining, M=Matrix.         Hydric Soil Indicators:       Indicators for Problematic Hydric Soils<sup>3</sup>:        </td><td></td></t<>	<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.         Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.         *Location: D1=Pore Lining, M=Matrix.           Hydric Soil Indicators:         Indicators for Problematic Hydric Soils*:         Indicators for Problematic Hydric Soils*:           Histosci (A1)         Sandy Gleyed Matrix (S4)         Coast Prairie Redox (A16)           Histosci (A2)         Sandy Redox (S5)         Dark Surface (TF12)           Hydrogen Suffid (A3)         Loamy Mucky Mineral (F1)         Very Shallow Dark Surface (TF12)           Stratified Layers (A5)         Loamy Mucky Mineral (F1)         Very Shallow Dark Surface (TF12)           Gardy Mucky Mineral (S1)         Depleted Matrix (F3)         Other (Explain in Remarks)           Depleted Balox Dark Surface (A11)         Period Dark Surface (F7)         *unleas disturbed or problematic.           Restrictive Layer (if observed):         Type: N/A         unless disturbed or problematic.           Type: N/A         Medicators (minimum of one is required: check all that apply)         Secondary Indicators (minimum of two required)           Saturation (A3)         True Aquatic Plants (B14)         Dry-Season Water Table (C2)         Yorainage Patterns (B10)           Saturation (A3)         True Aquatic Plants (B14)         Dry-Season Water Table (C2)         Yorainage Patterns (B10)         Saturation (A3)         Dry-Season Water Table (C2)         Yorainage Patterns (B10)         Saturation Yish	<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.         Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :	
Hydric Soil Indicators:       Indicators:       Indicators:       Indicators:         Histos (A1)       Sandy Gleyed Matrix (S4)       Coast Prains Redox (A16)         Histo Epipedon (A2)       Sandy Redox (S5)       Dark Surface (S7)         Black Histic (A3)       Stripped Matrix (S6)       Iron-Manganese Masses (F12)         Hydrogen Suffde (A4)       Loamy Mucky Mineral (F1)       Very Shallow Dark Surface (S7)         2 cm Muck (A10)       Depleted Matrix (F2)       Other (Explain in Remarks)         2 cm Mucky Mineral (S1)       Redox Dark Surface (F6)       Thick Dark Surface (A12)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F7) <sup>1</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed):       Type: INA       Unless disturbed or problematic.         Pepth (inches):       No       Meter Stained Leaves (B9)       Surface Soil Cracks (B6)         Surface Water (A1)       Water-Stained Leaves (B9)       Surface Soil Cracks (B6)       Surface Soil Cracks (B6)         Surface Water (A1)       Water-Stained Leaves (B9)       Surface Soil Cracks (B6)       Surface Soil Cracks (B6)         Surface Water (A1)       Ory-Season Water Table (C2)       Crayfish Burrows (C8)       Saturation Visible on Aerial Imagery (C9)         Surface Soil Cracks (B1)       Hy	Hydric Soil Indicators:     Indicators for Problematic Hydric Soils*:	
	Histic Epipedon (A2)      Sandy Redox (S5)      Dark Surface (S7)        Black Histic (A3)      Stripped Matrix (S6)      Iron-Manganese Masses (F12)         Hydrogen Sulfide (A4)      Loamy Mucky Mineral (F1)       Very Shallow Dark Surface (TF12)	
Stripped Matrix (S6)	Black Histic (A3)       Stripped Matrix (S6)       Iron-Manganese Masses (F12)         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)       Very Shallow Dark Surface (TF12)	
	Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Very Shallow Dark Surface (TF12)	
Dialitied Layers (Aci) During (F2) Orther (Explain in Remarks) Depleted Matrix (F2) Orther (Explain in Remarks) Depleted Matrix (F2) Orther (Explain in Remarks) Depleted Matrix (F2) Orther (Explain in Remarks)	Statified Lower (A)	
	2 cm Muck (A10) Depleted Matrix (F2) Other (Explain in Remarks)	
	Depleted Below Dark Surface (A11)	
	Thick Dark Surface (A12) Depleted Dark Surface (F7) <sup>3</sup> Indicators of hydrophytic vegetation and	
	Sandy Mucky Mineral (S1) Redox Depressions (F8) wetland hydrology must be present,	
Restrictive Layer (if observed)::       Type: <u>N/A</u> Depth (inches):	5 cm Mucky Peat or Peat (S3) unless disturbed or problematic.	
Type:       N/A         Depth (inches):	Restrictive Layer (if observed):	
Depth (inches):       Hydric Soil Present?       Yes       No         Remarks:         Hydric soils are present.         IVPROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)       Secondary Indicators (minimum of two required)	Type: N/A	
Remarks:         Hydric soils are present.         ItyDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)         Secondary Indicators (minimum of two required)	Depth (inches): No	
Hydric soils are present.         Hydric soils are present.         Hydric soils are present.         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)         Surface Water (A1)       Water-Stained Leaves (B9)       Surface Soil Cracks (B6)         High Water Table (A2)       Aquatic Fauna (B13)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       ✓ Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       ✓ Geomorphic Position (D2)         Inon Deposits (B5)       Thin Muck Surface (C7)       ✓ FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Surface Water Present? Yes No       Yes	Remarks:	
Hydric soils are present.         Hydric soils are present.         Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)       Secondary Indicators (minimum of two required)         Surface Water (A1)       Water-Stained Leaves (B9)       Surface Soil Cracks (B6)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stuntad or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       ✓ Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       ✓ FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Field Observations:       Yes       No         Sutration Present?       Yes       No         Yes       No       Depth (inches):       Wetland Hydrology Present? Yes       No		
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)       Secondary Indicators (minimum of two required)	Hydric soils are present.	
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)       Secondary Indicators (minimum of two required)		
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)       Secondary Indicators (minimum of two required)         Surface Water (A1)       Water-Stained Leaves (B9)       Surface Soil Cracks (B6)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       ✓       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       ✓       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       ✓       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       FAC-Neutral Test (D5)         Surface Water Present?       Yes       No       Depth (inches):       Wetland Hydrology Present? Yes       No         Water Table Present?       Yes       No       Depth (inches):       Wetland Hydrology Present? Yes       No       No <td></td> <td></td>		
NTUROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)       Secondary Indicators (minimum of two required)		
Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)       Secondary Indicators (minimum of two required)	HIDROLOGI	
Primary Indicators (minimum of one is required: check all that apply)       Secondary Indicators (minimum of two required)	Wetland Hydrology Indicators:	
	Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two requ	<u>uired)</u>
	Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6)	
	High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)	
	Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (C2)	
Sediment Deposits (B2)       ✓       Oxidized Rhizospheres on Living Roots (C3)      Saturation Visible on Aerial Imagery (C9)        Drift Deposits (B3)      Presence of Reduced Iron (C4)      Stunted or Stressed Plants (D1)        Algal Mat or Crust (B4)      Recent Iron Reduction in Tilled Soils (C6)       ✓       Geomorphic Position (D2)        Iron Deposits (B5)      Thin Muck Surface (C7)       ✓       FAC-Neutral Test (D5)        Inundation Visible on Aerial Imagery (B7)      Gauge or Well Data (D9)       ✓       FAC-Neutral Test (D5)        Sparsely Vegetated Concave Surface (B8)      Other (Explain in Remarks)	Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)	
Drift Deposits (B3)      Presence of Reduced Iron (C4)      Stunted or Stressed Plants (D1)        Algal Mat or Crust (B4)      Recent Iron Reduction in Tilled Soils (C6)       ✓ Geomorphic Position (D2)        Iron Deposits (B5)      Thin Muck Surface (C7)       ✓ FAC-Neutral Test (D5)        Inundation Visible on Aerial Imagery (B7)      Gauge or Well Data (D9)        Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Field Observations:          Surface Water Present?       Yes       No         Yes       No       ✓         Saturation Present?       Yes       No       ✓       No	Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C3	29)
	Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)	
	Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) 📝 Geomorphic Position (D2)	
Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No <u>v</u> Depth (inches): Water Table Present? Yes No <u>v</u> Depth (inches): Saturation Present? Yes No <u>v</u> Depth (inches): Wetland Hydrology Present? Yes <u>v</u> No	Iron Deposits (B5) Thin Muck Surface (C7) FAC-Neutral Test (D5)	
Sparsely Vegetated Concave Surface (B8)      Other (Explain in Remarks)         Field Observations:          Surface Water Present?       YesNo _        Depth (inches):         Water Table Present?       YesNo _        Depth (inches):         Saturation Present?       YesNo _        Depth (inches):         Wetland Hydrology Present?       YesNo _        No _	Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9)	
Field Observations:         Surface Water Present?       Yes Depth (inches):         Water Table Present?       Yes Depth (inches):         Saturation Present?       Yes Depth (inches):         Water Table Present?       Yes Depth (inches):         Water Table Present?       Yes Depth (inches):         Water Table Present?       Yes Depth (inches):         Wetland Hydrology Present?       Yes No	Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks)	
Surface Water Present?       Yes No        Depth (inches):         Water Table Present?       Yes No        Depth (inches):         Saturation Present?       Yes No        Depth (inches):         Wetland Hydrology Present?       Yes No        No	Field Observations:	
Water Table Present?       Yes No _       Depth (inches):       Wetland Hydrology Present?       Yes No _         Saturation Present?       Yes Depth (inches):       Wetland Hydrology Present?       Yes No	Surface Water Present? Yes No Depth (inches):	
Saturation Present? Yes No V Depth (inches): Wetland Hydrology Present? Yes V No No	Water Table Present? Yes No Depth (inches):	
	Saturation Present? Yes No _ Depth (inches): Wetland Hydrology Present? Yes _ No	
(Includes capillary fringe)	(Includes capillary tringe)	

Remarks:

Hydrology indicators are present.

Project/Site: AEP North Delphos - Rockhill Delineation	City/County: Lima/Allen		Sampling Date:	2021-07-01
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-AF/4-D UPL
Investigator(s): E. Wilson, J. Holmes	Section, Township, Range:	S019, T0	03, R007	
Landform (hillslope, terrace, etc.): Upland	Local relief (conc	ave, convex, none):	None	
Slope (%): 0 Lat: 40.7631242	Long: -84.0974036		Datum: WGS 8	34
Soil Map Unit Name: BsA		NWI classificat	tion: None	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🗾 No	_ (If no, explain in Re	marks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norm	al Circumstances" pre	esent? Yes	No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed	, explain any answers	s in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locat	ions, transects,	important fe	eatures, etc.

Hydrophytic Vegetation Present?	Yes	No	~				
Hydric Soil Present?	Yes	No_	<b>v</b>	Is the Sampled Area			
Wetland Hydrology Present?	Yes	No_	<ul> <li></li> </ul>	within a Wetland?	Yes	No _	<u> </u>
Remarks:							

# Upland sample point for wetlands 1-AF and 4-D.

**VEGETATION** – Use scientific names of plants.

00 ft	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft r</u> )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 1 (A)
2.				
2				Total Number of Dominant
				Species Across All Strata: $\underline{2}$ (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 50 (A/B)
15 6		= Total Cov	er	
Sapling/Shrub Stratum (Plot size: 15 ft f )				Prevalence Index worksheet:
1				Total % Cover of:Multiply by:
2.				OBL species 0 x 1 = 0
3				FACW species $0 \qquad x 2 = 0$
4				FAC species $30$ x 3 = $90$
				EACLI species $\frac{70}{70}$ x 4 = $\frac{280}{280}$
5				$\frac{1}{100}$
Harb Stratum (Distaire) 5 ft r		= Total Cov	ver	UPL species $0 \times 5 = 0$
Trifolium pratense	45	~	FACU	Column Totals: 100 (A) 370 (B)
				2
2. Poa pratensis	30		FAC	Prevalence Index = B/A =
3. Cichorium intybus	15		FACU	Hydrophytic Vegetation Indicators:
4. Trifolium repens	10		FACU	1 - Rapid Test for Hydrophytic Vegetation
5.				2 - Dominance Test is >50%
6.				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
·				data in Remarks or on a separate sheet)
ð				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
9				
10				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
20 ft r	100%	= Total Cov	ver	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: 30 IT )				
1				Hydrophytic
2				Vegetation
		= Total Cov	ver	Present? Yes No
Remarks: (Include photo numbers here or on a separate s	heet.)			1
	,			
No hydrophytic vegetation present	•			

Profile Description: (Describe to the	depth needed to docum	ment the indicator	or confirm	the absence of i	ndicators.)
Depth Matrix	Redo	x Features			
(inches) Color (moist) %	Color (moist)	<u>%</u> Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
<u>0-20</u> <u>10YR 4/4</u> <u>100</u>	·			Silt Loam	
-					
-					
<sup>1</sup> Type: C=Concentration, D=Depletion,	RM=Reduced Matrix, MS	S=Masked Sand Gra	ains.	<sup>2</sup> Location: Pl	L=Pore Lining, M=Matrix.
Hydric Soil Indicators:				Indicators for	Problematic Hydric Soils":
Histosol (A1)	Sandy C	Gleyed Matrix (S4)		Coast Prai	rie Redox (A16)
Black Histic (A3)	Sandy F	Kedox (55) Matrix (56)		Dark Surfa	ace (S7)
Hydrogen Sulfide (A4)	Loamy I	Mucky Mineral (F1)		Verv Shall	ow Dark Surface (TF12)
Stratified Layers (A5)	Loamy (	Gleyed Matrix (F2)		Other (Exp	plain in Remarks)
2 cm Muck (A10)	Deplete	d Matrix (F3)			
Depleted Below Dark Surface (A11	) Redox [	Dark Surface (F6)			
Thick Dark Surface (A12)	Deplete	d Dark Surface (F7)		<sup>3</sup> Indicators of h	hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Redox L	Depressions (F8)		wetland hy	drology must be present,
Restrictive Laver (if observed):					turbed of problematic.
Type: N/A					
Depth (inches):				Hydric Soil Pre	esent? Yes No
Remarks:					
No hydric solls present					
HYDROLOGY					
Wetland Hydrology Indicators:					
Primary Indicators (minimum of one is r	equired: check all that ap	oply)		Secondary I	ndicators (minimum of two required)
Surface Water (A1)	Water-Stai	ined Leaves (B9)		Surface	Soil Cracks (B6)
High Water Table (A2)	Aquatic Fa	auna (B13)		Drainag	e Patterns (B10)
Saturation (A3)	True Aqua	tic Plants (B14)		Dry-Sea	ason Water Table (C2)
Water Marks (B1)	Hydrogen	Sulfide Odor (C1)		Crayfish	n Burrows (C8)
Sediment Deposits (B2)	Oxidized F	Rhizospheres on Liv	ing Roots (	(C3) Saturati	on Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence	of Reduced Iron (C4	·)	Stunted	or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iro	n Reduction in Tille	d Soils (C6	6) Geomor	rphic Position (D2)
Iron Deposits (B5)	Thin Muck			FAC-Ne	utral Test (D5)
Inundation Visible on Aerial Imager	y (B7) Gauge of v	vveli Data (D9)			
Eield Observations:		Dain in Remarks)			
Surface Water Dresent? Vac	No Ponth (in	ches).			
Water Table Present?	No V Dopth (inc	ches).	-		
Saturation Present?	No V Depth (ind	ches).	-	and Hydrology Pr	asant2 Vas No V
(includes capillary fringe)		unes)		and Hydrology Pr	
Describe Recorded Data (stream gauge	e, monitoring well, aerial p	photos, previous ins	pections),	if available:	
Remarks:					

# No hydrology present

Project/Site: AEP North Delphos - Rockhill Delineation	City/County: Lima/Allen		Sampling Date: 2021-07-01
Applicant/Owner: AEP		State: Ohio	Sampling Point: 1-AG
Investigator(s): E. Wilson, J. Holmes	Section, Township, Range: _	S019, 7	F003, R007
Landform (hillslope, terrace, etc.): Depression	Local relief (conca	ive, convex, none):	Concave
Slope (%): 0 Lat: 40.7648077	Long: -84.1014067		Datum: WGS 84
Soil Map Unit Name: BSA		NWI classific	ation: None
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🗾 No	(If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances" p	oresent? Yes 🔽 No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	rs in Remarks.)
CLIMMARY OF FINDINGS Attack site man about			incomentant footunes ato

#### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         V         No           Yes         V         No           Yes         V         No	Is the Sampled Area within a Wetland? Yes <u> V</u> No
Remarks:		

# Small PEM wetland within ROW.

#### **VEGETATION** – Use scientific names of plants.

20.4	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>3</u> (B)
4				
5				Percent of Dominant Species
		= Total Cov	/er	
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1. Fraxinus pennsylvanica	5	<u> </u>	FACW	Total % Cover of:Multiply by:
2				OBL species 20 x 1 = 20
3				FACW species <u>85</u> x 2 = <u>170</u>
4.				FAC species 0 x 3 = 0
5.				FACU species 0 x 4 = 0
	5%	= Total Cov	/er	UPL species 25 x 5 = 125
Herb Stratum (Plot size: 5 ft r )				Column Totals; 130 (A) 315 (B)
1. Phalaris arundinacea	50	<u> </u>	FACW	
2. Dipsacus laciniatus	25	<u> </u>	UPL	Prevalence Index = B/A = 2.4
3. Carex lurida	20		OBL	Hydrophytic Vegetation Indicators:
4. Solidago gigantea	15		FACW	1 - Rapid Test for Hydrophytic Vegetation
5. Carex vulpinoidea	10		FACW	✓ 2 - Dominance Test is >50%
6. Juncus torreyi	5		FACW	✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7.				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8.				data in Remarks or on a separate sheet)
9.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10.				
	125%	= Total Cov	/er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )		10101 001		be present, unless disturbed or problematic.
1				Hydrophytic
2				Vegetation
		= Total Cov	/er	Present? Yes No
Remarks: (Include photo numbers here or on a separate s	sheet.)			
Hydrophytic vegetation is present.				

0 - 4 10YR 4/2	70	Color (moist)	%	Tvpe'	Loc <sup>2</sup>	Texture	Remarks
	90	10YR 4/6	10	C	M	Clay	
5 <sup>-</sup> 20 10YR 5/4	85	7.5YR 6/6	15	<u>с</u>		Clay	
-		<u>/.orn.o/o</u>			<u></u>		
-							
Type: C=Concentration, D=Dep	pletion, RM	1=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location	: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:		Sandy		atrix (CA)		Indicators	for Problematic Hydric Soils :
Histic Eninedon (A2)		Sandy G	Gleyed IV Redax (S	atrix (54) 5)		Coast	Surface (S7)
Black Histic (A3)		Strippe	d Matrix (	S6)		Iron-M	anganese Masses (F12)
Hydrogen Sulfide (A4)		Loamy	Mucky M	ineral (F1)		Very S	Shallow Dark Surface (TF12)
Stratified Layers (A5)		Loamy	Gleyed N	latrix (F2)		Other	(Explain in Remarks)
2 cm Muck (A10)		Deplete	d Matrix	(F3)			
Depleted Below Dark Surface Thirds Dark Surface (A40)	ce (A11)	Redox	Dark Surf	ace (F6)		31	
Thick Dark Sufface (A12) Sandy Mucky Mineral (S1)		Deplete	Depressiv	UITACE (F/	)	Indicators	s of hydrophytic vegetation and
5 cm Mucky Peat or Peat (S	3)		Depressi	JIIS (1 0)		unless	disturbed or problematic.
Restrictive Layer (if observed)	:						•
Туре: <u>N/A</u>							
Depth (inches):						Hydric Soll	Present? Yes No
Remarks:							
Remarks: Hydric soils are pre	sent.						
Remarks: Hydric soils are pre YDROLOGY	sent.						
Remarks: Hydric soils are pre YDROLOGY Wetland Hydrology Indicators	sent.						
Remarks: Hydric soils are pre YDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of d	sent.	ired: check all that a	oply)			Seconda	ary Indicators (minimum of two required)
Remarks: Hydric soils are pre YDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of o Surface Water (A1)	sent.	<u>iired: check all that a</u> Water-Sta	oply) ined Lea	ves (B9)		<u>Seconda</u>	ary Indicators (minimum of two required) face Soil Cracks (B6)
Remarks: Hydric soils are pre YDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2)	sent.	<u>iired: check all that ar</u> Water-Sta Aquatic Fa	oply) ined Lea	ves (B9) 3)		<u>Seconda</u> Sur Dra	ary Indicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10)
Remarks: Hydric soils are pre YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of of 	sent.	<u>uired: check all that ar</u> Water-Sta Aquatic Fa True Aquat	oply) ined Lea auna (B1	ves (B9) 3) ≶ (B14)		<u>Seconda</u> Sur Dra Dry	ary Indicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2)
Remarks: Hydric soils are pre YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of of 	sent.	<u>uired: check all that an</u> Water-Sta Aquatic Fa True Aqua Hydrogen	oply) ined Lea auna (B1 atic Plants Sulfide C	ves (B9) 3) 5 (B14) 9dor (C1)		<u>Seconda</u> Sur Dra Dry Cra	ary Indicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8)
Remarks: Hydric soils are pre YDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	sent.	iired: check all that an Water-Sta Aquatic Fa True Aqua Hydrogen Ndized Fa	oply) ined Lea auna (B1 atic Plants Sulfide C Rhizosph	ves (B9) 3) 5 (B14) 5 dor (C1) eres on Liv	ring Roots	<u>Seconda</u> Sur Dra Dry Cra (C3) <u>↓</u> Sat	ary Indicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9)
Remarks: Hydric soils are pre YDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	sent.	ired: check all that an Water-Sta Aquatic Fa True Aqua Hydrogen Presence	oply) ined Lear auna (B1; atic Plants Sulfide C Rhizosph of Reduc	ves (B9) 3) 5 (B14) Odor (C1) eres on Liv ed Iron (C	ring Roots 4)	<u>Seconda</u> Suri Dra Dry Cra (C3)Satu Stu	ary Indicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1)
Remarks: Hydric soils are pre YDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Lag Deposits (B5)	sent.	iired: check all that an Water-Sta Aquatic Fa True Aqua Hydrogen Presence Recent Inc This Musi	oply) ined Lea auna (B1 atic Plants Sulfide C Rhizosph of Reduc on Reduc	ves (B9) 3) 5 (B14) 2dor (C1) eres on Liv ed Iron (C cion in Tille	ring Roots 4) d Soils (C	<u>Seconda</u> Dra Dry Cra (C3) <u>✓</u> Satu Stuu 6) <u>✓</u> Gec	ary Indicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1) pmorphic Position (D2)
Remarks: Hydric soils are pre YDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Invertion Visible on Assiel	sent.	iired: check all that ar Water-Sta Aquatic Fa True Aqua Hydrogen Hydrogen Presence Recent Iro Thin Muck	oply) ined Lea auna (B1 atic Plants Sulfide C Rhizosphi of Reduc on Reduc s Surface	ves (B9) 3) 5 (B14) odor (C1) eres on Liv ed Iron (C ion in Tille (C7)	ring Roots 4) d Soils (C	<u>Seconda</u> Sur Dra Dry Cra (C3) <u>✔</u> Stu 6) <u>✔</u> Geo FAO	ary Indicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5)
Remarks: Hydric soils are pre YDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of e Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Sparsely Vegetated Concerv	sent.	ired: check all that an Water-Sta Aquatic Fa True Aquatic Hydrogen ✓ Oxidized Fa Presence Recent Inc Thin Muck 37) Gauge or (B8) Other (Ex)	oply) ined Lea auna (B1; atic Plants Sulfide C Rhizosph of Reduc on Reduc son Reduc son Reduc son Reduc son Reduc	ves (B9) 3) 5 (B14) 5 dor (C1) eres on Liv ed Iron (C ion in Tille (C7) a (D9) emarks)	ring Roots 4) d Soils (C	<u>Seconda</u> Suri Dra Dry Cra (C3) <u>✓</u> Satu Sturi 6) <u>✓</u> Gec FAC	ary Indicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5)
Remarks: Hydric soils are pre YDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of a Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Sparsely Vegetated Concav Field Observations:	sent.	ired: check all that an Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized fa Presence Recent Irc Thin Muck 37) Gauge or (B8) Other (Ex	oply) ined Lear auna (B1; atic Plants Sulfide C Rhizosph of Reduc on Reduc sufface Well Data plain in R	ves (B9) 3) 5 (B14) Odor (C1) eres on Liv ed Iron (C tion in Tille (C7) a (D9) emarks)	ring Roots 4) d Soils (C	<u>Seconda</u> Sur Dra Dry Cra (C3) <u>✓</u> Satu Stur 6) <u>✓</u> Gec FAC	ary Indicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5)
Remarks: Hydric soils are pre YDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of a 	sent.	ired: check all that ar Water-Sta Aquatic Fa True Aqua Hydrogen Presence Recent Irc Thin Muck 37) Gauge or (B8) Other (Exp No. ✓ Depth (in	oply) ined Lea auna (B1 atic Plants Sulfide C Rhizosph of Reduc on Reduc ( Surface Well Data plain in R	ves (B9) 3) 5 (B14) 2dor (C1) eres on Liv ed Iron (C cion in Tille (C7) a (D9) emarks)	ring Roots 4) d Soils (C	Second:	ary Indicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5)
Remarks: Hydric soils are pre YDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of of 	Sent.	iired: check all that ar Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized fa Presence Recent Irc Thin Muck 37) Gauge or (B8) Other (Ex) No Depth (in No Depth (in	oply) ined Lea auna (B1: atic Plants Sulfide C Rhizosphi of Reduc on Reduc s Surface Well Data plain in R ches): ches):	ves (B9) 3) 5 (B14) odor (C1) eres on Liv ed Iron (C ion in Tille (C7) a (D9) emarks)	ring Roots 4) d Soils (C	Seconda Sur Dra Dry Cra (C3) ⊻ Satu Stu 6) ⊻ Geo FAC	ary Indicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5)
Remarks: Hydric soils are pre YDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of a Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Sparsely Vegetated Concav Field Observations: Surface Water Present? Water Table Present?	sent.	ired: check all that ag Water-Sta Aquatic Fa True Aquatic Hydrogen Oxidized Fa Presence Recent Inc Thin Muck 37) Gauge or (B8) Other (Exp No Depth (in No Depth (in No Depth (in	oply) ined Lear auna (B1; atic Plants Sulfide C Rhizosphio of Reduc on Reduc sufface Well Data plain in R ches): ches): ches):	ves (B9) 3) 5 (B14) 9dor (C1) eres on Liv ed Iron (C tion in Tille (C7) a (D9) emarks)	ring Roots 4) d Soils (C	Seconda     Suri     ✓ Dra     Ory     Cra     (C3)    ✓ Satu     Stu     Of     ✓ FAC	ary Indicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5)
Remarks: Hydric soils are pre YDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of or 	sent.	iired: check all that ar Water-Sta Aquatic Fa True Aqua Hydrogen Presence Recent Irc Thin Muck 37) Gauge or (B8) Other (Exp No Depth (in No Depth (in No Depth (in No Depth (in	oply) ined Lea auna (B1: atic Plants Sulfide C Rhizosph of Reduc on Reduc o	ves (B9) 3) 5 (B14) odor (C1) eres on Liv ed Iron (C cion in Tille (C7) a (D9) emarks)	ring Roots 4) d Soils (C	Seconda          Sur          Dra          Dra          Dra          Dra          Dra          Dra          Cra          Stur         6)       ⊻         ✓       FAC         Iand Hydrolog         if available:	ary Indicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5)
Remarks: Hydric soils are pre YDROLOGY Netland Hydrology Indicators Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Sparsely Vegetated Concav Field Observations: Surface Water Present? Vater Table Present? Vater Table Present? Saturation Present? Saturati	Sent.	ired: check all that ag Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized fa Presence Recent Irc Thin Muck 37) Gauge or (B8) Other (Exp No Depth (in No Depth (in No Depth (in nonitoring well, aerial	pply) ined Lea auna (B1: auna (B1: Sulfide C Rhizosphi of Reduc on Reduc con Reduc sufface Well Data plain in R ches): ches): ches): photos, p	ves (B9) 3) 5 (B14) 9dor (C1) eres on Liv ed Iron (C ion in Tille (C7) a (D9) emarks) revious ins	ring Roots 4) d Soils (C  	Seconda         Sur         ✓         ✓         ✓         Ora         ✓         Ory  <	ary Indicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5) y Present? Yes No

Project/Site: AEP North Delphos - Rockhill Delineation	City/County: Lima/Allen		Sampling Date: 2021-07-0	1
Applicant/Owner: AEP		<sub>State:</sub> Ohio	Sampling Point: 1-AH (PEM	)
Investigator(s): E. Wilson, J. Holmes	Section, Township, Range: _	S019, T	003, R007	
Landform (hillslope, terrace, etc.): Depression	Local relief (conca	ave, convex, none)	Concave	
Slope (%): 0 Lat: 40.7627174	Long: -84.0998446		Datum: WGS 84	
Soil Map Unit Name: PmA		NWI classifie	<sub>cation:</sub> None	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🔽 No	(If no, explain in F	Remarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances"	present? Yes 🗾 No 🔜	
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing	a sampling point locati	ons. transects	s, important features, etc	2.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u> </u>	ls the Sampled Area within a Wetland? Yes No
Remarks:		

# PEM wetland portion of complex within the ROW.

**VEGETATION** – Use scientific names of plants.

00 ft -	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: <u>3</u> (A)
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4				
5				Percent of Dominant Species
J	·	- Tatal Car		That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft r )		- Total Cov	/er	Prevalence Index worksheet:
1 Cornus amomum	5	~	FACW	Total % Cover of: Multiply by:
2 Fraxinus pennsylvanica	5	~	FACW	$\begin{array}{c} \hline
	<u> </u>			EACW appeales $100$ $x_2 = 200$
3	·			FACW species $\frac{100}{200}$ $x_2 = \frac{200}{200}$
4	·			FAC species $0$ $x^3 = 0$
5	·			FACU species $0 \times 4 = 0$
5 ft r	10%	= Total Cov	/er	UPL species $0 \times 5 = 0$
Herb Stratum (Plot size: 51(1))	6E			Column Totals: 100 (A) 200 (B)
	05			
2. Carex vulpinoidea	15		FACW	Prevalence Index = B/A = 2.0
3. Juncus torreyi	10		FACW	Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5.				✓ 2 - Dominance Test is >50%
6.				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
0				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
9	·			
10	0.00%			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Weath View Obstance (Distained 30 ft r	90%	= Total Cov	/er	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)				
1	·			Hydrophytic
2				Vegetation Present? Ves No
		= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate s	sheet.)			
Hydrophytic vegetation is present.				

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the	indicator	or confirm	n the absence of in	idicators.)
Depth (inchoo)	Matrix Color (moist)	0/	Redo	x Feature	Tuno <sup>1</sup>	1 cc <sup>2</sup>	Toxturo	Pomorko
		<u>%</u>		<u>70</u>				Remarks
	101R 4/1	95	101R 4/0					
-								
-								
-								
-								
-								
<sup>1</sup> Type: C=Co	oncentration, D=Dep	pletion, RM	Reduced Matrix, M	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location: PL	=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for I	Problematic Hydric Soils':
Histosol	(A1)		Sandy	Gleyed Ma	atrix (S4)		Coast Prair	ie Redox (A16)
Histic Ep	olpedon (A2)		Sandy I	Redox (St	) )		Dark Surfac	ce (S7)
Black Hi Hydroge	SIIC (A3) on Sulfide (A4)			d Mucky Mi	50) neral (F1)		Iron-Manga	Inese Masses (F12)
Stratified	Lavers (A5)		Loamy	Gleved M	atrix (F2)		Other (Expl	lain in Remarks)
2 cm Mu	ick (A10)		Deplete	d Matrix (	F3)			,
Depleted Below Dark Surface (A11)								
Thick Da	ark Surface (A12)		Deplete	ed Dark Su	urface (F7	)	<sup>3</sup> Indicators of h	ydrophytic vegetation and
Sandy M	lucky Mineral (S1)		Redox	Depressio	ons (F8)		wetland hyd	Irology must be present,
5 cm Mu	icky Peat or Peat (S	3)					unless distu	urbed or problematic.
	Layer (If observed)	:						
Type: <u>N</u>	A						Hydric Soil Pres	sent? Yes 🖌 No
Depth (inc	ches):							
Remarks:								
Hvdric s	soils are pre	sent.						
, <b>,</b>								
HYDROLO	GY							
Wetland Hyd	drology Indicators:	:						
Primary Indic	cators (minimum of o	one is requi	red; check all that ap	oply)			Secondary In	idicators (minimum of two required)
Surface	Water (A1)		Water-Sta	ined Leav	ves (B9)		Surface	Soil Cracks (B6)
High Wa	ter Table (A2)		Aquatic Fa	auna (B13	3)		🖌 Drainage	e Patterns (B10)
Saturatio	on (A3)		True Aqua	atic Plants	(B14)		Dry-Seas	son Water Table (C2)
Water M	arks (B1)		Hydrogen	Sulfide O	dor (C1)		Crayfish	Burrows (C8)
Sedimer	nt Deposits (B2)		Oxidized I	Rhizosphe	eres on Liv	ing Roots	(C3) 🗹 Saturatio	on Visible on Aerial Imagery (C9)
Drift Dep	posits (B3)		Presence	of Reduce	ed Iron (C	4)	Stunted	or Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Recent Irc	on Reduct	ion in Tille	d Soils (C	6) 🖌 Geomor	phic Position (D2)
Iron Dep	oosits (B5)		Thin Muck	Surface	(C7)		🖌 FAC-Neu	utral Test (D5)
Inundatio	on Visible on Aerial	Imagery (B	7) Gauge or	Well Data	(D9)			
Sparsely	Vegetated Concav	e Surface (	B8) Other (Ex	plain in Re	emarks)			
Field Obser	vations:							
Surface Wate	er Present?	'es	No Depth (in	ches):		_		
Water Table	Present?	'es	No Depth (in	ches):		_		
Saturation Pr (includes cap	resent? Yoillary fringe)	'es	No <u> </u>	ches):		Wet	land Hydrology Pre	esent? Yes 🦯 No
Describe Red	corded Data (stream	n gauge, mo	onitoring well, aerial	photos, pr	revious ins	spections)	, if available:	

Remarks:

Hydrology indicators are present.

Project/Site: ^ t , ) ? n Ž , S _ ĺ 5 Ž ] , H ,   B Å Ž į ĺ ĺ , S	_ City/County:	¡êõD, ĺĺ_ñ		Sampling Date:	нн
Applicant/Owner: ^ t		Stat	<sub>te:</sub> >Žį s	Sampling Point:	H , 2 t ‰
Investigator(s): _^q, Æ įĺ] ñp, q, ĺê _]	Section, Townsl	hip, Range:	S019, T0	03, R007 –	
Landform (hillslope, terrace, etc.): S_5?_]]; ñ	Loca	al relief (concave, o	convex, none):	Η ñΒõž_	
Slope (%): Lat: 9	<sub>Lona:</sub> H q			Datum: ÆŒ‰	,
Soil Map Unit Name: t ê			NWI classificat	ion: ) ñ_	
Are climatic / hydrologic conditions on the site typical for this time of y	vear?Yes 🖌	No (lf n	o. explain in Rer	marks.)	
Are Vegetation Soil or Hydrology significant	lv disturbed?	Are "Normal Cir	cumstances" pre	esent? Yes	No
Are Vegetation Soil or Hydrology naturally p	problematic?	(If needed, expl	ain any answers	in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showin	ig sampling p	oint locations	, transects,	important fea	tures, etc.
Hydrophytic Vegetation Present? Yes No	_				
Hydric Soil Present? Yes Ves No	_ Is the Sa	ampled Area			
Wetland Hydrology Present? Yes <u>Ves</u> No	within a	Wetland?	Yes	No	
Remarks:			a na si a		<b>—</b>
t‱ %ponio_mib∡_,con;,}njt,^!,¢nio_no_ini,γi,r 	nn_?einji	m_ <u>?</u> n_no, <b>e</b> −,	q <i>,</i> =_n io	njkg i n Z [ ka	Æq
VEGETATION – Use scientific names of plants.					
Absolute	e Dominant Ind	icator Dominar	nce Test worksl	neet:	
Tree Stratum (Plot size:, • II, ?) <u>% Cove</u>	er Species? Si	tatus Number	of Dominant Spe	cies	(4)
1		That Are	OBL, FACW, or	FAC:	(A)
2		Total Nu	mber of Dominar	nt	
۵			Across All Strata		(B)
5		Percent of	of Dominant Spe	cies	
···	= Total Cover		OBL, FACVV, OF	FAC:	(A/B)
Sapling/Shrub Stratum (Plot size:, • n , ?)		Prevaler	nce Index works	sheet:	
1. <u>^? õ « ; ñ }], 5 _ ñ ñ ] ° l ž õ ñ ; B õ</u>	^ ^	HÆ Tota	I % Cover of:	Multiply	oy:
2. <u>H</u> ? ñ } ] , õ ê ê } ê	_ <u> </u>	HÆ OBL spe	cies	x 1 =	
3. <u> Zôëń}], lônB_ lônô</u>		HÆ FACW s	pecies	x 2 =	
4		FAC spe	cies	x 3 =	
5		FACU sp		x 4 =	
Herb Stratum (Plot size: , • n , ? )	_ = Total Cover		cies	x 5 =	(B)
1. tŽõĺõ?;],õ?}ñN;ñõB_õ	<ul> <li>^</li> </ul>	HÆ		(A)	(D)
2. Hõ?_«,ĺ}?¡Nõ	<b>v</b> >	@ Pre	valence Index =	= B/A =	
3. ^?õ«;ñ}],5_ññ]°ĺžõñ;Bõ		HÆ Hydroph	ytic Vegetation	Indicators:	
4		I - R	apid Test for Hy	drophytic Vegetat	ion
5		2 - D	ominance Test i	s >50%	
6		🖌 3 - P	Prevalence Index	is ≤3.0 <sup>1</sup>	
7		4 - M	lorphological Ad	aptations <sup>1</sup> (Provid	e supporting
8		Prob	lematic Hydroph	vtic Vegetation <sup>1</sup> (I	Explain)
9				, in the second s	
10		Indicato	rs of hydric soil a	and wetland hydro	logy must
Woody Vine Stratum (Plot size:, • n , ?)	_ = Total Cover	be prese	nt, unless disturt	ped or problemation	
1		Hydroph	vtic		
2		Vegetati	on	<b>V</b>	
	_ = Total Cover	Present	Yes	No	
Remarks: (Include photo numbers here or on a separate sheet.)					
°N? 5ްpž;B;,nõn;;15ñ?; 1 ñno:					

Profile Description:	(Describe to the de	pth needed to document t	the indicator	or confirm	the absence of	findicators.)
Depth	Matrix or (moist) %	Color (moist) %	tures 6 Type <sup>1</sup>		Texture	Bemarks
<u>- Ó</u>			<u> </u>	t D		Komuno
	<u> </u>			<u> </u>		
-						
-						
<sup>1</sup> Type: C=Concentra	ation, D=Depletion, RN	1=Reduced Matrix, MS=Ma	sked Sand Gra	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
Hydric Soil Indicate	ors:				Indicators fo	or Problematic Hydric Soils":
Histosol (A1)	(4.0)	Sandy Gleyed	d Matrix (S4)		Coast Pr	airie Redox (A16)
Black Histic (A3)	(AZ)	Sandy Redox Stripped Mate	(55) iv (56)		Dark Sur	Tace (S7)
Hydrogen Sulfid	) e (A4)	Loamy Mucky	Mineral (F1)		ITOIT-IMAIN	allow Dark Surface (TF12)
Stratified Lavers	(A5)	Loamy Gleve	d Matrix (F2)		Other (E)	xplain in Remarks)
2 cm Muck (A10	)	Depleted Mat	rix (F3)			,
Depleted Below	Dark Surface (A11)	Redox Dark S	Surface (F6)			
Thick Dark Surfa	ace (A12)	Depleted Dar	k Surface (F7)		<sup>3</sup> Indicators of	f hydrophytic vegetation and
Sandy Mucky M	ineral (S1)	Redox Depre	ssions (F8)		wetland h	hydrology must be present,
5 cm Mucky Pea	at or Peat (S3)				unless di	isturbed or problematic.
Restrictive Layer (in	observed):					
Type: _) D					Hvdric Soil P	resent? Yes 🖌 No
Depth (inches): _						
° N ? ¡]B ; I	]õ, ? <u>5</u> ,? _ ] _ ŕ	inq				
HYDROLOGY						
Wetland Hydrology	Indicators:					
Primary Indicators (n	ninimum of one is requ	uired; check all that apply)			Secondary	Indicators (minimum of two required)
Surface Water (	A1)	Water-Stained L	eaves (B9)		Surfac	e Soil Cracks (B6)
High Water Tabl	e (A2)	Aquatic Fauna (	B13)		🖌 Draina	age Patterns (B10)
Saturation (A3)		True Aquatic Pla	ants (B14)		Dry-Se	eason Water Table (C2)
🖌 Water Marks (B	1)	Hydrogen Sulfid	e Odor (C1)		Crayfis	sh Burrows (C8)
Sediment Depos	sits (B2)	Oxidized Rhizos	pheres on Liv	ing Roots (	C3) Satura	ation Visible on Aerial Imagery (C9)
Drift Deposits (B	(3)	Presence of Rec	duced Iron (C4	ł)	Stunte	ed or Stressed Plants (D1)
Algal Mat or Cru	st (B4)	Recent Iron Rec	luction in Tille	d Soils (C6)	) 🖌 Geom	orphic Position (D2)
Iron Deposits (B	5)	Thin Muck Surfa	ace (C7)		🖌 FAC-N	leutral Test (D5)
Inundation Visib	le on Aerial Imagery (I	37) Gauge or Well D	Data (D9)			
Sparsely Vegeta	ited Concave Surface	(B8) Other (Explain in	n Remarks)			
Field Observations						
Surface Water Prese	ent? Yes	No Depth (inches):		-		
Water Table Present? Yes No Depth (inches):				-		
Saturation Present? (includes capillary fri	Yes nge)	No Depth (inches):		_ Wetla	ind Hydrology F	Present? Yes No
Describe Recorded [	Data (stream gauge, n	onitoring well, aerial photos	s, previous ins	pections), i	f available:	
Remarks:						
°N?Í₽	ñ N ; R ñ m ??	5 <b>1</b> ?]ñna				
		איייי איי איי איי איי איי איי איי איי א				

Project/Site: 1730 AEP North Delphos - Rockhill Delineation	City/County: Lima/Al	len	Sampling Date: 2021-12-09
Applicant/Owner: AEP		State: Ohio	Sampling Point: 1-AH PFO
Investigator(s): C. Kwolek, E. Wilson	Section, Township, Ra	nge: <u>S019 T003 R007</u>	7
Landform (hillslope, terrace, etc.): Depression	Local relief	(concave, convex, none):	Concave
Slope (%): 1 Lat: 40.763052	Long: 84.09975		Datum: WGS 84
Soil Map Unit Name: Pewamo silty clay loam, 0 to 1 percent	t slopes (PmA)	NWI classific	ation: N/A
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🗾 No _	(If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are	Normal Circumstances" p	resent? Yes No
Are Vegetation , Soil , or Hydrology naturally pr	oblematic? (If ne	eded, explain any answer	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point l	ocations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes <u>Ves</u> No			
Hydric Soil Present? Yes 🔽 No	is the Sampled	Area	
Wetland Hydrology Present? Yes <u>Ves</u> No	within a Wetlar	nd? Yes	No
Remarks:			
perennial stream. All three wetland criteria present.	present within fore	sted depression and	adjacent to small
VEGETATION – Use scientific names of plants.			
Absolute	Dominant Indicator	Dominance Test works	sheet:
Tree Stratum (Plot size: 30 ft r ) % Cover	Species? Status	Number of Dominant Sp	becies
Fraxinus pennsylvanica	$-\frac{\checkmark}{\checkmark}$ FAC FAC	That Are OBL, FACW, c	or FAC: <u>4</u> (A)
		Total Number of Domina	ant to: 4 (P)
4.		Species Across All Strat	(D)
5		Percent of Dominant Sp	pecies
95%	_ = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r )		Prevalence Index work	ksheet:
		Total % Cover of:	Multiply by:
2		OBL species 90	$x_1 = 0$
3		FAC species 75	x 3 = 225
4		FACU species 0	$x_{4} = 0$
30%	= Total Cover	UPL species 0	x 5 = 0
Herb Stratum (Plot size: 5 ft r )		Column Totals: 165	(A) 405 (B)
1. Phalaris arundinacea 40	FACW		2.5
2		Prevalence Index	= B/A = <u>2.5</u>
3		Hydrophytic Vegetatio	on Indicators:
4		2 - Dominance Test	tic >50%
5		✓ 2 - Dominance res	213 - 50%
7		4 - Morphological A	daptations <sup>1</sup> (Provide supporting
8		data in Remarks	or on a separate sheet)
g		Problematic Hydrop	ohytic Vegetation <sup>1</sup> (Explain)
10.			
Woody Vine Stratum (Plot size: 30 ft r )	= Total Cover	<sup>1</sup> Indicators of hydric soil be present, unless distu	and wetland hydrology must rbed or problematic.
1		Hydrophytic	
2		Vegetation	
	_ = Total Cover	Present? Yes	5 <u> </u>
Remarks: (Include photo numbers here or on a separate sheet.)			

Profile Description: (Describe to the depth needed to d	locument the	indicator	or confirm	n the absence o	of indicators.)
Depth Matrix	Redox Feature	s			,
(inches) Color (moist) % Color (mois	t) %	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
0 - 20 10YR 3/1 90 7.5YR 5/8	10	С	PL / M	Clay Loam	
-					
-					
				21 +	Di - Dava Lizia a MaMatain
Type: C=Concentration, D=Depletion, RM=Reduced Matr	IX, INIS=Masked	a Sand Gr	ains.	Indicators f	PL=Pore Lining, M=Matrix.
Historol (A1)	ndy Cleved M	atrix (SA)		Coast P	rairie Redox (A16)
Histic Epipedon (A2)	ndv Redox (Sf	5)		Dark Su	Inface (S7)
Black Histic (A3)				Iron-Mai	nganese Masses (F12)
Lo	amy Mucky Mi	neral (F1)		Very Sh	allow Dark Surface (TF12)
Stratified Layers (A5) Lo	amy Gleyed M	atrix (F2)		Other (E	Explain in Remarks)
2 cm Muck (A10) De	pleted Matrix (	F3)			
Depleted Below Dark Surface (A11)	dox Dark Surfa	ace (F6)		2	
Thick Dark Surface (A12) De	pleted Dark Su	Inface (F7	)	°Indicators o	of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Re	dox Depressio	ns (F8)		wetland	hydrology must be present,
S cm Mucky real of real (SS)				uniess d	isturbed of problematic.
Denth (inches):				Hydric Soil F	Present? Yes 🖌 No
Pomarke:					
Hydric soil present					
HIDROLOGI					
Wetland Hydrology Indicators:					
Primary Indicators (minimum of one is required; check all the	nat apply)			Secondar	y Indicators (minimum of two required)
Surface Water (A1)	r-Stained Leav	es (B9)		Surfa	ce Soil Cracks (B6)
High Water Table (A2)	tic Fauna (B13	)		C Drain	age Patterns (B10)
Saturation (A3)	Aquatic Plants	(B14)		Dry-S	Season Water Table (C2)
Water Marks (B1) Hydro	ogen Sulfide O	dor (C1)		Crayf	ish Burrows (C8)
Sediment Deposits (B2)	zed Rhizosphe	eres on Liv	ing Roots	(C3) Satur	ation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Prese	ence of Reduce	ed Iron (C	4)	Stunt	ed or Stressed Plants (D1)
Algal Mat or Crust (B4) Rece	nt Iron Reduct	on in Tille	d Soils (C	6) 🖌 Geom	norphic Position (D2)
Iron Deposits (B5) Thin	Muck Surface	(C7)		FAC-	Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7) Gaug	e or Well Data	(D9)			
Sparsely Vegetated Concave Surface (B8) Other	r (Explain in Re	emarks)			
Field Observations:					
Surface Water Present? Yes No Dep	th (inches): 2				
Water Table Present? Yes No Dep	th (inches): 0		-1		
Saturation Present? Yes <u>V</u> No <u>Dep</u>	th (inches): 0		_   Wet	land Hydrology	Present? Yes V No
Describe Recorded Data (stream gauge, monitoring well, a	erial photos, pr	evious ins	pections).	if available:	
,	, , <b>p</b> .				
Remarks:					
Hydrology procent					

Project/Site: AEP North Delphos - Rockhill Delineation	City/County: L	_ima/Allen	Samp	pling Date: 2021-07-01		
Applicant/Owner: AEP		S	tate: Ohio Samp	pling Point: 1-AH/AI UPL		
Investigator(s): E. Wilson, J. Holmes	Section, Town	nship, Range:	S019, T003,	R007		
Landform (hillslope, terrace, etc.): Upland	Lo	cal relief (concave	e, convex, none): <u>Non</u>	e		
Slope (%): 0 Lat: 40.7631238	Long: -84.10	00015	Datur	m: WGS 84		
Soil Map Unit Name: PmA			NWI classification:	None		
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes 🔽	No (li	f no, explain in Remark	(S.)		
Are Vegetation, Soil, or Hydrology signific	antly disturbed?	Are "Normal (	Circumstances" present	t? Yes 🖌 No		
Are Vegetation, Soil, or Hydrology natural	y problematic?	(If needed, ex	kplain any answers in R	lemarks.)		
SUMMARY OF FINDINGS – Attach site map show	ving sampling	point location	ns, transects, imp	ortant features, etc.		
Hydrophytic Vegetation Present? Yes No						
Hydric Soil Present? Yes No	Is the a	Sampled Area	Vac	No V		
Wetland Hydrology Present? Yes No			Tes			
Remarks: Upland sample point for complex wetland 1-AH and PEM wetland 1-AI.						
VEGETATION – Use scientific names of plants.				]		
Abso	olute Dominant In	dicator Domin	nance Test worksheet:	:		
1 Robinia pseudoacacia 10	ver <u>species?</u> _	ACU   Numbe	er of Dominant Species	1 (A)		
2 Prunus serotina 5		ACU		·· · · · · · · · · · · · · · · · · · ·		
		Total N	Number of Dominant			

3				Total Number of Dominant	
4					9
5				Percent of Dominant Species	
J		- Total Co		That Are OBL, FACW, or FAC: (A	/B)
Sapling/Shrub Stratum (Plot size: 15 ft r )	1070	_ = 10(a) C0	vei	Prevalence Index worksheet:	
1. Lonicera morrowii	35	~	FACU	Total % Cover of: Multiply by:	
2. Rhamnus cathartica	10	~	FAC	OBL species 0 x 1 = 0	
3. Robinia pseudoacacia	5		FACU	FACW species <u>0</u> x 2 = <u>0</u>	
4				FAC species <u>15</u> x 3 = <u>45</u>	
5				FACU species <u>85</u> x 4 = <u>340</u>	
	50%	= Total Co	ver	UPL species <u>0</u> x 5 = <u>0</u>	
Herb Stratum (Plot size: 5 ft r )		-		Column Totals: 100 (A) 385 (	B)
1. Tussilago farfara	20		FACU		-
2. Trifolium repens	10	_ <u> </u>	FACU	Prevalence Index = B/A = <u>3.9</u>	
3. Persicaria virginiana	_ 5		FAC	Hydrophytic Vegetation Indicators:	
4				1 - Rapid Test for Hydrophytic Vegetation	
5				2 - Dominance Test is >50%	
6				3 - Prevalence Index is ≤3.0 <sup>1</sup>	
7.				4 - Morphological Adaptations <sup>1</sup> (Provide support	ting
8.				data in Remarks or on a separate sheet)	
9.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
10.					
	35%	= Total Co	ver	<sup>1</sup> Indicators of hydric soil and wetland hydrology mus	t
Woody Vine Stratum (Plot size: 30 ft r )				be present, unless disturbed or problematic.	
1				Hydrophytic	
2				Vegetation	
		_ = Total Co	ver	Present? Yes No	
Remarks: (Include photo numbers here or on a separate	sheet.)				
No hydrophytic vegetation present	t.				

Profile Description: (Describe to the depth needed to document the indicator or co	nfirm the absence of indicators.)
Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type <sup>1</sup> Loc	c <sup>2</sup> TextureRemarks
0 - 20 10YR 4/3 100	Silt Loam
·	
-	
'Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soll Indicators:	Indicators for Problematic Hydric Solis":
Histosol (A1) Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
Histic Epipedon (A2) Sandy Redox (S5)	Dark Surface (S7)
Black Histic (A3) Stripped Matrix (S6)	Iron-Manganese Masses (F12)
Stratified Lavers (A5)	Other (Explain in Remarks)
2 cm Muck (A10) Depleted Matrix (F3)	
Depleted Below Dark Surface (A11) Redox Dark Surface (F6)	
Thick Dark Surface (A12) Depleted Dark Surface (F7)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Redox Depressions (F8)	wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)	unless disturbed or problematic.
Restrictive Layer (if observed):	
Туре: _N/A	
Depth (inches):	Hydric Soll Present? Yes No
Remarks:	
No hydrio opilo proport	
No hydric solis present	
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1) Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
High Water Table (A2) Aquatic Fauna (B13)	Drainage Patterns (B10)
Saturation (A3) True Aquatic Plants (B14)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Cravfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Re	oots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soil	s (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9)	
Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks)	
Field Observations:	
Surface Water Present? Yes No Control Depth (inches):	
Water Table Present? Yes No V Depth (inches):	
Saturation Present? Yes No V Denth (inches):	Wetland Hydrology Present? Ves No V
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspection	ons), if available:

Remarks:

# No hydrology present

Project/Site: AEP North Delphos - Rockhill Delineation	City/County: Lima/Allen		Sampling Date:	2021-07-01
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-Al
Investigator(s): E. Wilson, J. Holmes	Section, Township, Range: _	S019, T	003, R007	
Landform (hillslope, terrace, etc.): Depression	Local relief (conc	ave, convex, none):	Concave	
Slope (%): 0 Lat: 40.7630983	Long: -84.1001589		Datum: WGS 8	4
Soil Map Unit Name: PmA		NWI classific	ation: None	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🗾 No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norm	al Circumstances" p	oresent? Yes	No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing	a sampling point locat	ons. transects	. important fe	atures. etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u> </u>	No No No	Is the Sampled Area within a Wetland?	Yes No	
Remarks:					

# Small PEM wetland alongside intermittent stream 1-018.

VEGETATION - Use scientific names of plants.

00 ft -	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft r</u> )	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 3 (A)
2				Total Number of Deminent
3				I otal Number of Dominant Species Across All Strata: 3 (B)
۵				
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: <u>100</u> (A/B)
Conting (Christian Chief and 15 ft r		= Total Cov	er	Brovalance Index worksheet:
<u>Saping/Shiub Stratum</u> (Plot size)	5	4		
			TACW	
2. Fraxinus pennsylvanica	5		FACW	OBL species $5$ $x = 5$
3				FACW species <u>95</u> x 2 = <u>190</u>
4				FAC species 0 x 3 = 0
5				FACU species $0 \qquad x 4 = 0$
··	10%	= Total Cov		UPL species $0$ x 5 = $0$
Herb Stratum (Plot size: 5 ft r )	1070	- 10tai 00v	CI	Column Totals: $100$ (A) $195$ (B)
Phalaris arundinacea	70	~	FACW	
2 Impatiens capensis	15		FACW	Prevalence Index = $B/A = 2.0$
2. Carex frankij	5		OBL	Hydrophytic Vegetation Indicators:
				✓ 1 - Rapid Test for Hydronbytic Vegetation
4				$\checkmark$ 2 - Dominance Test is >50%
5				
6				y 3 - Prevalence Index is ≤3.0
7				4 - Morphological Adaptations' (Provide supporting
8				Cata III Remarks of on a separate sheet)
9				Problematic Hydrophytic Vegetation (Explain)
10.				
	90%	= Total Cov		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )		- 10(a) 001	01	be present, unless disturbed or problematic.
1				Under a la stin
				Vegetation
2				Present? Yes No
		= Total Cov	er	
Remarks: (include photo numbers here or on a separate s	sneet.)			
Hydrophytic vegetation is present.				

#### 2011

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Fatures Color (moist) % Dype Loc <sup>2</sup> Texture Remarks O 20 10YR 3/1 95 10YR 4/3 5 C M stript Curvican 	Profile Description: (Describe to the depth needed to document the indicator or confirm the absorption: (Color (moist) % Vertex (Color (Colo	Sampling Point: 1-AI
Depth       Matrix       Concentration (model)       %       Type       Loc <sup>2</sup> Texture       Remarks         0 - 20       10YR 3/1       95       10YR 4/3       5       C       M       site Caruta	Depth (Inches)       Matrix Color (moisi)       %6 %       Type <sup>1</sup> Loc <sup>2</sup> Textur         0 - 20       10YR 3/1       95       10YR 4/3       5       C       M       sity clay L         -	ence of indicators.)
(inches)       Color (moist)       %       Type       Loc <sup>+</sup> Texture       Remarks         0 · 20       10YR 3/1       95       10YR 4/3       5       C       M       stry cay Leam         -       -       -       -       -       -       -       -       -         - <td< td=""><td>(inches)         Color (moist)         %         Type!         Loc<sup>2</sup>         Textur           0 - 20         10YR 3/1         95         10YR 4/3         5         C         M         sitry clary L           .   </td><td></td></td<>	(inches)         Color (moist)         %         Type!         Loc <sup>2</sup> Textur           0 - 20         10YR 3/1         95         10YR 4/3         5         C         M         sitry clary L           .	
0 - 20         10YR 3/1         95         10YR 4/3         5         C         M         Stry Clay Leam           -	0 - 20         10YR 3/1         95         10YR 4/3         5         C         M         sity Cavy L           .	re Remarks
Image: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>3</sup> Location: PL=Pore Lining, M=Matrix.         Image: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>3</sup> Location: PL=Pore Lining, M=Matrix.         Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>2</sup> :         Histic Epipedon (A2)	Image: Solution of the second sec	_oam
i       i       i       i         i <sup>1</sup> Type:       C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       i <sup>2</sup> Location:       PL=Pore Lining, M=Matrix.         Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>1</sup> :       Indicators for Problematic Hydric Soils <sup>2</sup> :         Histosi (A1)       Sandy Redox (55)       Coast Prairie Redox (A16)       Inor-Manganee Masses (F12)         Black Histic Epipedon (A2)       Sandy Redox (55)       Dark Surface (S7)         Black Histic (A3)       Stripped Matrix (F1)       Very Shallow Dark Surface (TF12)         2 cm Muck (A10)       Depleted Matrix (F2)       Other (Explain in Remarks)         2 cm Muck (A10)       Paelox Dark Surface (F6)       Indicators of hydrophytic vegetation and wetland hydroiogy must be present, urless disturbed or problematic.         G andry Mucky Mineral (S1)       Depleted Dark Surface (F7)       Indicators of hydrophytic vegetation and wetland hydroiogy must be present, urless disturbed or problematic.         Bestrictive Layer (if observed):       Type: NA       Medicators (Minimum of two required)	.       .	
''Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       ^Location: PL=Pore Lining, M=Matrix.         ''Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       `'Location: PL=Pore Lining, M=Matrix.         ''Histic Epipedon (A2)       Sandy Gleyed Matrix (S4)	Image: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Loc         Hydric Soil Indicators:       Indica         Histosol (A1)	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.         Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>2</sup> :         Histosi (A1)       Sandy Gleyed Matrix (S4)       Dark Surface (S7)         Black Histic (A3)       Stripped Matrix (S6)       Dark Surface (S7)         Black Histic (A3)       Stripped Matrix (S6)       Ioarny Mucky Mineral (F1)       Very Shallow Dark Surface (F12)         2 cm Muck (A10)       Depleted Matrix (F2)       Other (Explain in Remarks)         2 cm Muck (A10)       Depleted Matrix (F3)         Bepleted Below Dark Surface (A11)       Pepleted Matrix (F3)         Bandy Mucky Mineral (S1)       Redox Dark Surface (F7)         * Thick Dark Surface (S1)       Redox Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F6)         wetland hydrology must be present,       unless disturbed or problematic.         Restrictive Layer (I observed):       Type: <u>N/A</u> Type: <u>N/A</u> Stripped Matrix (B13)         9       Surface Soil Cracks (B6)         4typer C soils are present.       Surface Soil Cracks (B6)         YDROLOGY       Aquatic Fauna (B13)       Surface Soil Cracks (B6)         Surface Water (A1)       Water-Stained Leaves (B9)       Surface Soil Cracks (B6)	Image: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       3 <sup>1</sup> Loc         Image: Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       3 <sup>1</sup> Loc         Histosol (A1)       Sandy Gleyed Matrix (S4)       Co         Histic Epipedon (A2)       Sandy Redox (S5)       Di         Black Histic (A3)       Stripped Matrix (S6)       Inr         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)       VA         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       O         2 cm Muck (A10)       Depleted Matrix (F2)       O         2 cm Muck (A10)       Depleted Dark Surface (A12)       Depleted Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       3 <sup>1</sup> Idic         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       we         mestrictive Layer (If observed):       Type: M/A       Depheted Matrix (F3)       Hydric Soils are present.         Hydric Soils are present.         Hydric Soils are present.         Hydric Plant (Pause (B1)       Vater-Stained Leaves (B9)         Gleader Table (A2)       Aquatic Flaua (B13)       V         Satuation (A3)       True Aquatic Plaua (B13)       V         Statuation (A3)       True Aquatic Plaua (B14)       Vater	
''Type: C-Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.         ''Hydric Soil Indicators:       Indicators for Problematic Hydric Soils':       Indicators for Problematic Hydric Soils':         ''Histic Epipedon (A2)       Sandy Redox (S5)       Dark Surface (S7)         Black Histic (A3)       Stripped Matrix (S0)       ''Lorant's Surface (S7)         Hydroge Sulfide (A4)       Loamy Medxy (Mioral (F1)       Very Shallow Dark Surface (F12)         - Hydrogen Sulfade (A4)       Depleted Matrix (F2)       Other (Explain in Remarks)         - Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)       ''Indicators of hydrophytic vegetation and wetgetation and wetgetation and wetgetation and suffice (S1)         - Sandy Mucky Mineral (S1)       Redox Depressions (F8)       wetland hydrology must be present, unless disturbed or problematic.         Bestrictive Layer (if observed):       Type: IV/A       wetland hydrology must be present, unless disturbed or problematic.         Wetland Hydrology Indicators:       Primary Indicators (minimum of noo required)       Surface Soil Cracks (B6)         - Surface Water (A1)       Water-Stained Leaves (B9)       Surface Soil Cracks (B6)         - Hydrogen Sufface (A12)       Aquatic Feana (B13)       Dry-Season Water Table (C2)         - Water Marks (B1)       - Hydrogen Sufface (C1)       Surface Soil Cracks (B6)	-       -       -       -         -       -       -       -       -         -       -       -       -       -       -         -       -       -       -       -       -       -         -	
'Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix, Hidicators for Problematic Hydric Soils': Hidicators for Problematic Hydric Soils': Hidicators for Problematic Hydric Soils': Hidicators for Problematic Hydric Soils': Hydrogen Suffice (A2) Black Hitsic (A3) Stratified Layers (A5) Loamy Mucky Mineral (F1) Z om Muck (A10) Depleted Matrix (F2) Loamy Mucky Mineral (F1) Depleted Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Depleted Matrix (F2) Depleted Matrix (F2) Depleted Matrix (F3) Depleted Dark Surface (F1) Sandy Mucky Mineral (S1) S om Mucky Pleat or Peat (S3) Redox Depressions (F8) Watre Soil Present? Yes No Remarks: Hydric Soil Present? Yes No Surface Soil Cracks (B6) Juricacors (minimum of one is required: check all that apply) Surface Soil Cracks (B6) Hydrology Indicators: Hydric Soils are present. Watra Hydrology Indicators (B1) Surface Soil Cracks (B6) Juricace Soil Soil Soil Cracks (B6) Juricace Soil Soil Soil Cracks (B6) Juricace Soil Soil Soil Cracks (B6) Juricace Croil Cracks (B6) Juricace Croil Cracks (B7) Saturation Crash Sone Water Table (C2) Juricace Croil Cracks (B7) Saturation Crash Sone Water Table (C2) Juricace Croil Cracks	i       i	
''Type: C-Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       ''Location: PL=Pore Lining, M=Matrix.         ''Hydro Soil Indicators:       Indicators for Problematic Hydric Soils':         - Histosol (A1)	Image: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       ?Loc         Hydric Soil Indicators:       Indica         Histosol (A1)       Sandy Gleyed Matrix (S4)       C.         Histosol (A1)       Sandy Gleyed Matrix (S4)       C.         Black Histic (A3)       Stripped Matrix (S6)       In         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)       Vi         Stratified Layers (A5)       Loamy Gleyed Matrix (F3)       O         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)       Thick Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Indica         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       ur         Stripper Matrix (S4)       ur       Virace (Y12)       Popleted Dark Surface (F7)         Type: N/A       Depleted Dark Surface (F7)       Indica         Beach Mucky Mineral (S1)       Redox Depressions (F8)       ur         Remarks:       Hydric Soils are present.       Hydric         Primary Indicators (minimum of one is required: check all that apply)       Sec         Saturation (A3)       True Aquatic Plants (B13)       V         Saturation (A3)       True Aquatic Plants (B14)       Vater Matrix (B2)       Oxidized Matrix (D4)       Sec	
Image: Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix. Hidicators: Hidicators for Problematic Hydric Solls <sup>1</sup> : Hidicators for Problematic Hydric Solls <sup>1</sup> : Hydric Soll Advice (S1) Depleted Matrix (F3) Depleted Below Dark Surface (A12) Depleted Dark Surface (F7) Thick Dark Surface (A12) S of Mucky Mineral (S1) S of Mucky Peat or Peat (S3) Hydric Soil Present? Yes <u>v</u> No Remarks: Hydric Soil Present? Yes <u>v</u> No Surface Water (A1) Surface Water (A1) Saturation (A3) Surface Water (A1) Saturation (A3) Saturation (A3) Saturation (A3) Saturation (A3) Saturation (A3) Midicators (B1) Hydrice Soils (B2) Midicator Surface (B1) Aqualit Plants (B14) Mydrogen Sulfide Odor (C1) Saturation (A3) Saturation (A3) Miter Marks (B1) Aqualit Plants (B14) Mydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Miter Soll Cracks (B4) Mydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) Saturation	<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       ?Loc         Hydric Soil Indicators:       Indica         Histosol (A1)       Sandy Gleyed Matrix (S4)       C         Histo Epipedon (A2)       Sandy Redox (S5)       D         Black Histic (A3)       Stripped Matrix (S6)       In         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       O         2 cm Muck (A10)       Depleted Matrix (F3)       O         Depleted Below Dark Surface (A11)       ✓ Redox Dark Surface (F7) <sup>3</sup> Indic         Thick Dark Surface (A12)       Depleted Dark Surface (F7) <sup>3</sup> Indic         Sandy Mucky Mineral (S1)       Redox Dark Surface (F7) <sup>3</sup> Indic         Type: N/A       Depleted Dark Surface (F7) <sup>3</sup> Indic         Restrictive Layer (if observed):       Type: N/A       Hydric         Type: N/A       Depth (inches):       Hydric         Remarks:       Hydric soils are present.       Hydrogen Sulfide Codor (C1)       ✓         Muter Marks (B1)       Hydrogen Sulfide Codor (C1)       ✓       Saturation (A3)       ✓         Surface Water (A1)       Water-Stained Leaves (B9)       ✓       ✓         Might Water Table (A2)       Aquatic Flauna (B13)       ✓         Saturation (A3)	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>1</sup> Location: PL=Pore Lining, M=Matrix.           Hydric Soil Indicators:         Indicators for Problematic Hydric Soils*:           Histosci (A1)	<sup>1</sup> Type:         C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Loc           Hydric Soil Indicators:         Indica           — Histosol (A1)	
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils*:	Hydric Soil Indicators:       Indica	ation: PL=Pore Lining, M=Matrix.
	Histosol (A1)      Sandy Cleyed Matrix (S4)      C	tors for Problematic Hydric Soils':
	Hitsic Epipedon (A2)      Sandy Redox (S5)      D	oast Prairie Redox (A16)
Stripped Matrix (S6)	Black Histic (A3)	ark Surface (S7)
		on-Manganese Masses (F12)
		ery Shallow Dark Surface (TF12)
		ther (Explain in Remarks)
		ators of hydrophytic vegetation and
5 cm Mucky Peat or Peat (S3)       unless disturbed or problematic.         Restrictive Layer (if observed): Type: N/A Depth (inches):	5 cm Mucky Peat or Peat (S3)       ur         Restrictive Layer (if observed):	etland hydrology must be present,
Restrictive Layer (if observed):       Type: N/A         Depth (inches):	Restrictive Layer (if observed):         Type:       N/A         Depth (inches):	nless disturbed or problematic.
Type:       N/A         Depth (inches):	Type:       N/A         Depth (inches):	
Depth (inches):       Hydric Soil Present?       Yes       No         Remarks:         Hydric soils are present.         IYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)       Secondary Indicators (minimum of two required)	Depth (inches):       Hydric         Remarks:       Hydric soils are present.         HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Sec         Surface Water (A1)       Water-Stained Leaves (B9)         High Water Table (A2)       Aquatic Fauna (B13)         Saturation (A3)       True Aquatic Plants (B14)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)         Sediment Deposits (B2)       ✓ Oxidized Rhizospheres on Living Roots (C3)         ✓ Drift Deposits (B3)       Presence of Reduced Iron (C4)         Iron Deposits (B5)       Thin Muck Surface (C7)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Field Observations:       Yes       No         Surface Water Present?       Yes       No         Water Subla Densent?       Yes       Depth (inches):	
Remarks:         Hydric soils are present.         Hydric soils are present.         Surface soils are present.         Secondary Indicators:         Primary Indicators (minimum of one is required: check all that apply)       Secondary Indicators (minimum of two required)	Remarks:         Hydric soils are present.         Hydric soils are present.         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)       Sec         Surface Water (A1)       Water-Stained Leaves (B9)         High Water Table (A2)       Aquatic Fauna (B13)         Saturation (A3)       True Aquatic Plants (B14)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)         Sediment Deposits (B2)       ✓ Oxidized Rhizospheres on Living Roots (C3)         ✓ Drift Deposits (B3)       Presence of Reduced Iron (C4)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)         Iron Deposits (B5)       Thin Muck Surface (C7)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Field Observations:         Surface Water Present?       Yes       No       ✓         Mater Suble Deposit?       Yes       Depth (inches):       Image: Surface Water Present?	Soil Present? Yes No
Hydric soils are present.         Hydric soils are present.         Hydric soils are present.         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)       Secondary Indicators (minimum of two required)	Hydric soils are present.         HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)       Sec	
Hydric solis are present.         Hydric solis are present.         Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)       Secondary Indicators (minimum of two required)         Surface Water (A1)       Water-Stained Leaves (B9)       Surface Soil Cracks (B6)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         Prift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)	Hydric solis are present.         HyDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)       Sec	
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)       Secondary Indicators (minimum of two required)         Surface Water (A1)       Water-Stained Leaves (B9)       Surface Soil Cracks (B6)         High Water Table (A2)       Aquatic Fauna (B13)       Urainage Patterns (B10)         Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         Prift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       FAC-Neutral Test (D5)	HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Sec	
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)       Secondary Indicators (minimum of two required)	HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Sec	
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required)	HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)       Sec	
Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)       Secondary Indicators (minimum of two required)	Wetland Hydrology Indicators:       Sec         Primary Indicators (minimum of one is required; check all that apply)       Sec	
Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)       Secondary Indicators (minimum of two required)         Surface Water (A1)       Water-Stained Leaves (B9)       Surface Soil Cracks (B6)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Inon Deposits (B5)       Thin Muck Surface (C7)       FAC-Neutral Test (D5)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)	Wetland Hydrology Indicators:       Primary Indicators (minimum of one is required; check all that apply)       Sec	
Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required)         Surface Water (A1)       Water-Stained Leaves (B9)       Surface Soil Cracks (B6)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       ✓ Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         ✓ Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunde or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       ✓ Geomorphic Position (D2)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       FAC-Neutral Test (D5)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)       Other (Explain in Remarks)	Primary Indicators (minimum of one is required: check all that apply)       Sec         Surface Water (A1)       Water-Stained Leaves (B9)         High Water Table (A2)       Aquatic Fauna (B13)         Saturation (A3)       True Aquatic Plants (B14)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)         Sediment Deposits (B2)       ✓         Oridized Rhizospheres on Living Roots (C3)         ✓       Presence of Reduced Iron (C4)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)         Iron Deposits (B5)       Thin Muck Surface (C7)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Field Observations:       Yes         Surface Water Present?       Yes         Veg       Yes	
	Surface Water (A1)       Water-Stained Leaves (B9)         High Water Table (A2)       Aquatic Fauna (B13)         Saturation (A3)       True Aquatic Plants (B14)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)         Sediment Deposits (B2)       ✓         Drift Deposits (B3)       Presence of Reduced Iron (C4)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)         Iron Deposits (B5)       Thin Muck Surface (C7)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Field Observations:       Yes         Surface Water Present?       Yes         No       Yes         No       Yes         No       Yes	condary Indicators (minimum of two required)
High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       ✓       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         ✓       Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       ✓       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       ✓       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       FAC-Neutral Test (D5)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)       Image Patterns (B10)		Surface Soil Cracks (B6)
		Drainage Patterns (B10)
Water Marks (B1)      Hydrogen Sulfide Odor (C1)       ✓       Crayfish Burrows (C8)        Sediment Deposits (B2)       ✓       Oxidized Rhizospheres on Living Roots (C3)      Saturation Visible on Aerial Imagery (C9)         ✓       Drift Deposits (B3)      Presence of Reduced Iron (C4)      Stunted or Stressed Plants (D1)        Algal Mat or Crust (B4)      Recent Iron Reduction in Tilled Soils (C6)       ✓       Geomorphic Position (D2)        Iron Deposits (B5)      Thin Muck Surface (C7)       ✓       FAC-Neutral Test (D5)        Inundation Visible on Aerial Imagery (B7)      Gauge or Well Data (D9)	Water Marks (B1)       Hydrogen Sulfide Odor (C1)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)         Drift Deposits (B3)       Presence of Reduced Iron (C4)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)         Iron Deposits (B5)       Thin Muck Surface (C7)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Field Observations:       Yes         Surface Water Present?       Yes         No       V         Depth (inches):         Water Table Present2       Yes	Dry-Season Water Table (C2)
		Crayfish Burrows (C8)
✓       Drift Deposits (B3)		Saturation Visible on Aerial Imagery (C9)
	Algal Mat or Crust (B4)     Recent Iron Reduction in Tilled Soils (C6)     Iron Deposits (B5)     Thin Muck Surface (C7)     Inundation Visible on Aerial Imagery (B7)     Gauge or Well Data (D9)     Sparsely Vegetated Concave Surface (B8)     Other (Explain in Remarks)  Field Observations:  Surface Water Present? Yes No Yes Depth (inches):  Water Table Present?	Stunted or Stressed Plants (D1)
	Iron Deposits (B5)       Thin Muck Surface (C7)       ✓         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       ✓         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Field Observations:           Surface Water Present?       Yes        Depth (inches):         Water Table Present?       Yes        Depth (inches):	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks)	Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9)     Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks)  Field Observations:  Surface Water Present? Yes Depth (inches):  Water Table Present?	FAC-Neutral Test (D5)
Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks)	Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches):	
	Field Observations:         Surface Water Present?       Yes No Depth (inches):         Water Table Present?       Yes No Depth (inches):	
Field Observations:	Surface Water Present? Yes No Depth (inches):	
Surface Water Present? Yes No Depth (inches):	Water Table Dresent2 Vac Na V Darth (Instead)	
Water Table Present? Yes No Depth (inches):	vvater rable Present? Yes No C Depth (inches):	
Saturation Present? Yes No _ Depth (inches): Wetland Hydrology Present? Yes V No	Saturation Present? Yes No 🖍 Depth (inches): Wetland Hydro	ology Present? Yes 🔽 No
	(Includes capillary fringe) Describe Recorded Data (stream gauge monitoring well aerial photos previous inspections), if available	e.

Remarks:

Hydrology indicators are present.

Project/Site: AEP North Delphos - Rockhill Delineation	City/County: Lima/ Allen		Sampling Date: 2021-07-01
Applicant/Owner: AEP		State: Ohio	Sampling Point: 1-AJ
Investigator(s): E. Wilson, J. Holmes	Section, Township, Range: _	S013,	T003, R006
Landform (hillslope, terrace, etc.): Depression	Local relief (conca	ave, convex, none):	Concave
Slope (%): 0 Lat: 40.7787373	Long: -84.1118436		Datum: WGS 84
Soil Map Unit Name: PmA		NWI classific	<sub>cation:</sub> None
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🔽 No	(If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances" p	present? Yes 🔽 No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	ers in Remarks.)

#### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No	
Hydric Soil Present?	Yes No	Is the Sampled Area
Wetland Hydrology Present?	Yes 🖌 No	within a Wetland? Yes No

Remarks:

Small PFO within small depression. Disturbed hydrology due to nearby house runoff (through culvert) dumps out in this area.

**VEGETATION** – Use scientific names of plants.

20 fr	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft r</u> )	% Cover	Species?	Status	Number of Dominant Species
1. Acer saccharinum	35	<u> </u>	FACW	That Are OBL, FACW, or FAC: 6 (A)
2. Quercus palustris	15	<u> ⁄</u>	FACW	Total Number of Dominant
3.				Species Across All Strata: 6 (B)
4				
5				Percent of Dominant Species
0	50%	- Total Car		That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft r )		- 10tai C0V		Prevalence Index worksheet:
1 Fraxinus pennsylvanica	10	~	FACW	Total % Cover of: Multiply by:
2 Acer saccharinum	5		FACW	$OBL species 15$ $x_1 = 15$
2				EACW species $85$ $x_2 = 170$
3				EAC appeales $0$ $x^2 = 0$
4				FACt species $0$ $x^3 = 0$
5	450/			FACU species $0$ $x 4 = 0$
Horth Stratum (Plot size: 5 ft r	15%	= Total Cov	ver	UPL species $0 \times 5 = 0$
Carex lurida	15	~	OBL	Column Totals: 100 (A) 185 (B)
Acor coobarinum	10			Dravelance Index - D(A - 19
	<u> </u>		FACW	
3. Fraxinus pennsylvanica	<u> </u>		FACW	Hydrophytic Vegetation Indicators:
4. Solidago gigantea	5		FACW	✓ 1 - Rapid Test for Hydrophytic Vegetation
5				∠ 2 - Dominance Test is >50%
6				✓ 3 - Prevalence Index is $\leq 3.0^1$
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8.				data in Remarks or on a separate sheet)
Q				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10				
10	35%			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )	55%	= Total Cov	/er	be present, unless disturbed or problematic.
1				Hadeselse de
2				Hydropnytic Vegetation
Ζ				Present? Yes No
Pomarka: (Include photo numbero horo er en e concrete e	hoot )		l	
remarks. (include photo numbers here of on a separate s	sneet.)			
Hydrophytic vegetation is present				

Profile Desc	ription: (Describe	to the dep	oth needed to docu	ment the	indicator	or confin	m the absence of i	ndicators.)
Depth (in shas)	Matrix	0/	Redo	x Feature	es Turn a <sup>1</sup>	1 = = 2	Tautura	Demeric
(incnes)				_ <u>%</u>		Loc		Remarks
	7.51R 3/1	95	7.51R 5/3	5		IVI		
-								
-								
_								
							·	
-								
<sup>1</sup> Type: C=Co	oncentration, D=Dep	pletion, RM	=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location: PL	=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for	Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy	Gleyed M	atrix (S4)		Coast Prai	rie Redox (A16)
Histic Ep	pipedon (A2)		Sandy	Redox (S	5)		Dark Surfa	ce (S7)
Black Hi	stic (A3)		Strippe	d Matrix (	S6)		Iron-Manga	anese Masses (F12)
Hydroge	n Sulfide (A4)		Loamy	Mucky M	neral (F1)		Very Shall	ow Dark Surface (TF12)
Stratified	Layers (A5)		Loamy	Gleyed N	atrix (F2)		Other (Exp	lain in Remarks)
2 cm Mu	ick (A10)		Deplete	ed Matrix	(F3)			
Depleted	d Below Dark Surface	ce (A11)	Redox	Dark Surf	ace (F6)		3 maliantena af k	
Thick Da	ark Surface (A12)		Deplete	Donrocci		)	Indicators of r	drology must be present
Sandy w	iucky Mineral (ST)	3)	Redox	Depressio	ons (Fo)			urbed or problematic
Restrictive I	aver (if observed)	:						
Type N	/A							_
Denth (in	ches).						Hydric Soil Pre	sent? Yes 🖌 No
Remarke:								
Hydric s	soils are pre	sent.						
HYDROLO	GY							
Wetland Hyd	drology Indicators	:						
Primary Indic	cators (minimum of	one is requ	ired; check all that a	oply)			Secondary Ir	ndicators (minimum of two required)
<ul> <li>Surface</li> </ul>	Water (A1)		Water-Sta	ined Lea	/es (B9)		Surface	Soil Cracks (B6)
High Wa	iter Table (A2)		Aquatic Fa	auna (B13	3)		💆 Drainage	e Patterns (B10)
Saturatio	on (A3)		True Aqua	atic Plants	s (B14)		Dry-Sea	son Water Table (C2)
Water M	arks (B1)		Hydrogen	Sulfide C	dor (C1)		Crayfish	Burrows (C8)
Sedimer	nt Deposits (B2)		✓ Oxidized	Rhizosph	eres on Liv	ing Roots	(C3) 🗹 Saturatio	on Visible on Aerial Imagery (C9)
Drift Dep	oosits (B3)		Presence	of Reduc	ed Iron (C	4)	Stunted	or Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Recent Irc	on Reduct	ion in Tille	d Soils (C	6) 🖌 Geomor	phic Position (D2)
Iron Dep	oosits (B5)		Thin Mucl	surface	(C7)		🖌 FAC-Ne	utral Test (D5)
🖌 Inundati	on Visible on Aerial	Imagery (E	(7) Gauge or	Well Data	a (D9)			
Sparsely	Vegetated Concav	e Surface (	B8) Other (Ex	plain in R	emarks)			
Field Obser	vations:							
Surface Wate	er Present?	/es 🖌	No Depth (in	ches): 1		_		
Water Table	Present?	/es	No Depth (in	ches):		_		
Saturation P	resent?	/es	No Depth (in	ches):		Wet	land Hydrology Pr	esent? Yes 🔽 No
(includes cap	oillary fringe)		opitoring wall parial	photos -	revioue in		if available:	
Describe Re	corded Data (stream	i gauge, m	ormoning well, aerial	priotos, p	evious in	spections)	, ii avaliable:	
Domorko								

Hydrology indicators are present throughout wetland.

				lination	
Project/Site: AEP North Delphos - Rockhill Delineation	on c	City/County	r: Lima/Al	len	Sampling Date: 2021-07-01
Applicant/Owner: AEP				State: Ohio	Sampling Point: 1-AJ/AK UPL
Investigator(s): E. Wilson, J. Holmes		Section, To	wnship, Ra	nge: S013,	T003, R006
Landform (hillslope, terrace, etc.): Upland			Local relief	(concave, convex, none):	None
Slope (%): 0 Lat: 40.7787171		Long: -84	.112677		Datum: WGS 84
Soil Map Unit Name: PmA				NWI classific	cation: None
Are climatic / hydrologic conditions on the site typical for this tir	me of vea	ar? Yes	✓ No	(If no, explain in R	(emarks.)
Are Vegetation, Soil, or Hydrology sign	ificantly	disturbed?	Are "	Normal Circumstances"	present? Yes No
Are Vegetation, Soil, or Hydrology natu	urally prof	blematic?	(lf ne	eded, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sh	owing	samplin	g point le	ocations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes No	<b>v</b>				
Hydric Soil Present? Yes Ves No		ls th	ne Sampled	Area	
Wetland Hydrology Present? Yes No	~	with	nin a Wetlar	nd? Yes	No
Remarks:					
Upland sample point for PFO wetland	ls 1-A	Jand	1-AK.		
VEGETATION – Use scientific names of plants.					
A	bsolute	Dominant	Indicator	Dominance Test work	sheet:
Acer saccharinum	<u>b Cover</u>	Species?	FACW	Number of Dominant S	pecies
			<u></u>		OFFAC. (A)
3				Total Number of Domin	nant Nata: 3 (P)
۵ ۵					ata. <u> </u>
5				Percent of Dominant S	pecies
5	%	= Total Co	ver	That Are OBL, FACW,	OF FAC: <u>33</u> (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft r)				Prevalence Index wor	ksheet:
1				Total % Cover of:	Multiply by:
2				OBL species	$x_1 = \frac{0}{10}$
3				FACW species 5	x 2 = <u>10</u>
4				FAC species 5	x 3 = <u>15</u>
5				FACU species <u>55</u>	x 4 = 220
Herb Stratum (Plot size: 5 ft r )	·	= Total Co	ver	Column Totolo: 65	$x_{0} = \frac{0}{245}$ (P)
1. Trifolium repens	55	~	FACU		(A) <u></u> (B)
2. Zea mays	35	~	NI	Prevalence Index	a = B/A = <u>3.8</u>
3. Poa pratensis	5		FAC	Hydrophytic Vegetation	on Indicators:
4				1 - Rapid Test for I	Hydrophytic Vegetation
5				2 - Dominance Tes	st is >50%
6				3 - Prevalence Inde	ex is ≤3.0 <sup>1</sup>
7				4 - Morphological A data in Remark	Adaptations <sup>1</sup> (Provide supporting s or on a separate sheet)
ð				Problematic Hydro	phytic Vegetation <sup>1</sup> (Explain)
9					_ * * *
<sup>10.</sup>	95%	- Total Ca		<sup>1</sup> Indicators of hydric so	il and wetland hydrology must
Woody Vine Stratum (Plot size: <u>30 ft r</u> )			vei	be present, unless dist	urbed or problematic.

Remarks: (Include photo numbers here or on a separate sheet.)

\_ \_

= Total Cover

No hydrophytic vegetation present.

1. \_\_\_\_\_

2. \_\_\_\_\_

Yes \_\_\_\_\_ No \_\_\_\_

Hydrophytic Vegetation

Present?

JOIL								
Profile Desc	ription: (Describe	to the de	oth needed to do	ocument the	indicator	or confirm	n the absence of i	indicators.)
Depth	Matrix		R	Redox Feature	S			
(inches)	Color (moist)	%	Color (moist)	)%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
0 - 20	10YR 4/2	95	10YR 6/4	5	<u> </u>	M	Clay Loam	
-								
-								
-								
-								
-								
<sup>1</sup> Type: C=Co	oncentration. D=Der	oletion. RM	Reduced Matrix	. MS=Maske	d Sand Gr	ains.	<sup>2</sup> Location: P	L=Pore Lining, M=Matrix,
Hydric Soil	Indicators:	,		,			Indicators for	Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		San	ndy Gleyed Ma	atrix (S4)		Coast Pra	irie Redox (A16)
Histic Ep	pipedon (A2)		San	ndy Redox (St	5)		Dark Surfa	ace (S7)
Black Hi	stic (A3)		Stri	pped Matrix (S	56)		Iron-Mang	anese Masses (F12)
Hydroge	n Sulfide (A4)		Loa	my Mucky Mi	neral (F1)		Very Shall	ow Dark Surface (TF12)
Stratified	Layers (A5)		Loa	my Gleyed M	atrix (F2)		Other (Exp	plain in Remarks)
2 cm Mu	ick (A10)		Pep	pleted Matrix (	F3)			
Depleted	a Below Dark Surface	ce (A11)	Rec	lox Dark Suna	ace (F6) urface (E7	、 、	<sup>3</sup> Indicators of	hydrophytic vocatation and
Thick Da	Ark Surface (ATZ) Aucky Mineral (S1)		Dep	lov Depressio	inace (F7)	)	wetland by	drology must be present
5 cm Mu	icky Peat or Peat (S	(3)		iox Depressio	113 (1 0)		unless dis	turbed or problematic
Restrictive I	Laver (if observed)	:						
Type: N	/A							
Depth (inc	ches):						Hydric Soil Pre	esent? Yes No
Remarks:								
Remarks.								
No hydr	ric soils pres	sent						
HYDROLO	GY							
Wetland Hyd	drology Indicators	:						
Primary Indic	cators (minimum of	one is requ	ired; check all tha	at apply)			Secondary I	ndicators (minimum of two required)
Surface	Water (A1)		Water	-Stained Leav	es (B9)		Surface	Soil Cracks (B6)
High Wa	High Water Table (A2) Aquatic Fauna (B13)					🖌 Drainag	e Patterns (B10)	
Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (C2)							ason Water Table (C2)	
Water M	arks (B1)		Hydro	gen Sulfide O	dor (C1)		Crayfish	n Burrows (C8)
Sedimer	nt Deposits (B2)		Oxidiz	ed Rhizosphe	eres on Liv	ing Roots	(C3) 🗹 Saturat	on Visible on Aerial Imagery (C9)
Drift Dep	oosits (B3)		Prese	nce of Reduce	ed Iron (C	4)	Stunted	or Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Recen	t Iron Reduct	ion in Tille	d Soils (C	6) Geomo	rphic Position (D2)
Iron Dep	oosits (B5)		Thin M	luck Surface	(C7)		FAC-Ne	eutral Test (D5)
Inundatio	on Visible on Aerial	Imagery (E	37) Gauge	e or Well Data	(D9)			
Sparsely	Vegetated Concav	e Surface	(B8) Other	(Explain in Re	emarks)			
Field Obser	vations:							
Surface Wate	er Present?	/es	No Depth	n (inches):		_		
Water Table	Present?	/es	No Depth	n (inches):		_		
Saturation P	resent?	/es	No _ Depth	n (inches):		Wet	land Hydrology P	resent? Yes No
(includes cap	oillary fringe)		onitoring well as	rial abotas			if available:	
Describe Rec		r gauge, m	ontoning well, ae	nai priotos, pi	evious ins	specitoris),	, il avallable.	

Remarks:

## No hydrology present

Project/Site: AEP North Delphos - Rockhill Deline	<u>Lima/ A</u>	Ilen Sampling Date: 2021-07-	01		
Applicant/Owner: AEP		State: Ohio Sampling Point: 1-AK			
Investigator(s): E. Wilson, J. Holmes		Section, To	wnship, Ra	nge: S013, T003, R006	
Landform (hillslope, terrace, etc.): Depression		I	Local relief	(concave, convex, none): Concave	
Slope (%): 0 Lat: 40.7787373		Long: -84	.1130876	5 Datum: WGS 84	
Soil Map Unit Name: PmA				NWI classification: None	
Are climatic / hydrologic conditions on the site typical for t	his time of yea	ar? Yes	✓ No	(If no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology	significantly	disturbed?	Are °	"Normal Circumstances" present? Yes 🗾 No _	
Are Vegetation, Soil, or Hydrology	naturally pro	blematic?	(lf ne	eeded, explain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map	showing	samplin	g point l	ocations, transects, important features, e	tc.
Hydrophytic Vegetation Present? Yes	No				
Hydric Soil Present? Yes	No	Is th	e Sampled	l Area	
Wetland Hydrology Present? Yes	No	with	in a Wetlar	nd? Yes No	
Remarks:					
PFO wetland that continues offsite	e. Aerial	view lo	ooks sa	aturated.	
VEGETATION - Use scientific names of plant	s.				
00 ft	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30 ft r )	<u>% Cover</u>	Species?	Status	Number of Dominant Species	
1. Acer saccharinum	_ 35	<u> </u>	FACW	That Are OBL, FACW, or FAC: 7 (A)	
2. Quercus palustris	_ 15	<u> </u>	FACW	Total Number of Dominant	
3. Fraxinus pennsylvanica	10		FACW	Species Across All Strata: 7(B)	
4				Percent of Dominant Species	
5				That Are OBL, FACW, or FAC: 100 (A/	B)
Sapling/Shrub Stratum (Plot size: 15 ft r	60%	= Total Cov	/er	Prevalence Index worksheet:	$\neg$
1 Fraxinus pennsylvanica	15	~	FACW	Total % Cover of: Multiply by:	
2 Acer saccharinum	5	~	FACW	$\begin{array}{c} \hline \hline \\ OBL \text{ species } 0 \\ \hline \\ \end{array} \qquad \begin{array}{c} \hline \\ x 1 = 0 \\ \hline \end{array}$	
3				FACW species $95$ x 2 = $190$	
4				FAC species $5$ x 3 = $15$	
5				FACU species $0 \times 4 = 0$	
··	20%	= Total Cov	/er	UPL species $0$ $x 5 = 0$	
Herb Stratum (Plot size: 5 ft r )		10101 001		Column Totals: 100 (A) 205 (E	3)
1. Acer saccharinum	10	<u> </u>	FACW		
2. Fraxinus pennsylvanica		<u> </u>	FACW	Prevalence Index = B/A = 2.1	
3. Toxicodendron radicans	_ 5	<u> </u>	FAC	Hydrophytic Vegetation Indicators:	
4				1 - Rapid Test for Hydrophytic Vegetation	
5				2 - Dominance Test is >50%	
6				3 - Prevalence Index is ≤3.0'	
7				<ul> <li>4 - Morphological Adaptations' (Provide supporti data in Remarks or on a separate sheet)</li> </ul>	ng
8				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
9					
10				<sup>1</sup> Indicators of hydric soil and wetland hydrology must	
Woody Vine Stratum (Plot size: 30 ft r	20%	= Total Cov	/er	be present, unless disturbed or problematic.	
1				I hadro a hasti o	
2				Vegetation	
Ber		= Total Cov	/er	Present? Yes No	
Remarks: (Include photo numbers here or on a separate	e sheet.)	. 5141 001		1	$\neg$
nyurophytic vegetation is present	L				

SOIL								Sampling Point:
Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the	indicator	or confirm	n the absence of	indicators.)
Depth	Matrix		Redo	ox Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
0 - 20	7.5YR 3/1	95	7.5YR 5/3	5	С	М	Clay Loam	
-								
——								
-								
-								
-								
					_			
17							21 +	
Hydric Soil	oncentration, D=Dep	etion, RM	Reduced Matrix, M	S=Maske	d Sand Gr	ains.		PL=Pore Lining, M=Matrix.
History	(A1)		Sondy		atrix (SA)		Coost Dr	aria Bodov (A16)
Histic Er	(AT) Dipedon (A2)		Sandy	Gleyed IV Reday (S	atrix (54)		Coast Pra	face $(S7)$
Black Hi	stic (A3)		Strippe	d Matrix (	5) S6)		Iron-Man	nanese Masses (F12)
Hydroge	en Sulfide (A4)		Loamy	Mucky M	ineral (F1)		Very Sha	Illow Dark Surface (TF12)
Stratified	d Layers (A5)		Loamy	Gleyed N	latrix (F2)		Other (E)	(plain in Remarks)
2 cm Mu	ick (A10)		Deplete	ed Matrix	(F3)			
Depleted	d Below Dark Surfac	e (A11)	🖌 Redox	Dark Surf	ace (F6)			
Thick Da	ark Surface (A12)		Deplete	ed Dark S	urface (F7	)	<sup>3</sup> Indicators of	f hydrophytic vegetation and
Sandy M	lucky Mineral (S1)		Redox	Depressio	ons (F8)		wetland h	ydrology must be present,
5 cm Mu	icky Peat or Peat (S	3)					unless di	sturbed or problematic.
Restrictive	Layer (If observed)							
Type: IN	(A						Hydric Soil Pr	resent? Yes 🖌 No
Depth (inc	ches):							
Remarks:								
Hydric	soils are pre	sent						
		Joint.						
HYDROLO	GY							
Wetland Hyd	drology Indicators:							
Primary India	cators (minimum of c	ne is requi	red: check all that a	(vlaa			Secondary	Indicators (minimum of two required)
Surface	Water (A1)		✓ Water-Sta	ined Lea	ves (B9)		Surfac	e Soil Cracks (B6)
High Wa	ater Table (A2)		Aquatic F	auna (B1)	3)			ge Patterns (B10)
Saturatio	on (A3)		True Aqua	atic Plants	s (B14)		Drv-Se	ason Water Table (C2)
Vater M	larks (B1)		Hvdrogen	Sulfide C	)dor (C1)		Cravfis	sh Burrows (C8)
Sedimer	nt Deposits (B2)		✓ Oxidized	Rhizosph	eres on Liv	ing Roots	(C3) V Satura	tion Visible on Aerial Imagery (C9)
Drift Der	posits (B3)		Presence	of Reduc	ed Iron (C	4)	Stunte	d or Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Recent Iro	on Reduc	tion in Tille	d Soils (C	6) 🔽 Geomo	orphic Position (D2)
Iron Dep	oosits (B5)		Thin Much	c Surface	(C7)	,	FAC-N	leutral Test (D5)
<ul> <li>Inundation</li> </ul>	on Visible on Aerial	magery (B	7) Gauge or	Well Data	a (D9)			
Sparsely	Vegetated Concav	e Surface (	B8) Other (Ex	plain in R	emarks)			
Field Obser	vations:		`	-				
Surface Wate	er Present? Y	es	No 🖌 Depth (in	iches):				
Water Table	Present? Y	es	No V Depth (in	iches):		_		
Saturation P	resent?	es	No V Depth (in	iches).		Wet	land Hydrology	Present? Yes 🗸 No
(includes cap	pillary fringe)							
Describe Re	corded Data (stream	gauge, mo	onitoring well, aerial	photos, p	revious in	spections)	, if available:	

Remarks:

Hydrology indicators are present throughout wetland.

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1730 AEP North Delphos - Rockhill Delineation City/County: For	t Jennings/ Putnam Sampling Date: 2021-07-01
Applicant/Owner: AEP	State: Ohio Sampling Point: 1-AL
Investigator(s): E. Wilson, J. Holmes Section. Townsh	ip. Range: S004, T002, R005
Landform (hillslope terrace etc.) Floodplain	a convex none). Concave Slope (%). 1
Subsection (IMB of MLDA): 1.99	U onzy -84 2938438
Soil Map Unit Name: 50	NWI classification: NOTE
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed?	Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling po	int locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes          ✓	npled Area Vetland? Yes <u> Ves</u> No ional Wetland Site ID:
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)     Vidized Rhizospheres on Living     Oxidized Rhizospheres on Living	Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)     Presence of Reduced from (C4)     Algal Mat or Crust (P4)     Pocont Iron Peduction in Tilled S	$\sum_{i=1}^{n} \text{Stunted of Stressed Plants (D1)}$
I Algar Mat of Clust (64) Recent from Reduction in Third 3	Shallow Aquitard (D2)
Inundation Visible on Aerial Imagery (B7) Other (Evolain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	✓ FAC-Neutral Test (D5)
Field Observations:	<u> </u>
Surface Water Present? Yes No 🗸 Depth (inches):	
Water Table Present? Yes No V Depth (inches):	
Saturation Present? Yes No V Depth (inches):	Wetland Hydrology Present? Yes <u>V</u> No
(includes capillary fringe)	etter etter etter in der ster etter ette
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe	ctions), if available:
Remarks:	
Hydrology indicators are present	

#### **VEGETATION** – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft r )	Absolute % Cover	Dominant	Indicator Status	Dominance Test worksheet:
1.	<u>/// 00/01</u>	Opecies:		Number of Dominant Species That Are OBL EACW or EAC: $2$ (A)
2	·			
3.				Total Number of Dominant Species Across All Strata: 2 (B)
4	·			Percent of Dominant Crossics
5.				That Are OBL, FACW, or FAC: 100 (A/B)
6.				Provalanca Index workshoot:
7.				Total % Cover of: Multiply by:
	·	- Total Cov	vor	$\frac{1}{10000000000000000000000000000000000$
Copling/Shrub Stratum (Diataiza: 15 ft r )			vei	FACW species 95 $x_2 = 190$
				FAC species $5$ $x_3 = 15$
1	·			FACU species $0$ $x = 0$
2	·			UPL species $0$ $x_5 = 0$
3	·			Column Totals: 100 (A) 205 (B)
4				Drevelance lader D/A 21
5	·			
6	·			Hydrophytic Vegetation Indicators:
7				✓ 1 - Rapid Test for Hydrophytic Vegetation
		= Total Cov	ver	✓ 2 - Dominance Test is >50%
Herb Stratum (Plot size: 5 ft r )				✓ 3 - Prevalence Index is ≤3.0'
1. Phalaris arundinacea	70	~	FACW	<ul> <li>4 - Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)</li> </ul>
2. Carex cristatella	20	~	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3. Carex grayi	5		FACW	1
4. Toxicodendron radicans	5		FAC	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5	<u> </u>			Definitions of Vegetation Strata:
6	<u>.                                    </u>			
7				at breast height (DBH), regardless of height.
8				Sanling/shrub Woody plants loss than 3 in DBH
9.				and greater than or equal to 3.28 ft (1 m) tall.
10.	·			Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12				Woody vines – All woody vines greater than 3.28 ft in
	100%	= Total Co	ver	neight.
Woody Vine Stratum (Plot size: 30 ft r )				
1.				
2				
3				I hadrowky die
0				Vegetation
4	- <u></u>			Present? Yes V No
Pomarka: (Include photo numbers here or on a separate (	shoot )		ver	
Remarks. (include photo numbers here of on a separate s	sneet.)			
Hydrophytic vegetation is present.				

SOIL	
------	--

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the	indicator	or confirm	the absence of ind	icators.)			
(inches)	<u>Color (m</u> oist)	%	<u>Color (m</u> oist)	<u>~ reature</u>	<u>Typ</u> e <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0 - 20	7.5YR 3/1	95	7.5YR 5/4	5	C	PL/M	Clay Loam				
	7.011(0)1		7.011(0)4	<u> </u>	<u> </u>	,					
-											
-											
-											
						<u> </u>					
-											
-											
						<u> </u>					
-											
							·				
-											
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location: PL=F	Pore Lining, M=Matrix.			
Hydric Soil	Indicators:						Indicators for Pr	oblematic Hydric Soils':			
Histosol	(A1)		Polyvalue Belo	w Surface	e (S8) ( <b>LR</b>	R R,	2 cm Muck (A	( <b>LRR K, L, MLRA 149B</b> )			
Histic Ep	bipedon (A2)		MLRA 149B	)			Coast Prairie Redox (A16) (LRR K, L, R)				
Black HI	STIC (A3) on Sulfide (A4)		I nin Dark Surra	ace (59) (I Mineral (F		LRA 149B) ( I )	Dark Surface	(S7) (IPP K I)			
Stratified	1 avers (A5)		Loamy Gleved	Matrix (F2	1) ( <b>LKK K</b> 2)	<b>, ⊑</b> )	Polyvalue Be	low Surface (S8) (I RR K I )			
Depleted	d Below Dark Surfac	e (A11)	Depleted Matrix	x (F3)	-)		Thin Dark Surface (S9) (LRR K, L)				
Thick Da	ark Surface (A12)	0 ()	✓ Redox Dark Su	Inface (F6)	)		Iron-Manganese Masses (F12) (LRR K. L. R)				
Sandy M	lucky Mineral (S1)		Depleted Dark	Surface (I	F7)		Piedmont Floodplain Soils (F19) (MLRA 149B)				
Sandy G	Bleyed Matrix (S4)		Redox Depress	sions (F8)	,		Mesic Spodic (TA6) ( <b>MLRA 144A, 145, 149B</b> )				
Sandy Redox (S5)						Red Parent Material (F21)					
Stripped	Stripped Matrix (S6)					Very Shallow Dark Surface (TF12)					
Dark Su	rface (S7) (LRR R, N	VLRA 1498	<b>B</b> )				Other (Explai	n in Remarks)			
3											
Indicators of	f hydrophytic vegeta	tion and we	etland hydrology mus	st be pres	ent, unles	s disturbed	or problematic.				
Restrictive I	Layer (if observed):										
Type: NC	bne										
Depth (ind	ches):						Hydric Soil Prese	nt? Yes 🥙 No			
Remarks:											
	-:	<b>t</b>									
Hydric s	oils are pres	ent.									
1											

Project/Site: AEP North Delphos - Rockhill Delinea	ition	City/C	ounty: Lima/All	en		Sampling Da	ate: 202	1-06-30
Applicant/Owner: AEP				State	Ohio	Sampling Po	oint: 2-A	PEM
Investigator(s): Tyler Russell		Sectio	on, Township, Rar	nge: Section	on 13, 3S 6	BE		
Landform (hillslope, terrace, etc.): Depression			Local relief	concave, co	nvex, none):	Concave		
Slope (%): 5 Lat: 40.784646		Long:	-84.12247			Datum: WO	S 84	
Soil Map Unit Name: Gwg5B2		-			NWI classific	ation: N/A		
Are climatic / hydrologic conditions on the site typical for this	time of ve	ear? Y	es 🖌 No	(lf no	explain in R	emarks.)		
Are Vegetation . Soil . or Hvdrology si	ignificantly	distur	bed? Are "	Normal Circi	umstances" p	oresent? Yes	· ·	No
Are Vegetation Soil or Hydrology n	aturally pro	oblema	atic? (If ne	eded, explai	n anv answe	rs in Remark	s.)	
		obioint						
SUMMARY OF FINDINGS – Attach site map	showing	g sam	pling point lo	ocations,	transects	, importar	nt featur	es, etc.
Hydrophytic Vegetation Present? Yes No	o c							
Hydric Soil Present? Yes No	o c		is the Sampled	Area				
Wetland Hydrology Present? Yes No	o c		within a Wetlan	d?	Yes	No		
Remarks:								
VEGETATION – Use scientific names of plants.								
00.4	Absolute	Dom	ninant Indicator	Dominand	e Test work	sheet:		
Tree Stratum (Plot size: 30 ft r )	% Cover	Spe	cies? <u>Status</u>	Number of	Dominant S	pecies		
1				That Are C	BL, FACW,	or FAC: 2		_ (A)
2				Total Num	ber of Domin	ant		
3				Species A	cross All Stra	ta: <u>2</u>		_ (B)
4				Percent of	Dominant Sr	necies		
5				That Are C	BL. FACW.	or FAC: 10	0	(A/B)

2 3 4 5				Total Number of Dominant       2       (B)         Percent of Dominant Species       100       (A/B)				
Sapling/Shrub Stratum (Plot size: 15 ft r )		= Total Cov	ver	Prevalence Index worksheet:				
1				Total % Cover of: Multiply by:				
2				OBL species <u>10</u> x 1 = <u>10</u>				
3				FACW species 100 x 2 = 200				
4				FAC species <u>5</u> x 3 = <u>15</u>				
5				FACU species 0 x 4 = 0				
- 4		= Total Cov	ver	UPL species 0 x 5 = 0				
Herb Stratum (Plot size: 5 ft r )	40		EACW	Column Totals: <u>115</u> (A) <u>225</u> (B)				
1. Agrimonia parvinora	40	<b>·</b>	FACW	196				
2. Carex cristatella	25	<u> </u>	FACW	Prevalence Index = B/A = 1.90				
3. Lysimachia nummularia	20		FACW	Hydrophytic Vegetation Indicators:				
4. Carex grayi	10		FACW	✓ 1 - Rapid Test for Hydrophytic Vegetation				
5. Scirpus atrovirens	10		OBL	∠ 2 - Dominance Test is >50%				
6. Phalaris arundinacea	5		FACW	✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>				
7. Toxicodendron radicans	5		FAC	4 - Morphological Adaptations <sup>1</sup> (Provide supporting				
8				data in Remarks or on a separate sheet)				
9				Problematic Hydrophytic Vegetation (Explain)				
10				1				
Woody Vine Stratum (Plot size: 30 ft r)	115%	= Total Cov	ver	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
1				Hydrophytic				
2				Vegetation				
		= Total Cov	/er	Present? Yes No				
Remarks: (Include photo numbers here or on a separate s	sheet.)							
Hydrophytic vegetation present								
Profile Desc	ription: (Describe	to the dep	oth needed to docum	nent the	indicator	or confirm	the absence of	f indicators.)
------------------------	----------------------	-------------	-------------------------	------------------------	-------------------	------------------	---------------------------	--
Depth	Matrix		Redo	x Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-1	10YR 3/2	100					Clay Loam	
<u> </u>	10YR 4/2	85	10YR 4/4	15	<u>C</u>	PL/M	Clay Loam	
-								
-								
——								
·								
<sup>1</sup> Type: C=C	oncentration, D=Dep	letion, RM	=Reduced Matrix, MS	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:		Candu (		-		Indicators to	or Problematic Hydric Solls :
Histic Fi	(A1) Dipedon (A2)		Sandy G	sleyed Ma Reday (Sf	atrix (54)		Coast Pr	fare (S7)
Black Hi	istic (A3)		Stripped	d Matrix (S	S6)		Iron-Man	nganese Masses (F12)
Hydroge	en Sulfide (A4)		Loamy I	Mucky Mi	neral (F1)		Very Sha	allow Dark Surface (TF12)
Stratified	d Layers (A5)		Loamy (	Gleyed M	atrix (F2)		Other (E	xplain in Remarks)
2 cm Mu	uck (A10)		✓ Deplete	d Matrix (	(F3)			
Depleter	d Below Dark Surfac	e (A11)	Redox L	Jark Surfa	ace (F6)		<sup>3</sup> Indicators o	f hydrophytic vocatation and
Sandy M	Aucky Mineral (S1)		Depieter	u Dark Si Depressio	ons (F8)	1	wetland h	hydrology must be present
5 cm Mu	ucky Peat or Peat (S	3)					unless di	isturbed or problematic.
Restrictive	Layer (if observed)	:						
Туре:								
Depth (in	ches):						Hydric Soll P	resent? Yes No
Remarks:								
Hydric	soil present							
HIDROLO	GY							
Wetland Hy	drology Indicators:						<b>a</b> 1	
Primary India	cators (minimum of o	one is requ	ired: check all that ap	ply)	(20)		<u>Secondary</u>	/ Indicators (minimum of two required)
Surface	Water (A1)		Water-Star	ined Leav	/es (B9)		Surfac	ce Soil Cracks (B6)
⊢ High Wa	ater Table (AZ)		Aquatic Fa	tic Plants	) (P14)			age Patterns (BTU)
Water M	larks (B1)		Hvdrogen	Sulfide O	dor (C1)		✓ Cravfi	sh Burrows (C8)
Sedimer	nt Deposits (B2)		✓ Oxidized F	Rhizosphe	eres on Liv	ing Roots	(C3) Satura	ation Visible on Aerial Imagery (C9)
Drift De	posits (B3)		Presence	of Reduce	ed Iron (C4	4)	Stunte	ed or Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Recent Iro	n Reduct	ion in Tille	d Soils (Ce	ة) 🔽 Geom	orphic Position (D2)
Iron Dep	posits (B5)		Thin Muck	Surface	(C7)		FAC-N	Neutral Test (D5)
Inundati	on Visible on Aerial	Imagery (B	(7) Gauge or V	Well Data	a (D9)			
Sparsely	y Vegetated Concav	e Surface (	(B8) Other (Exp	olain in Re	emarks)			
Field Obser	vations:							
Surface Wat	er Present? Y	'es	No Depth (inc	ches):		_		
Water Table	Present? Y	'es	No Depth (inc	ches):		_		
Saturation P	resent? Y	'es 🔽	No Depth (inc	ches): <u>3</u>		_   Wetl	and Hydrology I	Present? Yes No
Describe Re	corded Data (stream	gauge, m	onitoring well, aerial	photos, p	revious ins	pections),	if available:	
						. ,,		
Remarks:								
1								

Project/Site AEP North Delphos - Rockhill Delineation	City/C	County.	Lima/Alle	n		Sampling	Date <sup>.</sup>	2021-06	3-30
Applicant/Owner: AEP		,,		State <sup>.</sup>	Ohio	Sampling	Point <sup>.</sup>	2-A/B U	PL
Investigator(s): Tyler Russell	Secti	ion. Tow	nship, Rano	e: Sectio	 n 13, 3S 6	E	onne.		
Landform (hillslone, terrace, etc.): Upland	0000	lon, rom	ocal relief (c		ver none).	Concav	e		
Sland (%): 2 Lat. 40 785245	Long		12333	uncave, cui	ivex, none).	Deturn W	- /GS 8	34	
	Long	_ Long: Datum: Datum:							
Soil Map Unit Name: DIGIDI				N	WI classific	ation:			
Are climatic / hydrologic conditions on the site typical for this time	of year? Y	Yes 🖊	No	(If no,	explain in R	emarks.)			
Are Vegetation, Soil, or Hydrology signific	cantly distur	rbed?	Are "N	ormal Circu	mstances" p	resent? Y	'es	No _	
Are Vegetation, Soil, or Hydrology natura	lly problem	natic?	(If nee	ded, explair	any answe	rs in Rema	rks.)		
SUMMARY OF FINDINGS - Attach site man sho	wing con	nnlina	noint lo	natione (	rancocte	import	ant fo	aturas	oto
SUMMART OF FINDINGS - Attach site map show	willy sail	inpining	point io	Jations, i	lansecis	, importa		atures,	elc.
Hydrophytic Vegetation Present? Yes No	<u>v</u>								
Hydric Soil Present? Yes No	<u>v</u>	- Not Sampled Area							
Wetland Hydrology Present? Yes No	<u>~</u>	withir	h a Wetland	?	Yes	No	-	-	
Remarks:									
Upland sample associated with wetlan	nd 2-A	PEM	and 2-	B PEM					
VEGETATION – Use scientific names of plants.									
Abs	solute Dor	minant	Indicator	Dominance	e Test work	sheet:			
Tree Stratum (Plot size: 30 ft r )	<u>Cover</u> Spe	ecies?	Status	Number of	Dominant Sr				
1. Acer saccharum 35		~	FACU	That Are O	BL, FACW, o	or FAC:	)	(A	٩)
2.						-		、	,
3.				Total Numb Species Ac	er of Domini	ant ta: 4	4	(F	3)
4				000000710	1000 / 11 0114		-	(L	"
5				Percent of I	Dominant Sp	Decies	n		
359	~	tal Cove		That Are O	BL, FACW, C	or FAC: _	,	(A	VB)
Sapling/Shrub Stratum (Plot size: 15 ft r )			"  -	Prevalence	Index worl	ksheet:			

				(-,
4 5				Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
1E ft -	35%	_ = Total Co	over	
Sapling/Shrub Stratum (Plot size: 15 Tt r )				Prevalence Index worksheet:
1. Ligustrum vulgare	_ 15	⁄	_ FACU	Total % Cover of: Multiply by:
2. Lonicera maackii	_ 15	⁄	<u>NI</u>	OBL species 0 x 1 = 0
3				FACW species 0 x 2 = 0
4				FAC species 0 x 3 = 0
5.				FACU species <u>65</u> x 4 = <u>260</u>
	30%	= Total Co	over	UPL species 0 x 5 = 0
Herb Stratum (Plot size: 5 ft r )	15	_	FACU	Column Totals: <u>65</u> (A) <u>260</u> (B)
				Prevalence index = $B/A = 4.00$
2				Hudrophytic Vegetation Indicators
3				A Devid Test (added added is ) (and disc
4				1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
8				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
9				
10 Woody Vine Stratum (Plot size: 30 ft r)	15%	_ = Total Co	over	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1.				Hydrophytic
2.	_			Vegetation
		= Total Co	over	Present? Yes No
Remarks: (Include photo numbers here or on a separate	sheet.)			
No Hydrophytic vegetation presen	nt. Bare	e aroun	d due t	o canopy cover
i i e i i jeli e prij de regetadon precen		- 3 4		

Profile Desc	ription: (Describe	to the depth r	eeded to docum	nent the i	ndicator	or confirm	the absence of in	ndicators.)
Depth	Matrix		Redox	x Features	5			
(inches)	Color (moist)		Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 20	10YR 5/3	100					Loamy Sand	
-								
-								
-								
-								
_								
<sup>1</sup> Type: C=Cc	ncentration D=Der	letion RM=Re	duced Matrix MS	 S=Masked	Sand Gra	ains	<sup>2</sup> Location: Pl	=Pore Lining M=Matrix
Hydric Soil I	ndicators:			- Maskea		an 15.	Indicators for	Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy G	leved Ma	trix (S4)		Coast Prai	rie Redox (A16)
Histic En	ipedon (A2)		Sandy B	Redox (S5)	)		Dark Surfa	ice (S7)
Black His	stic (A3)		Stripped	Matrix (S	, 6)		Iron-Manga	anese Masses (F12)
Hydroge	n Sulfide (A4)		Loamy M	Jucky Min	eral (F1)		Very Shall	ow Dark Surface (TF12)
Stratified	Layers (A5)		Loamy C	Gleyed Ma	atrix (F2)		Other (Exp	olain in Remarks)
2 cm Mu	ck (A10)		Depleted	d Matrix (F	=3)			
Depleted	Below Dark Surfac	æ (A11)	Redox D	ark Surfa	ce (F6)			
Thick Da	rk Surface (A12)		Depleted	d Dark Su	rface (F7)		<sup>3</sup> Indicators of h	nydrophytic vegetation and
Sandy M	ucky Mineral (S1)		Redox D	epression	ns (F8)		wetland hy	drology must be present,
5 cm Mu	cky Peat or Peat (S	3)					unless dist	turbed or problematic.
Restrictive L	ayer (if observed).	:						
Type:			-				Hydric Soil Pre	sent? Yes No
Depth (inc	:hes):		-					
No Hydi	ric soil prese	ent						
HYDROLO	GY							
Wetland Hyd	Irology Indicators:							
Primary Indic	ators (minimum of o	one is required;	check all that ap	ply)			Secondary In	ndicators (minimum of two required)
Surface	Water (A1)		Water-Stai	ned Leave	es (B9)		Surface	Soil Cracks (B6)
High Wa	ter Table (A2)		Aquatic Fa	una (B13)	)		Drainag	e Patterns (B10)
Saturatio	on (A3)		True Aquat	tic Plants	(B14)		Dry-Sea	ison Water Table (C2)
Water M	arks (B1)		Hydrogen S	Sulfide Oc	dor (C1)		Crayfish	Burrows (C8)
Sedimen	t Deposits (B2)		Oxidized R	hizosphei	res on Livi	ing Roots	(C3) Saturatio	on Visible on Aerial Imagery (C9)
Drift Dep	osits (B3)		Presence of	of Reduce	d Iron (C4	)	Stunted	or Stressed Plants (D1)
Algal Ma	t or Crust (B4)		Recent Iro	n Reductio	on in Tilleo	d Soils (C6	i) Geomor	phic Position (D2)
Iron Dep	osits (B5)		Thin Muck	Surface (	C7)		FAC-Ne	utral Test (D5)
Inundatio	on Visible on Aerial	Imagery (B7)	Gauge or V	Nell Data	(D9)			
Sparsely	Vegetated Concav	e Surface (B8)	Other (Exp	lain in Re	marks)			
Field Observ	vations:							
Surface Wate	er Present? Y	es No	Pepth (inc	ches):		_		
Water Table	Present? Y	′esNo	<ul> <li>Depth (inc</li> </ul>	ches):		_		
Saturation Pr	esent? Y	es No	<ul> <li>Depth (inc</li> </ul>	ches):		Wetla	and Hydrology Pr	resent? Yes No 🗸
(includes cap	illary fringe)		20ptil (inc					
Describe Rec	corded Data (stream	n gauge, monito	oring well, aerial p	photos, pre	evious ins	pections),	if available:	
Remarks:								

# No hydrology present

Project/Site: AEP North Delphos - Rockhill Delineation	City/County: Lima/Allen		Sampling Date:	2021-06-30
Applicant/Owner: AEP		<sub>State:</sub> Ohio	Sampling Point:	2-B PEM
Investigator(s): Tyler Russell	Section, Township, Range	Section 13, 3S 6	3E	
Landform (hillslope, terrace, etc.): Depression	Local relief (co	ncave, convex, none):	Concave	
Slope (%): <u>5</u> Lat: <u>40.78655</u>	Long: -84.12477		Datum: WGS 8	34
Soil Map Unit Name: SkA		NWI classific	cation: N/A	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🖌 No	(If no, explain in R	(emarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "No	rmal Circumstances" p	oresent? Yes	✓No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If neede	ed, explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing	sampling point loca	ations. transects	. important fe	eatures. etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         V         No           Yes         V         No           Yes         V         No	ls the Sampled Area within a Wetland? Yes No
Remarks:		

## PEM wetland with open water and bare ground.

**VEGETATION** – Use scientific names of plants.

20.64 -	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: <u>3</u> (A)
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4.				
5				Percent of Dominant Species
		- Total Cau		That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft r )		- Total Cov	er	Prevalence Index worksheet:
1 Fraxinus pennsylvanica	5	~	FACW	Total % Cover of Multiply by
· · _ ·				$\frac{1}{\text{OBL species } 2} \frac{1}{\text{v1} = 2}$
2				
3				FACTV species $23$ $x_2 = 30$
4				FAC species $2$ $x 3 = 0$
5				FACU species $0 \times 4 = 0$
<b>F f</b> +	5%	= Total Cov	er	UPL species $0 \times 5 = 0$
Herb Stratum (Plot size: 5 Tt r )	45	,		Column Totals: 33 (A) 66 (B)
1. Lysimachia hummularia	15		FACW	
2. Phalaris arundinacea	6	<u> </u>	FACW	Prevalence Index = $B/A = 2.00$
3. Agrimonia parviflora	3		FACW	Hydrophytic Vegetation Indicators:
4. Scirpus atrovirens	2		OBL	✓ 1 - Rapid Test for Hydrophytic Vegetation
5 Toxicodendron radicans	2		FAC	✓ 2 - Dominance Test is >50%
6				✓ 3 - Prevalence Index is $\leq 3.0^1$
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
<i>I</i>				data in Remarks or on a separate sheet)
8				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
9				
10				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
20 ft r	28%	= Total Cov	er	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: 30111 )				
1				Hydrophytic
2				Vegetation
		= Total Cov	er	Present? Yes No
Remarks: (Include photo numbers here or on a separate	sheet.)			
Ludrophytic vocatation present A	roop of	0000	untor a	nd muddy hara ground
resent. A	leas of	open v	valer a	na maaay bare ground.

Profile Desc	ription: (Describe	to the dep	th needed to docun	nent the	indicator	or confirm	m the absence of indicators.)	
Depth	 Matrix		Redo	x Feature	s		,	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture Remarks	
0-2	10YR 3/2	100					Clay Loam	
2 - 20	10YR 4/2	80	10YR 4/4	20	С	PL/M	Clay Loam	
-			<b>i</b>					
					·			
——					·			
-					·			
-								
<sup>1</sup> Type: C=Co	oncentration, D=De	pletion, RM	Reduced Matrix, MS	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.	
Hydric Soil	Indicators:						Indicators for Problematic Hydric Soils <sup>3</sup> :	
Histosol	(A1)		Sandy G	Sleyed Ma	atrix (S4)		Coast Prairie Redox (A16)	
Histic Ep	pipedon (A2)		Sandy F	Redox (S5	5)		Dark Surface (S7)	
Black Hi	stic (A3)		Stripped	Matrix (S	56)		Iron-Manganese Masses (F12)	
Stratifier			Loamy (	NUCKY IVII Gloved M	atrix (F2)		Very Shallow Dark Surface (TFT2)	
2 cm Mu	ick (A10)		✓ Deplete	d Matrix (	F3)			
Depleted	d Below Dark Surfa	ce (A11)	Redox [	Dark Surfa	ace (F6)			
Thick Da	ark Surface (A12)		Deplete	d Dark Su	urface (F7)		<sup>3</sup> Indicators of hydrophytic vegetation and	
Sandy M	lucky Mineral (S1)		Redox D	Depressio	ns (F8)		wetland hydrology must be present,	
5 cm Mu	icky Peat or Peat (S	<u>33)</u>					unless disturbed or problematic.	
Restrictive	Layer (If observed)	):						
Type:							Hydric Soil Present? Yes No	
	cnes):							
Hydric s	soil present							
HYDROLO	GY							
Wetland Hyd	drology indicators	:		- 1- 2			O	
Primary India	cators (minimum of	one is requi	red; check all that ap	ply)	(DO)		Secondary Indicators (minimum of two require	ed)
Uigh Wo	vvater (A1)		vvater-Stai	ned Leav	es (B9)		Sufface Soll Cracks (B6) V Drainage Patterns (B10)	
⊓igii wa	(A2)			tic Plants	(B14)		Drainage Fatterns (BT0)	
Water M	arks (B1)		Hvdrogen	Sulfide O	dor (C1)		<ul> <li>Cravfish Burrows (C8)</li> </ul>	
Sedimer	nt Deposits (B2)		✓ Oxidized R	Rhizosphe	eres on Liv	ing Roots	(C3) Saturation Visible on Aerial Imagery (C9)	)
Drift Dep	posits (B3)		Presence of	of Reduce	ed Iron (C4	t)	Stunted or Stressed Plants (D1)	,
Algal Ma	at or Crust (B4)		Recent Iro	n Reduct	ion in Tille	d Soils (C6	6) Ceomorphic Position (D2)	
Iron Dep	oosits (B5)		Thin Muck	Surface	(C7)		✓ FAC-Neutral Test (D5)	
Inundation	on Visible on Aerial	Imagery (B	7) Gauge or \	Well Data	(D9)			
Sparsely	Vegetated Concav	ve Surface (	B8) Other (Exp	lain in Re	emarks)			
Field Obser	vations:							
Surface Wate	er Present?	Yes	No Depth (ind	ches):		_		
Water Table	Present?	Yes	No Depth (ind	ches):		_		
Saturation P (includes cap	resent? billary fringe)	Yes	No Depth (ind	ches): 3		_ Wetl	land Hydrology Present? Yes <u> </u>	
Describe Re	corded Data (strear	n gauge, mo	onitoring well, aerial p	priotos, pi	evious ins	pections),	, it available:	

Remarks:

Wetland hydrology present

Project/Site: AEP North Delphos -	Rockhill Delineation	_ City/County: Lima/Allen		Sampling Date:	2021-06-30		
Applicant/Owner: <u>AEP</u>			State: Ohio	Sampling Point:	2-C PEM		
Investigator(s): Tyler Russell		_ Section, Township, Range	Section 13, 3S 6	BE			
Landform (hillslope, terrace, etc.): Dep	pression	Local relief (cor	ncave, convex, none)	Concave			
Slope (%): 5 Lat: 40.775	26	_ Long: -84.112578		Datum: WGS 8	34		
Soil Map Unit Name: Blg1A1			NWI classific	cation: N/A			
Are climatic / hydrologic conditions on t	he site typical for this time of y	/ear? Yes 🔽 No	(If no, explain in R	emarks.)			
Are Vegetation, Soil, or	Hydrology significant	ly disturbed? Are "Normal Circumstances" present? Yes 🗾 No					
Are Vegetation, Soil, or	Hydrology naturally p	problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS - A	ttach site map showin	g sampling point loca	tions, transects	, important fe	eatures, etc.		
Hydrophytic Vegetation Present?	Yes No	_					
Hydric Soil Present?	Yes 🔽 No	Is the Sampled Are	ea				
Wetland Hydrology Present?	Yes 🖌 No	within a Wetland?	Yes	No	-		
Remarks:		I					

#### **VEGETATION** – Use scientific names of plants.

00 fi	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: <u>3</u> (A)
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4				
5.				Percent of Dominant Species
		= Total Cov	er	
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1				Total % Cover of:Multiply by:
2				OBL species <u>10</u> x 1 = <u>10</u>
3				FACW species <u>85</u> x 2 = <u>170</u>
4				FAC species <u>10</u> x 3 = <u>30</u>
5.				FACU species 0 x 4 = 0
		= Total Cov	er	UPL species 0 x 5 = 0
Herb Stratum (Plot size: 5 ft r )				Column Totals: 105 (A) 210 (B)
1. Carex cristatella		<u> </u>	FACW	
2. Agrimonia parviflora	20	<u> </u>	FACW	Prevalence Index = B/A = 2.00
<sub>3.</sub> Lysimachia nummularia	20	<u> </u>	FACW	Hydrophytic Vegetation Indicators:
4. Carex vulpinoidea	15		FACW	✓ 1 - Rapid Test for Hydrophytic Vegetation
5. Scirpus atrovirens	10		OBL	✓ 2 - Dominance Test is >50%
6. Toxicodendron radicans	10		FAC	✓ 3 - Prevalence Index is $\leq 3.0^1$
7. Phalaris arundinacea	5		FACW	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
9.				Problematic Hydrophytic Vegetation (Explain)
10.				
	105%	= Total Cov	er	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )				be present, unless disturbed or problematic.
1				Hydrophytic
2				Vegetation
		= Total Cov	er	Present? Yes No
Remarks: (Include photo numbers here or on a separate s	sheet.)			
Hydrophytic vegetation procent				
riyurupriyuc vegetation present				

Profile Desc	ription: (Describe	to the depth	needed to docum	nent the i	ndicator	or confirm	n the absence of indicators.)	
Depth	Matrix		Redox	x Features	S			
(inches)	Color (moist)		Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture Remarks	
0-2	10YR 3/2						Clay Loam	_
<u> </u>	10YR 4/2	85 1	0YR 4/4	15	<u> </u>	PL/M	Clay Loam	
<u>15 <sup>-</sup> 20</u>	10YR 4/2	80 7	7.5YR 4/6	20	С	М	Clay Loam	_
-								
-								_
								_
								_
17								—
Hydric Soil	Indicators:	letion, RIVI=R	educed Matrix, ME	=Masked	Sand Gr	ains.	Indicators for Problematic Hydric Soils <sup>3</sup> :	
Histosol	(A1)		Sandy G	Sleved Ma	triv (S4)		Coast Prairie Redox (A16)	
Histic Er	pipedon (A2)		Sandy B	Redox (S5	)		Dark Surface (S7)	
Black Hi	stic (A3)		Stripped	Matrix (S	, 6)		Iron-Manganese Masses (F12)	
Hydroge	n Sulfide (A4)		Loamy M	Jucky Mir	neral (F1)		Very Shallow Dark Surface (TF12)	
Stratified	Layers (A5)		Loamy C	Gleyed Ma	atrix (F2)		Other (Explain in Remarks)	
2 cm Mu	ick (A10)		<ul> <li>Depleted</li> </ul>	d Matrix (F	=3)			
Depleted	Below Dark Surfac	e (A11)	Redox D	ark Surfa	ice (F6)		2	
Thick Da	ark Surface (A12)		Depleted	d Dark Su	rface (F7)		Indicators of hydrophytic vegetation and	
Sandy M	lucky Mineral (S1)	2)	Redox L	epression	ns (F8)		wetland hydrology must be present,	
Restrictive I	aver (if observed):							
Type <sup>.</sup>								
Depth (inc	ches):		_				Hydric Soil Present? Yes No	_
Remarks:			_					
Hydric	soil present							
HYDROLO	GY							
Wetland Hyd	drology Indicators:							
Primary Indic	ators (minimum of o	ne is require	d; check all that ap	ply)			Secondary Indicators (minimum of two required	<u>d)</u>
Surface	Water (A1)		Water-Stai	ned Leave	es (B9)		Surface Soil Cracks (B6)	
High Wa	ter Table (A2)		Aquatic Fa	una (B13)	)		Drainage Patterns (B10)	
🖌 🗹 Saturatio	on (A3)		True Aquat	tic Plants	(B14)		Dry-Season Water Table (C2)	
Water M	arks (B1)		Hydrogen \$	Sulfide Oc	dor (C1)		Crayfish Burrows (C8)	
Sedimer	nt Deposits (B2)		Oxidized R	hizosphe	res on Liv	ing Roots	(C3) Saturation Visible on Aerial Imagery (C9)	
Drift Dep	oosits (B3)		Presence of the second seco	of Reduce	d Iron (C4	4)	Stunted or Stressed Plants (D1)	
Algal Ma	at or Crust (B4)		Recent Irol	n Reductio	on in Tille	d Soils (C6	6) Ceomorphic Position (D2)	
Iron Dep	osits (B5)		Thin Muck	Surface (	C7)		FAC-Neutral Test (D5)	
Inundatio	on Visible on Aerial I	magery (B7)	Gauge or V	Nell Data	(D9)			
Sparsely	Vegetated Concave	e Surface (B8	3) Other (Exp	lain in Re	marks)			
Field Obser	vations:		<b>V</b> = 0.0					
Surface Wate	er Present? Y	es No	Depth (inc	ches):		-		
Water Table	Present? Y	es No	Depth (inc	ches):		-1		
Saturation P	resent? Y	es 🗾 No	Depth (inc	ches): <u>3</u>		_   Wetla	land Hydrology Present? Yes No	_
Describe Re	corded Data (stream	aauae, moni	toring well, aerial p	hotos, pre	evious ins	pections).	if available:	
			-			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Remarks:								
Matland	bydrology	arocont						
wenand	i iyu ology p	Jiesent						

				5			
Project/Site: AEP North Delphos - Rockhill Delineation	<u>n</u> c	city/County:	Lima/All	en	Samplin	ng Date: 2021	-06-30
Applicant/Owner: AEP				State: Ohio	Samplin	g Point: 2-C	UPL
Investigator(s): Tyler Russell	s	Section, Tov	vnship, Rar	nge: Section 13, 3	S 6E		
Landform (hillslope, terrace, etc.): Upland		L	ocal relief (	concave, convex, nor	e): Conca	ave	
Slope (%): 2 Lat: 40.77517	L	.ong: -84.	11239		Datum:	WGS 84	
Soil Map Unit Name: Blg1A1				NWI class	sification:		
Are climatic / hydrologic conditions on the site typical for this time	e of yea	r? Yes	No	(If no, explain i	n Remarks.)		
Are Vegetation , Soil , or Hydrology signific	icantly d	listurbed?	Are "	Normal Circumstance	s" present?	Yes 🖌	No
Are Vegetation , Soil , or Hydrology natura	ally prob	ematic?	(If ne	eded, explain any ans	wers in Rem	narks.)	
	wing	oomnlin	, n naint k	actions transs	to impo	rtant faatur	ac ata
Solviniar for Findings – Attach site map sho	wing	sampiinę	j point id	ocations, transet	is, impor	rtant leatur	es, etc.
Hydrophytic Vegetation Present? Yes No	<u>v</u>	le th	Samplad	A.r.o.			
Hydric Soil Present? Yes No	<u> </u>	is the	e Sampieu	Area		4	
Wetland Hydrology Present? Yes No	<u>~</u>	withi	n a Wetlan	d? Yes_	No		
VEGETATION – Use scientific names of plants.	nd 2-	C PEM					
Abs	solute	Dominant	Indicator	Dominance Test w	orksheet:		
Tree Stratum (Plot size: 30 ft r ) <u>% (</u>	Cover	Species?	Status	Number of Dominan	t Species		
1				That Are OBL, FAC	N, or FAC:	1	_ (A)
2			FACU	Total Number of Dor	minant	•	
3				Species Across All S	Strata:	3	_ (B)
4				Percent of Dominan	t Species		
D		- Total Cav		That Are OBL, FAC	N, or FAC:	33.3	_ (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft r )		- Total Cov	er	Prevalence Index v	vorksheet:		
1				Total % Cover of	of:	Multiply by:	
2				OBL species 0	x	1 =	
3				FACW species 0	x	2 = 0	_
4				FAC species 30	X	3 = 90	
1							

1.				Total % Cover of: Multiply by:
2.				OBL species         0         x 1 =         0
3.				FACW species 0 x 2 = 0
4				FAC species <u>30</u> x 3 = <u>90</u>
5				FACU species 70 x 4 = 280
		= Total Co	ver	UPL species 0 x 5 = 0
Herb Stratum (Plot size: 5 ft r )	30	~	FACU	Column Totals: 100 (A) 370 (B)
2. Glechoma hederacea	25	<ul> <li>✓</li> </ul>	FACU	Prevalence Index = B/A = <u>3.70</u>
3. Poa pratensis	20	<ul> <li>✓</li> </ul>	FAC	Hydrophytic Vegetation Indicators:
4. Dactylis glomerata	15		FACU	1 - Rapid Test for Hydrophytic Vegetation
5. Plantago major	10		FAC	2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
8				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
9				
Woody Vine Stratum (Plot size: 30 ft r )	100%	_ = Total Co	ver	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1				Hydronhytic
2.				Vegetation
		= Total Co	ver	Present? Yes No
Remarks: (Include photo numbers here or on a separate s	sheet.)			
No Hydrophytic vegetation present	t.			

Profile Desc	cription: (Describe	to the depth	needed to docum	nent the ind	licator o	or confirm	n the absence of	indicators.)
Depth (inchoo)	Matrix		Redox	<u>Features</u>	Turne <sup>1</sup>	1.0.02	Touture	Demorke
			Color (moist)		Туре	LOC		Remarks
	10 YR 4/3						Loamy Sand	
-								
-								
_								
-								
-								
<sup>1</sup> Type: C=C	oncentration, D=Dep	pletion, RM=R	educed Matrix, MS	=Masked S	and Gra	ins.	<sup>2</sup> Location: F	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators fo	r Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy G	leyed Matrix	x (S4)		Coast Pra	airie Redox (A16)
Histic E	pipedon (A2)		Sandy R	edox (S5)			Dark Sur	ace (S7)
Black H	istic (A3)		Stripped	Matrix (S6)	)		Iron-Man	ganese Masses (F12)
Hydroge	en Sulfide (A4)		Loamy N	lucky Miner	ral (F1)		Very Sha	llow Dark Surface (TF12)
Stratifie	d Layers (A5)		Loamy C	Bleyed Matri	ix (F2)		Other (Ex	plain in Remarks)
2 cm Mu	uck (A10)	( ( ) ( )	Depleted	d Matrix (F3)	)			
Deplete	d Below Dark Surface	ce (ATT)	Redox L	ark Surface	e (F6)		<sup>3</sup> Indicators of	hydrophytic vocatation and
Sandy M	Airk Suillace (A12) Aucky Mineral (S1)		Depieted		(F8)		wetland b	vdrology must be present
5 cm Mi	ucky Peat or Peat (S	3)		cp100010110	(10)		unless di	sturbed or problematic.
Restrictive	Layer (if observed)	):						
Type:								
Depth (in	ches):		_				Hydric Soil Pr	esent? Yes No
Remarks:								
Remarks.								
No Hyd	ric soil pres	ent						
HYDROLO	GY							
Wetland Hy	drology Indicators	:						
Primary Indi	cators (minimum of	one is required	l; check all that ap	ply)			Secondary	Indicators (minimum of two required)
Surface	Water (A1)		Water-Stai	ned Leaves	(B9)		Surfac	e Soil Cracks (B6)
High Wa	ater Table (A2)		Aquatic Fa	una (B13)			Draina	ge Patterns (B10)
Saturati	on (A3)		True Aquat	tic Plants (B	(14)		Dry-Se	ason Water Table (C2)
Water M	larks (B1)		Hydrogen \$	Sulfide Odor	r (C1)		Crayfis	h Burrows (C8)
Sedime	nt Deposits (B2)		Oxidized R	hizospheres	s on Livi	ng Roots	(C3) Satura	tion Visible on Aerial Imagery (C9)
Drift De	posits (B3)		Presence of	of Reduced I	Iron (C4	)	Stunte	d or Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Recent Iror	n Reduction	in Tilled	Soils (C	6) Geomo	orphic Position (D2)
Iron Dep	oosits (B5)		Thin Muck	Surface (C7	7)		FAC-N	eutral Test (D5)
Inundati	on Visible on Aerial	Imagery (B7)	Gauge or V	Vell Data (D	9)			
Sparsel	y Vegetated Concav	e Surface (B8	) Other (Exp	lain in Rema	arks)			
Field Obser	vations:							
Surface Wat	er Present?	Yes No	Depth (inc	:hes):		_		
Water Table	Present?	Yes No	Depth (inc	:hes):		_		
Saturation P	resent?	Yes No	Depth (inc	hes):		_ Wet	land Hydrology F	resent? Yes No
(includes ca	pillary fringe)							
Describe Re	corded Data (strean	n gauge, moni	toring well, aerial p	notos, previ	ious insp	pections),	if available:	

Remarks:

## No hydrology present

Project/Site: AEP North Delphos - Rockhill Delineation	City/County: Lima/Allen		Sampling Date:	2021-06-30
Applicant/Owner: AEP		State: Ohio	Sampling Point:	2-D
Investigator(s): E. Wilson, J. Holmes	Section, Township, Range: _	S019, T0	03, R007	
Landform (hillslope, terrace, etc.): Depression	Local relief (conca	ive, convex, none):	None	
Slope (%): 0 Lat: 40.7654773	Long: -84.102298		Datum: WGS 8	34
Soil Map Unit Name: BsA		NWI classific	ation: None	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🗾 No	(If no, explain in Re	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances" p	resent? Yes	No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answer	rs in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locati	ons, transects	, important fe	eatures, etc.

Hydrophytic Vegetation Present?	Yes No	
Hydric Soil Present?	Yes No	Is the Sampled Area
Wetland Hydrology Present?	Yes 🖌 No	within a Wetland? Yes <u>V</u> No
Remarks:		1

# Large PEM wetland within low depression.

**VEGETATION** – Use scientific names of plants.

00.6	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Deminent
3.				Species Across All Strata: 2 (B)
4				
5				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft r )		= Total Cov	er	Prevalence Index worksheet:
1				Total % Cover of Multiply by:
0				$\frac{1}{1-90}$
2				
3				$\begin{array}{c c} FAC \text{ vv species } \underline{O} \\ \hline \\ FAC \text{ vv species } \underline{O} \\ \hline \\ \hline \\ \end{array}$
4				FAC species $0$ $x^3 = 0$
5				FACU species $0 \times 4 = 0$
E ft r		= Total Cov	er	UPL species $5$ $x 5 = 25$
Herb Stratum (Plot size: 51(1))	25			Column Totals: 100 (A) 125 (B)
1. Scirpus pendulus	35			
2. Scirpus atrovirens	30	<u> </u>	OBL	Prevalence Index = B/A = 1.3
3. Carex frankii	15		OBL	Hydrophytic Vegetation Indicators:
4. Carex lurida	10		OBL	✓ 1 - Rapid Test for Hydrophytic Vegetation
5. Carex vulpinoidea	5		FACW	∠ 2 - Dominance Test is >50%
6. Dipsacus laciniatus	5		UPL	✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
0				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
9				
10	100%			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Weedy Vine Stratum (Plot size: 30 ft r	100%	= Total Cov	er	be present, unless disturbed or problematic.
Woody vine Stratum (Flot size)				
1				Hydrophytic
2				Present? Yes No
		= Total Cov	er	
Remarks: (Include photo numbers here or on a separate s	sheet.)			
Hydrophytic vegetation is present.				

## \_\_\_\_

SOIL								Sampling Point: <u>2-D</u>
Profile Desc	ription: (Describ	e to the dep	th needed to docum	nent the	indicator	or confir	m the absence o	of indicators.)
Depth	Matrix		Redo	x Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 20	10YR 4/2	95	10YR 5/6	5	С	М	Clay Loam	
-								
-								
-								
_								
	ncentration D=De	enletion RM	=Reduced Matrix MS		d Sand Gr	ains	<sup>2</sup> Location:	PI = Pore Lining M=Matrix
Hydric Soil I	ndicators:			D-Waske	u Sanu Gi	an15.	Indicators f	for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy	Sleved M	atrix (S4)		Coast P	Prairie Redox (A16)
Histic Ep	pipedon (A2)		Sandy F	Redox (S	5)		Dark Su	urface (S7)
Black His	stic (A3)		Stripped	Matrix (	S6)		Iron-Ma	inganese Masses (F12)
Hydroge	n Sulfide (A4)		Loamy I	Mucky M	ineral (F1)		Very Sh	nallow Dark Surface (TF12)
Stratified	Layers (A5)		Loamy (	Gleyed N	latrix (F2)		Other (E	Explain in Remarks)
2 cm Mu	ick (A10)		Deplete	d Matrix	(F3)			
Depleted	Below Dark Surfa	ace (A11)	Redox [	Dark Surf	ace (F6)		3	
Thick Da	ark Surface (A12)		Deplete	d Dark S	urface (F7	)	Indicators	of hydrophytic vegetation and
Sandy M	lucky Mineral (S1)	62)	Redox L	epressi	ons (F8)		wetland	hydrology must be present,
5 cm Mu	aver (if observed	33) N·					uniess c	disturbed of problematic.
	Layer (Π observed	<i>.</i> ,.						
Type. <u>117</u>							Hydric Soil F	Present? Yes No
Depth (Inc	cnes):							
Remarks:								
Hydric s	soils are pre	esent						
HYDROLO	GY							
Wetland Hyd	drology Indicator	s:						
Primary Indic	ators (minimum of	one is requi	red: check all that ap	(vlq			Secondar	v Indicators (minimum of two required)
Surface	Water (A1)		Water-Stai	ned Lea	ves (B9)		Surfa	ace Soil Cracks (B6)
High Wa	ter Table (A2)		Aquatic Fa	una (B1)	3)		V Drain	age Patterns (B10)
Saturatio	on (A3)		True Aqua	tic Plants	s (B14)		Drv-S	Season Water Table (C2)
Water M	arks (B1)		Hvdrogen	Sulfide C	dor (C1)		Cravi	fish Burrows (C8)
Sedimen	nt Deposits (B2)		V Oxidized F	hizosph	eres on Liv	ing Roots	s (C3) 🔽 Satur	ration Visible on Aerial Imagery (C9)
Drift Dep	oosits (B3)		Presence	of Reduc	ed Iron (C	4)	Stunt	ted or Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Recent Iro	n Reduc	tion in Tille	d Soils (C	(6) 🔽 Geon	norphic Position (D2)
Iron Dep	osits (B5)		Thin Muck	Surface	(C7)	,	FAC-	Neutral Test (D5)
Inundatio	on Visible on Aeria	l Imagery (B	7) Gauge or V	Nell Data	a (D9)		_	
Sparsely	Vegetated Conca	ve Surface (	B8) Other (Exp	lain in R	emarks)			
Field Observ	vations:							
Surface Wate	er Present?	Yes	No / Depth (ind	ches):				
Water Table	Present?	Yes	No V Depth (inc	ches):				
Saturation Pr	resent?	Yes	No V Depth (in	ches).			land Hydrology	Present? Yes V
(includes cap	oillary fringe)					_   ""	aana nyarology	Nosent: 105 No
Describe Rec	corded Data (strea	m gauge, m	onitoring well, aerial p	photos, p	revious ins	spections)	, if available:	

Remarks:

Hydrology is present.

Project/Site: AEP North Delphos - Rockhill		City/Cour	nty: Lima /	Allen Sampling Date: 2021-06-30
Applicant/Owner: AEP				State: Ohio Sampling Point: 2-D/1-AG UPL
Investigator(s): J. Holmes E. Wilson		Section,	Township, Ra	ange: S019 T003 R007
Landform (hillslope, terrace, etc.): Upland, Flat			_ Local relief	(concave, convex, none): None
Slope (%): <u>1</u> Lat: <b>40.765820</b>		Long: -8	4.102389	Datum: WGS 84
Soil Map Unit Name:BsA		•		NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this	s time of ye	ar? Yes	No_No	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologys	ignificantly	disturbed	? Are	"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology r	aturally pro	blematic	? (lf n	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing	sampl	ing point l	locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes N	• <b>_ ′</b>			
Hydric Soil Present? Yes N	o	ls	the Sampled	d Area
Wetland Hydrology Present? Yes N	o _ <b>/</b>	w	ithin a Wetla	nd? Yes No
Remarks:				
Representative of Areas outside we	etland.	area	previous	sly disturbed by construction
VEGETATION – Use scientific names of plants.				
00.5	Absolute	Domina	int Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species	<u>Status</u>	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2	·			Total Number of Dominant
3				Species Across All Strata: <u>2</u> (B)
4 5	- <u> </u>			Percent of Dominant Species
		= Total C	Cover	That Are OBL, FACW, or FAC: 0 (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species $\frac{0}{2}$ x 1 = $\frac{0}{2}$
3				FACW species $0 \times 2 = 0$
4				FAC species $0 \times 3 = 0$
5				FACU species $\frac{00}{40}$ $x = \frac{240}{200}$
Herb Stratum (Plot size: 5 ft r )		= Total C	Cover	$\begin{array}{c} \text{OPL species}  \underline{40} \qquad \chi \text{ 5} = \underline{200} \\ \text{Column Totals:}  \underline{100} \qquad (A)  \underline{440} \qquad (B) \end{array}$
1. Dipsacus laciniatus	40	~	UPL	
2. Bromus inermis	30	~	FACU	Prevalence Index = $B/A = 4.4$
3. Erigeron annuus	15		FACU	Hydrophytic Vegetation Indicators:
4. Lolium perenne	15		FACU	1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations' (Provide supporting data in Remarks or on a separate speet)
8				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
9				
10	100%			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r	100%	= Total C	Cover	be present, unless disturbed or problematic.
1				Hydrophytic
2				Vegetation
		= Total C	Cover	Present? Yes No V
Remarks: (Include photo numbers here or on a separate s	sheet.)			
A preponderance of hydrophytic ve	egetati	on is i	not nres	ent
	-90 tati	0.1.101		

L

Profile Desc	ription: (Describe	to the dept	h needed to docur	ment the indicator	or confirm	n the absence	of indicators.)			
Depth	Matrix		Redo	x Features		_	_			
(inches)	Color (moist)	%	Color (moist)	<u>%</u> Type'	Loc	Texture	Remarks			
_0-20	10YR 4/3	_ <u>100</u> _				Sandy Clay Loam				
-										
-										
-										
1						2				
'Type: C=Co	oncentration, D=Dep	pletion, RM=	Reduced Matrix, M	S=Masked Sand G	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.			
Hydric Soil	Indicators:					Indicators	for Problematic Hydric Soils":			
Histosol	(A1)		Sandy (	Gleyed Matrix (S4)		Coast I	Prairie Redox (A16)			
Histic Ep	bipedon (A2)		Sandy F	Redox (S5)		Dark S	urface (S7)			
Black Hi	stic (A3)		Stripped	d Matrix (S6)		Iron-Ma	anganese Masses (F12)			
Hydroge	en Sulfide (A4)		Loamy	Mucky Mineral (F1)		Very Si	nallow Dark Surface (TF12)			
Stratilied	Layers (A5)		Loany	d Matrix (F2)						
2 cm with	d Below Dark Surfac	ce (A11)	Depiete	Dark Surface (F6)						
Thick Da	ark Surface (A12)		Deplete	ed Dark Surface (F7	)	<sup>3</sup> Indicators	of hydrophytic vegetation and			
Sandy M	lucky Mineral (S1)		Redox I	Depressions (F8)	/	wetland	hvdrology must be present.			
5 cm Mu	icky Peat or Peat (S	33)	_	,		unless	disturbed or problematic.			
Restrictive	Layer (if observed)	):								
Type:										
Depth (in	ches):					Hydric Soil	Present? Yes No			
Remarke:										
The soi	l profile doe	s not me	eet the crite	eria for any	hydric	soil indic	ators			
HYDROLO	GY									
Wetland Hy	drology Indicators	:								
Primary India	cators (minimum of	one is require	ed; check all that ap	oply)		Seconda	ry Indicators (minimum of two required)			
Surface	Water (A1)		Water-Sta	ined Leaves (B9)		Surfa	ace Soil Cracks (B6)			
High Wa	ater Table (A2)		Aquatic Fa	auna (B13)		Draii	nage Patterns (B10)			
Saturatio	on (A3)		True Aqua	atic Plants (B14)		Dry-Season Water Table (C2)				
Water M	larks (B1)		Hydrogen	Sulfide Odor (C1)		Crayfish Burrows (C8)				
Sedimer	nt Deposits (B2)		Oxidized F	Rhizospheres on Liv	ing Roots	(C3) Satu	ration Visible on Aerial Imagery (C9)			
Drift Dep	posits (B3)		Presence	of Reduced Iron (C	4)	Stun	ted or Stressed Plants (D1)			
Algal Ma	at or Crust (B4)		Recent Iro	on Reduction in Tille	d Soils (Ce	6) Geo	morphic Position (D2)			
Iron Dep	oosits (B5)		Thin Muck	Surface (C7)		FAC	-Neutral Test (D5)			
Inundati	on Visible on Aerial	Imagery (B7)	) Gauge or	Well Data (D9)						
Sparsely	Vegetated Concav	e Surface (B	8) Other (Exp	plain in Remarks)						
Field Obser	vations:									
Surface Wat	er Present?	Yes N	lo 🗾 Depth (in	ches):	_					
Water Table	Present?	Yes N	lo 🖌 Depth (in	ches):						
Saturation P (includes car	resent?	Yes N	lo Depth (in	ches):	Wetl	and Hydrology	/ Present? Yes No			
Describe Re	corded Data (stream	n gauge, mor	nitoring well, aerial	photos, previous in	spections),	if available:				
No primary	and or second	ary wetlan	d hydrology inc	dicators were pr	esent at	the time of s	sampling			
Remarks:										

WEIEAND DETER				- Midwest Region
Project/Site: AEP North Delphos - Rockhill Delinea	tion	City/County	: Lima/All	en Sampling Date: 2021-06-30
Applicant/Owner: AEP				State: Ohio Sampling Point: 2-E
Investigator(s): E. Wilson, J. Holmes		Section, To	wnship, Rar	<sub>nge:</sub> S019, T003, R007
Landform (hillslope, terrace, etc.): Depression			Local relief (	(concave, convex, none): <u>Concave</u>
Slope (%): 0 Lat: 40.7683624		Long: -84	.1054541	Datum: WGS 84
Soil Map Unit Name: GuB				NWI classification: None
Are climatic / hydrologic conditions on the site typical for this	time of ye	ar? Yes	No	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology si	gnificantly	disturbed?	Are "	Normal Circumstances" present? Yes 🗾 No
Are Vegetation, Soil, or Hydrology na	aturally pro	oblematic?	(If ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site maps	howing	ı samplin	a point la	ocations, transects, important features, etc.
			gpontik	
Hydrophytic Vegetation Present? Yes No	·	ls th	e Sampled	Area
Wetland Hydrology Present?	,	with	in a Wetlan	nd? Yes 🗸 No
<b>VEGETATION</b> – Use scientific names of plants.	Absoluto	Dominant	Indicator	Dominance Test workshoet:
Tree Stratum (Plot size: 30 ft r )	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>1</u> (B)
4				Percent of Dominant Species
- 5		= Total Co	ver	That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species         85         x1 = 85           15         20
3				FACW species $13 \times 2 = 30$
4				FAC species $0$ $x 3 = 0$
D		- Total Co		$\begin{array}{c c} \hline & & \\ \hline & & \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\$
Herb Stratum (Plot size: <u>5 ft r</u> )		10tai C0	vei	Column Totals: 100 (A) 115 (B)
1. Typha angustifolia	80	·	OBL	
La Phalaris arundinacea	15			Prevalence Index = B/A = 1.2

2. Phalaris arundinacea	15	FACW	Prevalence Index = B/A = <u>1.2</u>
3. Leersia oryzoides	5	OBL	Hydrophytic Vegetation Indicators:
4.			<ul> <li>1 - Rapid Test for Hydrophytic Vegetation</li> </ul>
5.			✓ 2 - Dominance Test is >50%
6.			✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7			4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
9			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10 Woody Vine Stratum (Plot size: 30 ft r )	= Total Co	ver	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1 /		ver	Hydrophytic Vegetation Present? Yes <u>V</u> No
Remarks: (Include photo numbers here or on a separate s	sheet.)		

## Hydrophytic vegetation is present

Profile Desc	ription: (Describe	to the dep	oth needed to docur	nent the	indicator	or confirm	n the absence	of indicators.)
Depth	Matrix		Redo	x Feature	S1		_	
(inches)	Color (moist)	%	Color (moist)	%	Type'	_Loc <sup>2</sup>	Texture	Remarks
0-20	10YR 3/1	90	10YR 3/6	10	<u> </u>	PL / M	Silty Clay Loam	
-								
-								
					·			
-								
-								
		- <u> </u>			d Sand Gr		<sup>2</sup> Location:	PL-Poro Liping M-Matrix
Hydric Soil	ndicators:			5-Masked	a Sanu Gi	ams.	Indicators	for Problematic Hydric Soils <sup>3</sup>
Histosol	(A 1)		Sandy	Cloved Mr	atrix (SA)		Coast	Prairie Pedev (A16)
Histic Er	(AT) binedon (A2)		Sandy G	Sedox (SF	aurix (34)		Coast P	Inface (S7)
Black Hi	stic (A3)		Stripped	Matrix (S	7) 56)		Dark Of	anganese Masses (F12)
Hydroge	n Sulfide (A4)		Loamy	Mucky Mi	neral (F1)		Very Sł	nallow Dark Surface (TF12)
Stratified	Layers (A5)		Loamy	Gleyed M	atrix (F2)		Other (I	Explain in Remarks)
2 cm Mu	ck (A10)		Deplete	d Matrix (	F3)			
Depleted	Below Dark Surfac	æ (A11)	🖌 Redox I	Dark Surfa	ace (F6)			
Thick Da	ark Surface (A12)		Deplete	d Dark Su	urface (F7	)	<sup>3</sup> Indicators	of hydrophytic vegetation and
Sandy M	lucky Mineral (S1)		Redox I	Depressio	ns (F8)		wetland	hydrology must be present,
5 cm Mu	cky Peat or Peat (S	3)					unless	disturbed or problematic.
Restrictive L	_ayer (if observed)							
Type: <u>N</u>	Α						Hydric Soil	Present? Yes No
Depth (inc	ches):						liyane com	
Remarks:								
Ludria	oile are pro	cont						
Hyunc s	solis are pre	Sent						
HYDROLO	GY							
Wotland Hy	trology Indicators:							
	ators (minimum of a		ined, check all that an	(mba)			Casanda	- Indiantara (minimum of two required)
Primary Indic	ators (minimum of c	one is requ	ired; check all that ap	<u>, piy)</u>	(50)		<u>Seconda</u>	ry indicators (minimum of two required)
Surface	Water (A1)		Water-Sta	ined Leav	res (B9)		Surfa	ace Soil Cracks (B6)
High Wa	ter Table (A2)		Aquatic Fa	auna (B13	5) (54.0)		Drain	hage Patterns (B10)
Saturatio	on (A3)		True Aqua	tic Plants	(B14)		Dry-\$	Season Water Table (C2)
Water M	arks (B1)		Hydrogen	Sulfide O	dor (C1)		Cray	fish Burrows (C8)
Sedimer	it Deposits (B2)		Oxidized F	Rhizosphe	eres on Liv	ing Roots	(C3) 💌 Satu	ration Visible on Aerial Imagery (C9)
Drift Dep	oosits (B3)		Presence	of Reduce	ed Iron (C	4)	Stun	ted or Stressed Plants (D1)
Algal Ma	it or Crust (B4)		Recent Iro	n Reduct	ion in Tille	d Soils (Ce	5) <u>v</u> Geor	morphic Position (D2)
Iron Dep	osits (B5)		Thin Muck	Surface	(C7)		FAC-	-Neutral Test (D5)
Inundatio	on Visible on Aerial	Imagery (E	37) Gauge or	Well Data	(D9)			
Sparsely	Vegetated Concav	e Surface	(B8) Other (Exp	plain in Re	emarks)			
Field Observ	vations:							
Surface Wate	er Present? Y	'es	No Depth (in	ches):				
Water Table	Present? Y	'es 🔽	No Depth (in	ches): <u>4</u>		_		
Saturation Pr	resent? Y	′es _	No Depth (in	ches): <u>4</u>		Wetl	and Hydrology	Present? Yes 🥓 No
(includes cap	oillary fringe)		onitoring well pariel	nhotos r	evious in		if available:	
Describe Rec	Jorden Data (stream	i gauge, m	omoning well, aerial	priotos, pr	evicus ins	specions),	n avalidule.	
Dawserles								
Remarks:								
Hydrolo	gy indicator	s are p	present					

Project/Site: AEP North Delphos - Rockhill Delineation	City/County: Lima/Allen Sampling Date: 2021-06-30
Applicant/Owner: AEP	State: Ohio Sampling Point: 2-E/F UPL
Investigator(s): E. Wilson, J. Holmes	_ Section, Township, Range: S019, T003, R007
Landform (hillslope, terrace, etc.): Upland	Local relief (concave, convex, none): None
Slope (%): 0 Lat: 40.769132	Long: -84.1059261 Datum: WGS 84
Soil Map Unit Name: _GuB	NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of y	rear? Yes 🗾 No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significant	y disturbed? Are "Normal Circumstances" present? Yes 🗾 No
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes No	Is the Sampled Area
Wetland Hydrology Present? Yes No	within a Wetland? Yes No

Remarks:

## Upland sample point for wetlands 2-E and 2-F.

**VEGETATION** – Use scientific names of plants.

20 ()	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 1 (A)
2.				
3				Total Number of Dominant
3				Species Across All Strata: <u>5</u> (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 33 (A/B)
45.6		= Total Cov	er	
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1				Total % Cover of:Multiply by:
2				OBL species $0 \qquad x = 0$
2				EACW species $0$ $x_2 = 0$
3				7 A C W Species <u>- 25</u>
4				FAC species $23$ $x^3 = 75$
5				FACU species x 4 =
		= Total Cov	er	UPL species $0 \times 5 = 0$
Herb Stratum (Plot size: 5 ft r )				Column Totals: 100 (A) 375 (B)
1. Trifolium repens	45	~	FACU	(-)
2. Plantago lanceolata	30	~	FACU	Prevalence Index = B/A = 3.8
3. Poa pratensis	25	~	FAC	Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5.				2 - Dominance Test is >50%
6.				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
o				data in Remarks or on a separate sheet)
0				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
9				
10				<sup>1</sup> Indicators of hydric coil and watland hydrology must
00.4	100%	= Total Cov	er	he present unless disturbed or problematic
Woody Vine Stratum (Plot size: 30 ft r )				
1				Hydrophytic
2				Vegetation
		= Total Cov		Present? Yes No
Remarks: (Include photo numbers here or on a congrate s	heet )	- 10(a) 000		
Temarka. (molude proto numbers here of off a separate s	neet.)			
Upland sample point. No hydrophyt	tic veg	etation	preser	nt.

Profile Desc	ription: (Describe	to the depth	needed to docu	ment the indicator or	confirm	n the absence of ind	licators.)	
Depth	Matrix		Redo	x Features				
(inches)	Color (moist)		Color (moist)	<u>%</u> <u>Type</u> <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0 - 20	10YR 4/3	100				Silt Loam		
-								
-								
-								
		·						
-								
<sup>1</sup> Type: C=C	oncentration, D=Dep	letion, RM=R	educed Matrix, M	S=Masked Sand Grair	าร.	<sup>2</sup> Location: PL=	Pore Lining, M=Matri	x.
Hydric Soil	Indicators:		· · ·			Indicators for P	roblematic Hydric S	oils <sup>3</sup> :
Histosol	(A1)		Sandy	Gleved Matrix (S4)		Coast Prairie	e Redox (A16)	
Histic Er	pipedon (A2)		Sandy	Redox (S5)		Dark Surface	∋ (S7)	
Black Hi	stic (A3)		Strippe	d Matrix (S6)		Iron-Mangan	ese Masses (F12)	
Hydroge	en Sulfide (A4)		Loamy	Mucky Mineral (F1)		Very Shallow	v Dark Surface (TF12	2)
Stratified	d Layers (A5)		Loamy	Gleyed Matrix (F2)		Other (Expla	in in Remarks)	
2 cm Mu	ick (A10)		Deplete	ed Matrix (F3)				
Depleted	d Below Dark Surfac	e (A11)	Redox	Dark Surface (F6)				
Thick Da	ark Surface (A12)		Deplete	ed Dark Surface (F7)		<sup>3</sup> Indicators of hydrogeneration	drophytic vegetation	and
Sandy M	lucky Mineral (S1)		Redox	Depressions (F8)		wetland hydr	ology must be preser	nt,
5 cm Mu	icky Peat or Peat (S	3)				unless distur	bed or problematic.	
Restrictive I	Layer (if observed):							
Type: N	/A		_					
Depth (in	ches):					Hydric Soil Prese	ent? Yes	No
Remarks <sup>.</sup>	/							
rtemarks.								
No hydi	ric soils pres	ent.						
	•							
HYDROLO	GY							
Wotland Hy	drology Indicators:							
	urology mulcators.					<u> </u>		
Primary India	cators (minimum of o	one is require	a; check all that a	oply)		Secondary Ind	icators (minimum of t	wo required)
Surface	Water (A1)		Water-Sta	ined Leaves (B9)		Surface S	oil Cracks (B6)	
High Wa	ater Table (A2)		Aquatic Factor	auna (B13)		Drainage	Patterns (B10)	
Saturatio	on (A3)		True Aqua	atic Plants (B14)		Dry-Seaso	on Water Table (C2)	
Water M	larks (B1)		Hydrogen	Sulfide Odor (C1)		Crayfish B	urrows (C8)	
Sedimer	nt Deposits (B2)		Oxidized I	Rhizospheres on Living	g Roots	(C3) Saturation	Visible on Aerial Ima	agery (C9)
Drift Dep	posits (B3)		Presence	of Reduced Iron (C4)		Stunted or	r Stressed Plants (D1	)
Algal Ma	at or Crust (B4)		Recent Irc	on Reduction in Tilled	Soils (C6	6) Geomorph	nic Position (D2)	
Iron Dep	oosits (B5)		Thin Muck	surface (C7)	-	FAC-Neut	ral Test (D5)	
Inundati	on Visible on Aerial I	magery (B7)	Gauge or	Well Data (D9)				
Sparsely	Vegetated Concave	e Surface (B8	Other (Ex	plain in Remarks)				
Field Obser	vations	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	/					
Surface M/-t				(choo)				
Surface wat	er Present? Y	es No		unes).	-			

 Water Table Present?
 Yes \_\_\_\_\_ No \_
 Depth (inches): \_\_\_\_\_\_
 Wetland Hydrology Present? Yes \_\_\_\_\_ No \_
 No \_

 Saturation Present?
 Yes \_\_\_\_\_ No \_
 Depth (inches): \_\_\_\_\_\_
 Wetland Hydrology Present? Yes \_\_\_\_\_ No \_
 No \_

 (includes capillary fringe)
 Depth (inches): \_\_\_\_\_\_
 Depth (inches): \_\_\_\_\_\_
 Wetland Hydrology Present? Yes \_\_\_\_\_ No \_
 No \_

 Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
 Remarks:
 Upland sample point. No hydrology present.

Project/Site: AEP North Delphos - Rockhill	(	Citv/Countv	Lima /	Allen Sampling Date: 2021-06-30					
Applicant/Owner: AEP		State Ohio Sampling Point 2-F							
Investigator(s): J. Holmes E. Wilson		Section. To	wnship. Ra	nge: S019 T003 R007					
Landform (hillslope, terrace, etc.); Depression		,	Local relief	(concave, convex, none); Concave					
Slope (%): 1 Lat: 40.769101		-84.	105922	Datum: WGS 84					
Soil Map Unit Name: GUB				NWI classification: N/A					
Are climatic / hydrologic conditions on the site typical for th	is time of ve	ar2 Ves	V No	(If no, explain in Remarks )					
Are Vegetation Soil or Hydrology	significantly	disturbed?	NO						
Are Vegetation, Soil, or Hydrology	significantiy	blomatic?	Ale (If po	voded evolein any appuvers in Remarka )					
SUMMARY OF FINDINGS – Attach site map	showing	samplin	a point l	ocations, transects, important features, etc.					
	la		gpointi						
Hydrophytic Vegetation Present? Fes P	NO	Is the Sampled Area							
Wetland Hydrology Present? Yes _	No	with	in a Wetlar	nd? Yes 🖌 No					
Remarks:									
Roadside depression .									
VEGETATION – Use scientific names of plants	s.								
Tree Stratum (Plot size: 30 ft r )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:					
1.				That Are OBL, FACW, or FAC: 3 (A)					
2.									
3				Species Across All Strata: 3 (B)					
4				Benerit of Deminent Oracion					
5				That Are OBL, FACW, or FAC: 100 (A/B)					
Semling/Chryth Ctratum (Distaire), 15 ft r		= Total Cov	/er	Provalance Index worksheet:					
Sapiing/Shrub Stratum (Plot size:)				Total % Cover of: Multiply by:					
2				$\begin{array}{c} \hline					
2				FACW species $55$ $x_2 = 110$					
3				FAC species $0$ $x_3 = 0$					
5				FACIL species $0$ $x = 0$					
J		= Total Cov		UPL species $0$ $x_5 = 0$					
Herb Stratum (Plot size: <u>5 ft r</u> )		- 10(a) 00(		Column Totals: 100 (A) 155 (B)					
1. Eleocharis obtusa	45	<u> </u>	OBL						
2. Phalaris arundinacea		<u> </u>	FACW	Prevalence Index = B/A = <u>1.6</u>					
3. Persicaria pensylvanica	_ 25	<u> </u>	FACW	Hydrophytic Vegetation Indicators:					
4				✓ 1 - Rapid Test for Hydrophytic Vegetation					
5				2 - Dominance Test is >50%					
6				✓ 3 - Prevalence Index is ≤3.0					
7				<ul> <li>4 - Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)</li> </ul>					
8				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)					
9									
10	100%			<sup>1</sup> Indicators of hydric soil and wetland hydrology must					
Woody Vine Stratum (Plot size: 30 ft r	100%	= Total Cov	/er	be present, unless disturbed or problematic.					
1.				Hydrophytic					
2.				Vegetation					
		= Total Cov	/er	Present? Yes No					
Remarks: (Include photo numbers here or on a separate	sheet.)			<u> </u>					

A preponderance of hydrophytic vegetation is present

Profile Desc	cription: (Describe	to the dep	oth needed to docum	nent the i	ndicator	or confirm	n the absence of in	dicators.)
Depth	Matrix		Redox	K Feature	s1	. 2		- ·
(inches)	Color (moist)		Color (moist)	%	Type	_Loc <sup>*</sup>		Remarks
<u>5<sup>-</sup>7</u>	<u>10YR 5/1</u>	85	<u>10YR 4/6</u>	15	<u>C</u>	<u>M</u>	Silty Clay Loam	
-								
-								
-								
-								
-								
<sup>1</sup> Type: C=C	oncentration. D=Der	oletion. RM	=Reduced Matrix, MS	=Masked	Sand Gr	ains.	<sup>2</sup> Location: PL	=Pore Lining, M=Matrix,
Hydric Soil	Indicators:		,				Indicators for F	Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy G	leyed Ma	atrix (S4)		Coast Prair	ie Redox (A16)
Histic E	pipedon (A2)		Sandy R	edox (S5	)		Dark Surfac	ce (S7)
Black Histic (A3) Stripped Matrix (S6)					Iron-Manga	nese Masses (F12)		
Stratifie	d Lavers (A5)		Loamy (	Jeved Ma	atrix (F2)		Other (Expl	ain in Remarks)
2 cm Mi	uck (A10)		✓ Depleted	d Matrix (I	F3)			
Deplete	d Below Dark Surfac	ce (A11)	Redox D	ark Surfa	ace (F6)			
Thick Dark Surface (A12) Depleted Dark Surface (F7)						)	<sup>3</sup> Indicators of h	ydrophytic vegetation and
Sandy M	Aucky Mineral (S1)	2)	Redox D	epressio	ns (F8)		wetland hyd	rology must be present,
Restrictive	Laver (if observed)	:						inded of problematic.
Type:		-						,
Depth (in	ches):						Hydric Soil Pres	sent? Yes No
Remarks:	,							
The soi	l profile mee	ets the	criteria for h	aving	a dep	leted r	natrix	
HYDROLO	GY							
Wetland Hy	drology Indicators	:						
Primary Indi	cators (minimum of	one is requ	ired; check all that ap	ply)			Secondary In	dicators (minimum of two required)
Surface	Water (A1)		Water-Stai	ned Leav	es (B9)		Surface S	Soil Cracks (B6)
High Wa	ater Table (A2)		Aquatic Fa	una (B13	)		Drainage	Patterns (B10)
Saturati	on (A3)		True Aquat	tic Plants	(B14)		Dry-Seas	son Water Table (C2)
Water N	larks (B1)		Hydrogen 3	Sulfide O	dor (C1) roc on Liv	ing Poots	(C2) Crayfish	Burrows (C8)
Drift De	nosits (B3)		·X Oxidized R	of Reduce	d Iron (C	1) 1)	(C3) Saturatio	or Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Recent Iro	n Reducti	on in Tille	+) d Soils (C6	6) V Geomorr	blic Position (D2)
Iron Dep	posits (B5)		Thin Muck	Surface (	C7)		FAC-Neu	itral Test (D5)
Inundati	on Visible on Aerial	Imagery (B	7) Gauge or \	Vell Data	(D9)		—	
Sparsel	y Vegetated Concav	e Surface (	(B8) Other (Exp	lain in Re	marks)			
Field Obser	vations:							
Surface Wat	er Present?	/es	No Depth (inc	:hes):		_		
Water Table	Present?	/es	No Depth (inc	:hes):		_		
Saturation P	resent?	/es	No Depth (inc	:hes):		_ Wetl	and Hydrology Pre	sent? Yes 🥙 No
Describe Re	corded Data (stream	n gauge, m	onitoring well, aerial p	hotos, pr	evious ins	pections),	if available:	
Remarks <sup>.</sup>								
Norman No.	• •• •	<b>,</b>						
Multiple	indicators o	of wetla	and hydrolog	y wer	e pres	sent at	the time of	sampling

Project/Site: AEP North Delphos - Rockhill	Delineation	City/County	Lima/ A	llen	Sampling Date:	2021-09-02
Applicant/Owner: AEP				State: Ohio	Sampling Point:	3-A
Investigator(s): E. Wilson, C. Kwolek		Section, To	wnship, Ra	nge: S011 T003 R00	6	
Landform (hillslope, terrace, etc.): Depression		I	_ocal relief	(concave, convex, none):	Concave	
Slope (%): 0 Lat: 40.790535		Long: -84	.129338		Datum: WGS 8	34
Soil Map Unit Name: SrA				NWI classific	ation: None	
Are climatic / hydrologic conditions on the site typic	al for this time of ye	ear? Yes	No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology _	significantly	disturbed?	Are "	Normal Circumstances"	present? Yes	✓No
Are Vegetation, Soil, or Hydrology _	naturally pr	oblematic?	(lf ne	eded, explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS – Attach site	e map showing	a samplin	g point le	ocations, transects	, important fe	eatures, etc.
Hydrophytic Vegetation Present? Yes	No				· •	,
Hydric Soil Present? Yes	No	Is th	e Sampled	Area		
Wetland Hydrology Present? Yes	/No	with	in a Wetlar	nd? Yes 🗹	No	-
Remarks:						
PEM wetland that is undernea	th power lir	ne towe	r in der	pression in Aa f	ield (sovb	eans).
	•			<b>3</b>		,
VEGETATION - Use scientific names of	plants.					
Total (Division 30 ft r	Absolute	Dominant	Indicator	Dominance Test work	sheet:	
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	Status	Number of Dominant S	pecies	
1				That Are OBL, FACW,	or FAC: 2	(A)
2				Total Number of Domin	ant 2	
S				Species Across All Stra		(B)
				Percent of Dominant S	pecies	
		= Total Cov	/er	That Are OBL, FACW,	01 FAC. 100	(А/В)
Sapling/Shrub Stratum (Plot size: 15 ft r	)	-		Prevalence Index wor	ksheet:	
1				Total % Cover of:	Multip	ly by:
2				OBL species 0	$x_1 = 0$	
3				FACW species 70	x 2 = 140	<u> </u>
4				FAC species 20	$x_3 = 60$	
5				FACU species 10	x 4 = 40	
Herb Stratum (Plot size: 5 ft r )		= Total Cov	ver	UPL species 0	$x_{5} = 0$	
1 Phalaris arundinacea	65	~	FACW	Column Totals: 100	(A) <u></u>	<u> </u>
2. Ambrosia trifida	20	· · ·	FAC	Prevalence Index	= B/A = <u>2.4</u>	
3. Solidago altissima	10		FACU	Hydrophytic Vegetation	on Indicators:	
4. Impatiens capensis	5		FACW	1 - Rapid Test for H	Hydrophytic Vege	tation
5				🖌 🖌 2 - Dominance Tes	st is >50%	
6				🖌 🖌 3 - Prevalence Inde	ex is ≤3.0 <sup>1</sup>	
7				4 - Morphological A	Adaptations <sup>1</sup> (Prov	vide supporting
8				data in Remark	s or on a separate	e sheet)
9					phytic vegetation	(Explain)
10				<sup>1</sup> Indicators of hydric soi	l and wetland by	drology must
Weade Vine Stratum (Distained 30 ft r	100%	= Total Cov	ver	be present, unless dist	urbed or problema	atic.
Woody Vine Stratum (Plot size: 00111	_)					
l				Hydrophytic Vegetation		
۷		- Total Cox		Present? Ye	s No_	
Remarks: (Include photo numbers here or on a se	eparate sheet.)	10(al C0\				
Hydrophytic vegetation is pre-	sent.					

L

### \_ \_ .

SOIL								Sampling Point: <u>3-A</u>	
Profile Desc	ription: (Describe	to the dep	th needed to docun	nent the	indicator	or confirn	n the absence	of indicators.)	
Depth	 Matrix		Redo	x Feature	es				
(inches)	Color (moist)	%	Color (moist)	%	_Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0 - 20	10YR 4/2	93	10YR 4/6	7	С	PL / M	Clay Loam		
-									
-									
-									
<u> </u>									
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, MS	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location	: PL=Pore Lining, M=Matrix.	
Hydric Soil I	indicators:						Indicators	for Problematic Hydric Soils <sup>®</sup> :	
Histosol	(A1)		Sandy G	Sleyed M	atrix (S4)		Coast	Prairie Redox (A16)	
Histic Ep	pipedon (A2)		Sandy F	Redox (St	5)		Dark S	Surface (S7)	
Black Hi	stic (A3)		Stripped	Matrix (	S6)		Iron-M	anganese Masses (F12)	
Hydroge	n Sulfide (A4)		Loamy I		neral (F1)		Very S	Shallow Dark Surface (TF12)	
2 cm Mu	Layers (AD)		Loamy (	d Matrix (	atrix (F2)		Other	(Explain in Remarks)	
Depleted	Below Dark Surfac	e (A11)	Redox [	Dark Surf	ace (F6)				
Thick Da	ark Surface (A12)	• (• • • • •	Deplete	d Dark Si	urface (F7)	)	<sup>3</sup> Indicators	of hydrophytic vegetation and	
Sandy M	lucky Mineral (S1)		Redox D	Depressio	ons (F8)	wetland hydrology must be present,			
5 cm Mu	icky Peat or Peat (S	3)					unless	disturbed or problematic.	
Restrictive L	_ayer (if observed)	:							
Type: No	one								
Depth (inc	ches):						Hydric Soil	Present? Yes No	
Remarks:									
	••								
Hydric s	solls are pre	sent.							
	<u></u>								
HYDROLO	GY								
Wetland Hyd	drology Indicators:								
Primary Indic	ators (minimum of c	one is requi	red; check all that ap	ply)			Seconda	ary Indicators (minimum of two required)	
Surface	Water (A1)		Water-Stai	ned Leav	/es (B9)		Surl	face Soil Cracks (B6)	
High Wa	ter Table (A2)		Aquatic Fa	una (B13	3)		💆 Drai	inage Patterns (B10)	
Saturatio	on (A3)		True Aqua	tic Plants	s (B14)		Dry-	-Season Water Table (C2)	
Water M	arks (B1)		Hydrogen	Sulfide O	dor (C1)		Cra	yfish Burrows (C8)	
Sedimer	nt Deposits (B2)		🖌 Oxidized R	Rhizosphe	eres on Liv	ing Roots	(C3) Satu	uration Visible on Aerial Imagery (C9)	
Drift Dep	oosits (B3)		Presence of	of Reduce	ed Iron (C4	4)	Stur	nted or Stressed Plants (D1)	
Algal Ma	at or Crust (B4)		Recent Iro	n Reduct	ion in Tille	d Soils (Ce	6) 🖌 Geo	pmorphic Position (D2)	
Iron Dep	oosits (B5)		Thin Muck	Surface	(C7)		🖌 FAC	C-Neutral Test (D5)	
Inundatio	on Visible on Aerial	lmagery (B	7) Gauge or \	Well Data	a (D9)				
Sparsely	Vegetated Concave	e Surface (	B8) Other (Exp	lain in Re	emarks)				
Field Observ	vations:								
Surface Wate	er Present? Y	'es	No 🚩 Depth (ind	ches):		_			
Water Table	Present? Y	'es	No Depth (ind	ches):		_			
Saturation Pr	resent? Y	'es	No Depth (ind	ches):		Wetl	and Hydrolog	y Present? Yes 🗹 No	
(includes cap	oillary fringe)			h etc -			if evellet let		
Describe Red	corded Data (stream	i gauge, m	onitoring well, aerial p	motos, p	revious ins	spections),	ii available:		

Remarks:

Hydrology indicators are present.

Project/Site: AEP North Delphos -	· Rockhill Delineation	City/Co	unty: Lima/ Allen		Sampling Date:	2021-09-02			
Applicant/Owner: AEP				State: Ohio	Sampling Point:	3-A UPL			
Investigator(s): E. Wilson, C. Kwol	ek	Section	Section, Township, Range: S011 T003 R006						
Landform (hillslope, terrace, etc.): Upl	and		Local relief (concave, convex, none): None						
Slope (%): 0 Lat: 40.790	)325	Long: _	-84.129423		Datum: WGS	84			
Soil Map Unit Name: SrA				NWI classific	ation: None				
Are climatic / hydrologic conditions on t	he site typical for this time	of year? Ye	s 🗾 No	_ (If no, explain in R	emarks.)				
Are Vegetation, Soil, or	Hydrology signification	antly disturbe	ed? Are "Norm	nal Circumstances" p	present? Yes	✓No			
Are Vegetation, Soil, or	Hydrology natural	y problemati	c? (If needed	, explain any answe	ers in Remarks.)				
SUMMARY OF FINDINGS - A	ttach site map show	/ing samp	oling point locat	ions, transects	, important f	eatures, etc.			
Hydrophytic Vegetation Present?	Yes No								
Hydric Soil Present?	Yes No	·	s the Sampled Area	1	,				
Wetland Hydrology Present?	Yes No 💆	<u> </u>	within a Wetland?	Yes	No	_			

Remarks:

## Upland sample point for PEM wetland 3-A.

VEGETATION - Use scientific names of plants.

00 (i	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft r</u> )	% Cover	Species?	Status	Number of Dominant Species
1. Robinia pseudoacacia	30	<u> </u>	FACU	That Are OBL, FACW, or FAC: 1 (A)
2.				
3				Total Number of Dominant Species Across All Strate: 4 (P)
<u>.</u>				Species Across All Strata (B)
4	·			Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 25 (A/B)
15 ft r	30%	= Total Cov	/er	Duran la na la deu var de ha etc
Sapling/Shrub Stratum (Plot size:)	-		FAOL	Prevalence Index worksneet:
1. Jugians nigra	5		FACU	Total % Cover of:Multiply by:
2				OBL species 0 x 1 = 0
3.				FACW species 10 x 2 = 20
4				FAC species 20 $x_3 = 60$
5				EACLI species $60$ $x_4 = 240$
5	E 9/			
Herb Stratum (Plot size: 5 ft r )	5%	= Total Cov	ver	$\frac{1}{2} \frac{1}{2} \frac{1}$
Setaria pumila	20	~	FAC	Column Totals: $90$ (A) $320$ (B)
1. Solidago canadonsis	15		EACU	Dravalance Index $= P/A = -3.6$
	10		FACU	
3. Glycine max	10			Hydrophytic Vegetation Indicators:
4. Rosa multiflora	10		FACU	1 - Rapid Test for Hydrophytic Vegetation
5. Verbesina alternifolia	10		FACW	2 - Dominance Test is >50%
6.				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
0	·			data in Remarks or on a separate sheet)
8	·			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
9				
10				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
20 # -	65%	= Total Cov	ver	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: 30 ft r )				
1				Hydrophytic
2				Vegetation
		= Total Cov	/er	Present? Yes No
Remarks: (Include photo numbers here or on a separate s	sheet.)			1
No hydrophytic vegetation present	•			

Profile Desc	ription: (Describe	to the depth n	eeded to docur	nent the ind	licator o	r confirr	n the absence o	f indicators.)	
Depth	Matrix		Redo	x Features				,	
(inches)	Color (moist)	(	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0 - 20	10YR 4/4	100					Sandy Loam		
_									
-									
-									
-									
				·					
-									
<sup>1</sup> Type: C=Co	oncentration, D=Dep	eletion, RM=Rec	luced Matrix, M	S=Masked S	and Grai	ns.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.	
Hydric Soil	Indicators:						Indicators for	or Problematic Hydric Soils <sup>3</sup> :	
Histosol	(A1)		Sandy (	Gleyed Matri	x (S4)		Coast Pi	rairie Redox (A16)	
Histic Ep	oipedon (A2)		Sandy I	Redox (S5)			Dark Su	rface (S7)	
Black Hi	istic (A3)	Stripped	d Matrix (S6)	)		Iron-Mar	nganese Masses (F12)		
Hydroge	en Sulfide (A4)		Loamy	Mucky Miner	ral (F1)		Very Sha	allow Dark Surface (TF12)	
Stratified	d Layers (A5)		Loamy	Gleyed Matri	ix (F2)		Other (E	xplain in Remarks)	
2 cm Muck (A10) Depleted Below Dark Surface (A11)			Deplete	a Matrix (F3	) (E6)				
Depleted	Thick Dark Surface (A12)			d Dark Surfa	= (FO) ace (F7)		<sup>3</sup> Indicators o	of hydrophytic vegetation and	
Sandy Mucky Mineral (S1)			Redox I	Depressions	(F8)		wetland	hydrology must be present.	
5 cm Mucky Peat or Peat (S3)					()		unless d	listurbed or problematic.	
Restrictive I	Layer (if observed)	:							
Type: N	one								
Depth (inc	ches):		_				Hydric Soil P	Present? Yes No	
Remarks:			-						
N I - 1I-									
No nyai	ric solis pres	sent.							
	CY								
Wetland Hy	drology indicators:								
Primary India	cators (minimum of o	one is required;	check all that ap	oply)			Secondary	y Indicators (minimum of two required)	
Surface	Water (A1)		Water-Sta	ined Leaves	(B9)		Surfac	ce Soil Cracks (B6)	
High Wa	ater Table (A2)		Aquatic Fa	auna (B13)			Draina	age Patterns (B10)	
Saturation	on (A3)		True Aqua	itic Plants (B	814)		Dry-S	eason Water Table (C2)	
Water M	larks (B1)		Hydrogen	Sulfide Odo	r (C1)		Crayfi	ish Burrows (C8)	
Sedimer	nt Deposits (B2)		Oxidized F	Rhizospheres	s on Livin	g Roots	(C3) Satura	ation Visible on Aerial Imagery (C9)	
Drift Deposits (B3) Presence of Reduced Iron (C4)							Stunte	ed or Stressed Plants (D1)	
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)									
Iron Dep	posits (B5)		Thin Muck	Surface (C7	7)		FAC-I	Neutral Test (D5)	
Inundati	Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9)								
Sparsely	y Vegetated Concav	e Surface (B8)	Other (Exp	plain in Rem	arks)				
Field Obser	vations:								
Surface Wate	er Present? Y	′es No _	Depth (in	ches):		-			
Water Table	Present? Y	′es No _	Depth (in	ches):		_			

Yes \_\_\_\_\_ No \_\_\_\_ Depth (inches): \_\_\_ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation Present?

No hydrology indicators present.

Wetland Hydrology Present? Yes \_\_\_\_\_ No \_\_\_

r

WEILAND DETE	RIVIINAT			- Midwest Region			
Project/Site: 1730 AEP North Delphos - Rockhill Deli	neation	City/Co	unty: Lima/Al	len	Sampling Date: 2021	-12-09	
Applicant/Owner: AEP				State: Ohio	Sampling Point: 4-A		
Investigator(s): C. Kwolek, E. Wilson		Section	, Township, Ra	nge: S019 T003 R002	7		
Landform (hillslope, terrace, etc.): Depression		Local relief (concave, convex, none): Concave					
Slope (%): <u>1</u> Lat: <u>40.764251</u>		Long: _{	34.100722		Datum: WGS 84		
Soil Map Unit Name: Glynwood-Urban land comple	x, 2 to 6	perce	nt slopes (G	uB) NWI classific	ation: N/A		
Are climatic / hydrologic conditions on the site typical for this	time of yea	ar? Yes	s No	(If no, explain in R	emarks.)		
Are Vegetation, Soil, or Hydrologys	ignificantly	disturbe	ed? Are "	Normal Circumstances" p	resent? Yes 🖌 I	No	
Are Vegetation, Soil, or Hydrology n	aturally pro	blemati	c? (If ne	eded, explain any answe	rs in Remarks.)		
SUMMARY OF FINDINGS - Attach site man	showing	samr	ling point k	ocations transects	important featur	es etc	
	snowing	Jamp	ing point is				
Hydrophytic Vegetation Present? Yes <u>Ves</u> No	o	i	s the Sampled	Area			
Wetland Hydrology Present? Yes V		· ·	, within a Wetlar	nd? Yes 🗸	No		
Remarks:							
Wetland sample point for PEM 4-A. Wetland str	retches a	lona s	mall depres	sion adiacent to berr	m and upland fores	t. All	
three wetland criteria present.							
VEGETATION - Use scientific names of plants							
	Absolute	Domir	ant Indicator	Dominance Test work	shoot:		
Tree Stratum (Plot size: 30 ft r )	<u>% Cover</u>	Specie	es? Status	Number of Dominant St			
1				That Are OBL, FACW, o	or FAC: 3	_ (A)	
2				Total Number of Domin	ant		
3				Species Across All Stra	ta: <u>4</u>	_ (B)	
4				Percent of Dominant Sr	pecies		
5				That Are OBL, FACW, o	or FAC: 75	_ (A/B)	
Sapling/Shrub Stratum (Plot size: 15 ft r )		= Total	Cover	Prevalence Index worl	ksheet:		
1.				Total % Cover of:	Multiply by:		
2.				OBL species 20	x 1 = 20		
3.				FACW species 60	x 2 = <u>120</u>		
4				FAC species 0	x 3 =	_	
5				FACU species 20	x 4 = <u>80</u>	_	
5.0		= Total	Cover	UPL species 0	x 5 =	_	
Herb Stratum (Plot size: 5 ft r )	40		EACW/	Column Totals: 100	(A)	(B)	
- Bromus inermis	40			Brovelence Index	- P/A = 2.2		
	20			Hydrophytic Vegetatic			
3. Symphyotrichum praealtum	20			1 - Rapid Test for H	Avdronhytic Vegetation		
				∠ 2 - Dominance Tes	t is >50%		
5				✓ 3 - Prevalence Inde	x = 30%		
7				4 - Morphological A	daptations <sup>1</sup> (Provide su	pporting	
8				data in Remarks	s or on a separate sheet	)	
g				Problematic Hydrop	ohytic Vegetation <sup>1</sup> (Expl	ain)	
· · · · · · · · · · · · · · · · · · ·				1		I	

- -

100% = Total Cover

= Total Cover

10. \_\_\_\_\_

2.

Woody Vine Stratum (Plot size: 30 ft r ) 1.\_\_\_\_\_

Remarks: (Include photo numbers here or on a separate sheet.)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Yes 🥢 No \_\_\_\_

Hydrophytic Vegetation

Present?

#### 001

SOIL								Sampling Point: <u>4-A</u>		
Profile Desc	ription: (Describe	to the dep	oth needed to docu	ment the	indicator	or confirm	n the absence o	of indicators.)		
Depth	 Matrix		Red	ox Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0 - 8	10YR 3/2	93	10YR 4/6	7	<u>C</u>	PL / M	Clay Loam			
<u> </u>	10YR 6/2	90	10YR 6/8	10	<u> </u>	<u>M</u>	Clay Loam			
-										
-										
-										
-										
-										
<sup>1</sup> Type: C=Co	oncentration, D=Dep	pletion, RM	=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.		
Hydric Soil	Indicators:						Indicators f	for Problematic Hydric Soils <sup>3</sup> :		
Histosol	(A1)		Sandy	Gleyed M	latrix (S4)		Coast F	Prairie Redox (A16)		
Histic Ep	pipedon (A2)		Sandy	Redox (S	5)		Dark Su	urface (S7)		
Black Hi	stic (A3)		Strippe	d Matrix (	S6)		Iron-Ma	Inganese Masses (F12)		
Hydroge	en Sulfide (A4)		Loamy	Mucky M	Ineral (F1)		Very Sr	hallow Dark Surface (TF12)		
Stratified	a Layers (A5)		Loamy	Gleyed IV				Explain in Remarks)		
2 cm wid	d Below Dark Surfac	ο (Δ11)	✓ Redox	Dark Sur	(FS) face (F6)					
Thick Dark Surface (A12) Depleted Dark Surface (F7) <sup>3</sup> Indicators of hydrophytic vegetation and						of hydrophytic vegetation and				
Sandy M	lucky Mineral (S1)		Redox	Depressi	ons (F8)	/	wetland	hydrology must be present.		
5 cm Mu	icky Peat or Peat (S	33)	_				unless disturbed or problematic.			
Restrictive I	Layer (if observed)	:								
Туре:										
Depth (ind	ches):						Hydric Soil I	Present? Yes No		
Remarks:										
Hydric s	soil present									
HYDROLO	GY									
Wetland Hyd	drology Indicators	:								
Primary Indic	cators (minimum of	one is requ	ired; check all that a	pply)			Secondar	y Indicators (minimum of two required)		
Surface	Water (A1)		Water-Sta	ained Lea	ves (B9)		Surfa	ace Soil Cracks (B6)		
High Wa	ater Table (A2)		Aquatic F	auna (B1	3)		💆 Drain	nage Patterns (B10)		
Saturatio	on (A3)		True Aqua	atic Plant	s (B14)		Dry-६	Season Water Table (C2)		
Water M	larks (B1)		Hydrogen	Sulfide C	Odor (C1)		Cray	fish Burrows (C8)		
Sedimer	nt Deposits (B2)		<ul> <li>Oxidized</li> </ul>	Rhizosph	eres on Liv	ing Roots	(C3) Satur	ration Visible on Aerial Imagery (C9)		
Drift Dep	oosits (B3)		Presence	of Reduc	ed Iron (C4	4)	Stunf	ted or Stressed Plants (D1)		
Algal Ma	at or Crust (B4)		Recent Ire	on Reduc	tion in Tille	d Soils (Ce	6) 🖌 Geor	norphic Position (D2)		
Iron Dep	oosits (B5)		Thin Mucl	k Surface	(C7)		🖌 FAC-	Neutral Test (D5)		
Inundatio	on Visible on Aerial	Imagery (B	7) Gauge or	Well Data	a (D9)					
Sparsely	Vegetated Concav	e Surface (	B8) Other (Ex	plain in R	emarks)					
Field Obser	vations:									
Surface Wate	er Present?	res	No Depth (ir	nches):		_				
Water Table	Present?	res	No Depth (ir	nches):		_				
Saturation P	resent?	res	No Depth (ir	nches):		_ Wetl	and Hydrology	Present? Yes 🦯 No		
(includes cap Describe Red	oillary fringe) corded Data (strean	n gauge, m	onitoring well, aerial	photos, p	revious ins	pections),	if available:			

Remarks:

Hydrology present

Project/Site: 1730 AEP North Delphos - Rockhill Deli	ineation (	City/County:	Lima/All	len	Sampling Date: 2	021-12-09
Applicant/Owner: AEP				<sub>State:</sub> Ohio	Sampling Point: 4	-A/B/C UPL
Investigator(s): C. Kwolek, E. Wilson		Section, Tov	wnship, Rai	nge: S019 T003 R00	7	
Landform (hillslope, terrace, etc.): Upland		L	ocal relief	(concave, convex, none):	Linear	
Slope (%): 0 Lat: 40.764074		Long: -84.	100096	· · · ·	Datum: WGS 84	
Soil Map Unit Name: Pewamo silty clay loam, 0 to 1	percent	slopes (P	mA)	NWI classific	cation: N/A	
Are climatic / hydrologic conditions on the site typical for this	s time of yea	ar? Yes	No	(If no, explain in R	(emarks.)	
Are Vegetation, Soil, or Hydrologys	ignificantly	disturbed?	Are "	Normal Circumstances"	present? Yes	No
Are Vegetation, Soil, or Hydrology n	naturally pro	blematic?	(lf ne	eded, explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map	showing	sampling	g point le	ocations, transects	, important fea	tures, etc.
Hydrophytic Vegetation Present? Yes N	• <u> </u>					
Hydric Soil Present? Yes N	o _ 🗸 _	Is the	e Sampled	Area		
Wetland Hydrology Present? Yes N	o _ <b>/</b>	with	in a Wetlan	nd? Yes	No	
Remarks:						
Upland sample point for PEMs 4-A, 4-B, and 4-	-C. Sampl	le taken v	vithin upl	and forest. No wetla	and criteria pres	ent.
VEGETATION – Use scientific names of plants.						
20 ft r	Absolute	Dominant	Indicator	Dominance Test work	(sheet:	
Costrua virginiana	<u>% Cover</u>	Species?	Status	Number of Dominant S	pecies	
Quercus palustris	$-\frac{70}{40}$	<u> </u>	FACW	That Are OBL, FACW,	or FAC: 2	(A)
	40			Total Number of Domin	ant	
3				Species Across All Stra	ata: <u>4</u>	(B)
4				Percent of Dominant S	pecies	(1/5)
0	110%	= Total Cov	er	That Are OBL, FACW,	or FAC: 50	(A/B)
Sapling/Shrub Stratum (Plot size: 15 ft r )		10101 001	01	Prevalence Index wor	ksheet:	
1. Amelanchier arborea	_ 25	<u> </u>	FACU	Total % Cover of:	Multiply	by:
2. Quercus palustris	_ 20	<u> </u>	FACW	OBL species 0	$x_1 = 0$	
3				FACW species 60	$x_2 = \frac{120}{2}$	
4				FAC species 0	x 3 = <u>0</u>	—
5	45.0/			FACU species 95	× 4 = <u>380</u>	—
Herb Stratum (Plot size: 5 ft r )	45%	= Total Cov	er	OPL species 0	$x_{5} = 0$	(P)
1.					(A) <u>500</u>	(B)
2.				Prevalence Index	a = B/A = <u>3.23</u>	
3.				Hydrophytic Vegetation	on Indicators:	
4				1 - Rapid Test for H	Hydrophytic Vegetat	tion
5				2 - Dominance Tes	st is >50%	
6				3 - Prevalence Inde	ex is ≤3.0 <sup>1</sup>	
7				4 - Morphological A	Adaptations <sup>1</sup> (Provid	le supporting
8				Broblematic Hydro	s or on a separate s	Explain)
9					privic vegetation (	
10				<sup>1</sup> Indicators of hydric soi	il and wetland hydro	loav must
Woody Vine Stratum (Plot size: 30 ft r		= Total Cov	er	be present, unless dist	urbed or problemation	C.
(Plot size)						
2				Vegetation		
		= Total Cov	er	Present? Ye	s No	<u> </u>
Remarks: (Include photo numbers here or on a separate s	sheet.)			1		
	-					

(inches) (	Color (moist)	%	Color (moist)	% T		$\overline{DC^2}$ T	exture	F	Remarks	
0 - 20 10	YR 3/3	100			<u>,po _co</u>	Cla	av Loam		tomanto	
	111 0,0						ly Louin			
		·								
-										
	stration D-Dan	lation DM-Do	duced Metrix M				<sup>2</sup> Legation	Di - Dere Lizia	a M-Matr	
ype: C=Concer	ators:	etion, RM=Re	duced Matrix, M	S=Masked Sa	and Grains.	h	Location:	PL=Pore Linin	ig, M=Matr	IX.
Histosol (A1)	ators.		Sandy	Cloved Matrix	(\$4)		Coast [	Proirie Redex (A	16)	
- Histosol (AT)	on (A2)		Sandy	Sleyeu Mainx Redox (S5)	. (34)	-	_ Coast r	Inface (S7)	410)	
Black Histic (	A3)		Strippe	d Matrix (S6)		-	Iron-Ma	anganese Mass	es (F12)	
Hvdrogen Su	lfide (A4)		Loamv	Mucky Minera	al (F1)	-	Verv SI	nallow Dark Sur	rface (TF12	2)
Stratified Lay	ers (A5)		Loamy	Gleyed Matrix	(F2)	_	Other (	Explain in Rema	arks)	,
2 cm Muck (A	(10)		Deplete	d Matrix (F3)		_				
_ Depleted Belo	ow Dark Surfac	e (A11)	Redox	Dark Surface	(F6)					
_ Thick Dark Su	urface (A12)		Deplete	d Dark Surfac	ce (F7)	3	Indicators	of hydrophytic v	vegetation	and
_ Sandy Mucky	Mineral (S1)		Redox	Depressions (	(F8)		wetland	hydrology mus	st be prese	nt,
_ 5 cm Mucky F	Peat or Peat (S	3)					unless	disturbed or pro	oblematic.	
	r (if observed):									
Type:	r (if observed):		-			н	/dric Soil	Present? Ye	s	No 🗸
Type: Depth (inches)	r (If observed):		-			Hy	/dric Soil	Present? Ye	es	No
Type: Depth (inches)	r (if observed):		-			Ну	/dric Soil	Present? Ye	es	No
Type: Depth (inches) emarks:	:	ent	-			ну	ydric Soil	Present? Ye	9S	No
Type: Depth (inches) emarks:	soil prese	ent	-			ну	/dric Soil	Present? Ye	es	No
Type: Depth (inches) emarks: Io hydric s	soil prese	ent	-			Hy	ydric Soil	Present? Ye	es	No
Type: Depth (inches) emarks: Jo hydric s	soil prese	nt	-			Hy	ydric Soil	Present? Ye	98	No
Type: Depth (inches) emarks: No hydric s	soil prese	ent	-			Hy	ydric Soil	Present? Ye	es	No
Type: Depth (inches) emarks: No hydric s	soil prese	ent	-			Hy	ydric Soil	Present? Ye	2\$	No
Type: Depth (inches) emarks: Jo hydric s /DROLOGY /etland Hydrolo rimary Indicators	soil prese	ent ne is required:	- - check all that a			Hy	ydric Soil	Present? Ye	inimum of	No <u>require</u>
Type: Depth (inches) emarks: Jo hydric s /DROLOGY /etland Hydrolo rimary Indicators Surface Wate	soil prese	nt	- 	oply)	(B9)	Hy	ydric Soil	Present? Ye	ninimum of	No <u>require</u>
Type: Depth (inches) emarks: Io hydric s /DROLOGY /etland Hydrolo rimary Indicators _ Surface Wate High Water T	soil prese	ent	-  Water-Sta Aquatic Fa	oply) ined Leaves ( auna (B13)	(B9)		ydric Soil <u>Seconda</u> Surfa	Present? Ye	<u>ninimum of</u> (B6) B10)	No <u>require</u>
Type: Depth (inches) emarks: To hydric s CDROLOGY /etland Hydrolo rimary Indicators Surface Wate High Water To Saturation (A)	soil prese soil prese gy Indicators: s (minimum of o er (A1) able (A2) 3)	ent	- - - <u>check all that ap</u> Water-Sta Aquatic Fa Aquatic Fa	oply) ined Leaves ( auna (B13) atic Plants (B1	(B9)		ydric Soil Seconda Surfa Drair Dry-5	Present? Ye	ninimum of 6 (B6) B10) Table (C2)	No <u>v</u>
Type: Depth (inches) emarks: Io hydric s //DROLOGY /etland Hydrolo rimary Indicators Surface Wate High Water T Saturation (A: Water Marks	r (If observed): soil prese soil prese gy Indicators: (minimum of o er (A1) able (A2) 3) (B1)	ent	<u>check all that a</u> <u>Water-Sta</u> <u>A</u> quatic Fa <u>True Aqua</u> <u>Hydrogen</u>	oply) ined Leaves ( auna (B13) atic Plants (B1 Sulfide Odor	(B9) (4) (C1)		ydric Soil Seconda Surfa Drair Cray	Present? Ye	ninimum of (B6) B10) Table (C2) 28)	No
Type: Depth (inches) emarks: Io hydric s //DROLOGY /etland Hydrolo rimary Indicators Surface Wate High Water T. Saturation (A: Water Marks Sediment Dep	soil prese soil prese gy Indicators: s (minimum of o er (A1) able (A2) 3) (B1) posits (B2)	ent	- - - - - - - - - - - - - - - - - - -	oply) ined Leaves ( auna (B13) titc Plants (B1 Sulfide Odor Rhizospheres	(B9) (4) (C1) on Living R	Hy Roots (C3)	ydric Soil Seconda Surfa Drair Dry-3 Cray Satu	Present? Ye	ninimum of (B6) B10) Table (C2) 28) n Aerial Ima	No <u>require</u>
Type: Depth (inches) emarks: Io hydric s //DROLOGY //DROLOGY //etland Hydrolo rimary Indicators 	soil prese soil prese gy Indicators: s (minimum of o er (A1) able (A2) 3) (B1) posits (B2) 5 (B3)	ent	- - - - - - - - - - - - - - - - - - -	oply) ined Leaves ( auna (B13) atic Plants (B1 Sulfide Odor Rhizospheres of Reduced Ir	(B9) (C1) on Living R ron (C4)	Roots (C3)	ydric Soil Seconda Surfa Drair Dry-3 Cray Satu Stun	Present? Ye	ninimum of (B6) B10) Table (C2) (28) n Aerial Ima I Plants (D1	No <u>require</u>
Type: Depth (inches) emarks: Jo hydric s // DROLOGY // Tetland Hydrolo rimary Indicators Surface Water High Water T Saturation (A: Water Marks Sediment Dep Drift Deposits Algal Mat or O	soil prese soil prese gy Indicators: s (minimum of o er (A1) able (A2) 3) (B1) posits (B2) s (B3) Crust (B4)	ent	- - - - - - - - - - - - - - - - - - -	oply) ined Leaves ( auna (B13) atic Plants (B1 Sulfide Odor Rhizospheres of Reduced Ir on Reduction i	(B9) (C1) on Living R ron (C4) in Tilled Soi	Roots (C3)	ydric Soil Seconda Surfa Dry-3 Cray Satu Satu Stun Geoi	Present? Ye	ainimum of (B6) B10) Table (C2) C8) n Aerial Ima I Plants (D1 n (D2)	No <u>require</u> agery (C9)
Type: Depth (inches) emarks: Jo hydric s /DROLOGY /etland Hydrolo rimary Indicators 	soil prese soil prese gy Indicators: s (minimum of o er (A1) able (A2) 3) (B1) posits (B2) 5 (B3) Crust (B4) (B5)	ent	<u>check all that ap</u> <u> </u>	oply) ined Leaves ( auna (B13) atic Plants (B1 Sulfide Odor Rhizospheres of Reduced Ir on Reduction is Surface (C7)	(B9) (C1) on Living R ron (C4) in Tilled Soi )	Roots (C3)	<u>Seconda</u> <u>Seconda</u> <u>Drair</u> <u>Dry-3</u> <u>Cray</u> <u>Satu</u> Stun <u>Stun</u> <u>Stun</u>	Present? Ye	n Aerial Ima I Plants (D1) n (D2) D5)	No <u>require</u> agery (C9)
Type: Depth (inches) emarks: Jo hydric s Io hydric s // DROLOGY /etland Hydrolo rimary Indicators Surface Wate High Water T Saturation (A: Water Marks Sediment Dep Drift Deposits Algal Mat or (C Iron Deposits Inundation Via	soil prese soil prese soil prese gy Indicators: s (minimum of o er (A1) able (A2) 3) (B1) posits (B2) 5 (B3) Crust (B4) (B5) sible on Aerial I	ent me is required: magery (B7)	- - - - - - - - - - - - - -	oply) ined Leaves ( auna (B13) atic Plants (B1 Sulfide Odor Rhizospheres of Reduced Ir on Reduction i s Surface (C7) Well Data (DS	(B9) (C1) on Living R ron (C4) in Tilled Soi ) 9)	Roots (C3)	Seconda Surfa Drair Dry-1 Cray Satu Satu Stun Geor FAC	Present? Ye	ninimum of (B6) B10) Table (C2) 28) n Aerial Ima I Plants (D1 n (D2) D5)	No two require agery (C9) 1)

Field Observations:				
Surface Water Present?	Yes No	Depth (inches):		
Water Table Present?	Yes No	Depth (inches):		
Saturation Present? (includes capillary fringe)	Yes No	Depth (inches):	Wetland Hydrology Present?	Yes No
Describe Recorded Data (st	ream gauge, monitori	ing well, aerial photos, previous inspec	tions), if available:	
Remarks:				

Project/Site: 1730 AEP North Delphos - Rockhill Delineation	n_ City/County: Lima/Allen Sampling Date: 2021-12-09								
Applicant/Owner: AEP	State: Ohio Sampling Point: 4-B PEM								
Investigator(s): C. Kwolek, E. Wilson	Section, Township, Range: S019 T003 R007								
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, none): Concave								
Slope (%): <u>1</u> Lat: <u>40.763845</u>	Long:84.099978 Datum: WGS 84								
Soil Map Unit Name: Glynwood-Urban land complex, 2 to	6 percent slopes (GuB) NWI classification: N/A								
Are climatic / hydrologic conditions on the site typical for this time of	vre climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)								
Are Vegetation, Soil, or Hydrology significan	ntly disturbed? Are "Normal Circumstances" present? Yes 🔽 No								
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any answers in Remarks.)								
SUMMARY OF FINDINGS – Attach site map showin	ng sampling point locations, transects, important features, etc.								
Hydrophytic Vegetation Present? Yes No									
Hydric Soil Present? Yes 🖌 No	Is the Sampled Area								
Wetland Hydrology Present? Yes No	within a Wetland? Yes No								
Remarks:	· · · ·								

Wetland sample point for PEM portion of 4-B. Wetland stretches along small depression adjacent to berm and upland forest. All three wetland criteria present.

**VEGETATION** – Use scientific names of plants.

00.6	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2.				
3				I otal Number of Dominant Species Across All Strata: 2 (B)
۰				
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
5 m m m m m m 15 ft r		= Total Cov	/er	Durante and the data wand to be a fe
Sapling/Shrub Stratum (Plot size: 1911)				Prevalence index worksneet:
1				Total % Cover of: Multiply by:
2				OBL species 20 x 1 = 20
3.				FACW species 80 x 2 = 160
4				FAC species $0 \times 3 = 0$
5				EACLI species $0$ $x = 0$
5				
Horb Stratum (Plot size: 5 ft r		= Total Cov	ver	$\frac{100}{100} \times 5 = \frac{100}{100}$
Phalaris arundinacea	80	~	FACW	Column Totals: 100 (A) 180 (B)
	20			Dravelance index $= D(4 - 18)$
3				Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5				✓ 2 - Dominance Test is >50%
6.				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
o				data in Remarks or on a separate sheet)
8				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
9				
10				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
20 ft r	100%	= Total Cov	ver	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: 30 It I )				
1				Hydrophytic
2				Vegetation
		= Total Cov	ver	Present? Yes No
Remarks: (Include photo numbers here or on a separate s	heet.)			
. ,	,			

Profile Desc	ription: (Describe	to the dep	th needed to docun	nent the i	indicator	or confirm	the absence of	indicators.)
Depth (inches)	Matrix	0/	Redo	x Feature	S Tumo <sup>1</sup>	1002	Texture	Demodra
				10				Remarks
-0-20	10 fR 4/1	90	1018 5/6	10	<u> </u>			
-								
-								
-								
<u> </u>								
-								
-								
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, MS	S=Masked	d Sand Gr	ains.	<sup>2</sup> Location: I	PL=Pore Lining, M=Matrix.
Hydric Soil	ndicators:						Indicators fo	or Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy C	Gleyed Ma	atrix (S4)		Coast Pra	airie Redox (A16)
Histic Ep	pipedon (A2)		Sandy F	Redox (S5	5)		Dark Sur	face (S7)
Black Hi	stic (A3)		Stripped	Matrix (S	56)		Iron-Man	ganese Masses (F12)
Hydroge	n Sulfide (A4)		Loamy I	Mucky Mi	neral (F1)		Very Sha	allow Dark Surface (TF12)
Stratified	Layers (A5)		Loamy (	Gleyed M	atrix (F2)		Other (E)	xplain in Remarks)
2 cm Mu	ck (A10) L Dalam Daala Orafaa	- (6.4.4)	Deplete	d Matrix (	F3)			
Depleted	Below Dark Surrac	e (A11)	Redox L	Jark Suna	ace (F6) urface (E7	<b>`</b>	<sup>3</sup> Indicators of	f hydrophytic vocatation and
Thick Da	lik Sunace (A12)		Depieter	u Dark Su Depressio	ns (F8)	)	wetland b	and
5 cm Mu	cky Peat or Peat (S	3)		Jepi 63310	113 (1 0)		unless di	sturbed or problematic
Restrictive I	ayer (if observed)	:						
Type:								
Depth (ind	ches):						Hydric Soil Pr	resent? Yes No
Remarks:								
Hydric s	soil present							
-	-							
	GY							
Wotland Hw								
	ators (minimum of c	no io roqui	radi aback all that an	nhu)			Secondary	Indiastors (minimum of two required)
Primary mult		ne is requi	Notos Check an that ap				<u>Secondary</u>	ndicators (minimum or two required)
Surface	vvater (A1)		vvater-Stal	ned Leav	es (B9)		Surfac	e Soll Cracks (Bb)
Fign wa	ter Table (AZ)			tia Dianta	(P14)		Draina	ige Patterns (BTU)
Saturatio	on (A3) orko (B1)		True Aqua	Cultide C	(B14)		Dry-Se	
Water M	arks (BT)		Hydrogen	Sumde O		ing Dect	(C2) Crayfis	sn burrows (Co) $(Co)$
Seaimer	it Deposits (B2)			nizospne			(C3) Satura	ation visible on Aerial Imagery (C9)
	t or Cruct (B4)		Presence of	n Reduce	a iron (C	4) d Selle (CC	Stunte	a or Stressed Plants (D1)
Algai Ma	t or Crust (B4)		Recent Iro	n Reducti		a Solis (Ce		
Iron Dep	osits (B5)		Thin Muck	Surface	(07)		FAC-N	Neutral Test (D5)
Inundatio	on Visible on Aerial	Imagery (B	7) Gauge or V	Well Data	(D9)			
Sparsely	Vegetated Concave	e Surface (	B8) Other (Exp	lain in Re	emarks)			
Field Obser	ations:							
Surface Wate	er Present? Y	es	No Depth (ind	ches):				
Water Table	Present? Y	es	No Depth (inc	ches):		- _		
Saturation Pr	resent? Y	'es	No _ Popth (ind	ches):		_   Wetl	and Hydrology F	Present? Yes No
Describe Re	corded Data (stream	gauge, mo	onitoring well, aerial	photos, pr	evious ins	spections).	if available:	
		J				,		
Remarks:								
Hydrolo	av present							
	gy prosent							

Project/Site: 1730 AEP North Delphos - Rockhill Delineation	City/County: Lima/Al	len	Sampling Date: 2021-12-09			
Applicant/Owner: AEP		<sub>State:</sub> Ohio	Sampling Point: 4-B PFO			
Investigator(s): C. Kwolek, E. Wilson	_ Section, Township, Range: S019 T003 R007					
Landform (hillslope, terrace, etc.): Depression	Local relief	(concave, convex, none):	Concave			
Slope (%): 1 Lat: _40.763569	Long: 84.100073		Datum: WGS 84			
Soil Map Unit Name: Pewamo silty clay loam, 0 to 1 percent	nt slopes (PmA)	NWI classific	ation: N/A			
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes 🗾 No _	(If no, explain in R	emarks.)			
Are Vegetation, Soil, or Hydrology significant	tly disturbed? Are	"Normal Circumstances" p	present? Yes No			
Are Vegetation , Soil , or Hydrology naturally	problematic? (If ne	eeded, explain any answe	rs in Remarks.)			
SUMMARY OF FINDINGS – Attach site map showin	ng sampling point l	ocations, transects	, important features, etc.			
Hydrophytic Vegetation Present? Yes No	_					
Hydric Soil Present? Yes Ves No	_ Is the Sampled	l Area	,			
Wetland Hydrology Present? Yes <u>V</u> No	within a Wetla	nd? Yes	No			
Remarks:			1			
perennial stream. All three wetland criteria present.	i present within fore	sted depression and	adjacent to small			
<b>VEGETATION</b> – Use scientific names of plants.						
Absolut	te Dominant Indicator	Dominance Test work	sheet:			
Tree Stratum     (Plot size:)     % Cove       A Quercus palustris     90	er Species? Status	Number of Dominant Sp	pecies			
		That Are OBL, FACW, o	or FAC: (A)			
2		Total Number of Domin	ant (D)			
S		Species Across All Stra	.ta: <u> </u>			
		Percent of Dominant Sp	pecies			
90%	= Total Cover	I nat Are OBL, FACVV, o	or FAC: 100 (A/B)			
Sapling/Shrub Stratum (Plot size: 15 ft r )		Prevalence Index wor	ksheet:			
1		Total % Cover of:	Multiply by:			
2		OBL species 0	$x_1 = 0$			
3		FACW species 90	$x_2 = \frac{180}{2}$			
4		FAC species 0	$x_3 = \frac{0}{0}$			
5		FACU species 0	x = 0			
Herb Stratum (Plot size: 5 ft r )	= Total Cover	UPL species 0	$x_{5} = \frac{0}{180}$			
1.		Column Totals: 90	(A) 100 (B)			
2.		Prevalence Index	= B/A = <u>2.0</u>			
3		Hydrophytic Vegetatio	on Indicators:			
4		L 1 - Rapid Test for F	Hydrophytic Vegetation			
5		2 - Dominance Tes	st is >50%			
6		3 - Prevalence Inde	ex is ≤3.0 <sup>1</sup>			
7		4 - Morphological A	Adaptations <sup>1</sup> (Provide supporting			
8		Droblomatic Hydro	s or on a separate sneet)			
9						
10		<sup>1</sup> Indicators of hydric soi	il and wetland hydrology must			
Woody Vine Stratum (Plot size: 30 ft r )	= Total Cover	be present, unless distu	urbed or problematic.			
1		Hydrophytic				
2		Vegetation Present? Ve	s No			
	= Total Cover					
Remarks: (include photo numbers here or on a separate sheet.)						

SOIL								Sampling Point: 4-0 FTO
Profile Desc	ription: (Describ	e to the de	pth needed to do	ocument the	indicator	or confirn	n the absence	of indicators.)
Depth	Matrix		R	edox Featur	es			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 20	10YR 3/1	90	7.5YR 5/8	10	С	PL / M	Clay Loam	
-								
-								
-								
_								
-								
<sup>1</sup> Type: C=Co	oncentration, D=D	epletion, RM	I=Reduced Matrix	, MS=Maske	ed Sand Gr	ains.	<sup>2</sup> Location	: PL=Pore Lining, M=Matrix.
Hydric Soil I	indicators:						Indicators	for Problematic Hydric Soils <sup>®</sup> :
Histosol	(A1)		San	dy Gleyed M	latrix (S4)		Coast I	Prairie Redox (A16)
Histic Ep	pipedon (A2)		San	dy Redox (S	5)		Dark S	urface (S7)
Black Hi	stic (A3)		Stri	oped Matrix (	S6)		Iron-Ma	anganese Masses (F12)
Hydroge	n Sulfide (A4)		Loa	my Mucky M	ineral (F1)		Very S	hallow Dark Surface (TF12)
Stratified	Layers (A5)		Loa	my Gleyed N	latrix (F2)		Other (	Explain in Remarks)
2 cm wu	ICK (ATU) Nalow Dark Surf:	000 (A11)		lox Dark Sud	(F3) (F6)			
Depieted	ark Surface (A12)			leted Dark Sun	urface (FO)	<b>`</b>	<sup>3</sup> Indicators	of hydrophytic vegetation and
Sandy M	lucky Mineral (S1)		Bec	lox Depressi	ons (F8)	)	wetland	d hydrology must be present
5 cm Mu	icky Peat or Peat (	S3)		ion Doprocon			unless	disturbed or problematic.
Restrictive L	_ayer (if observed	i):						
Type:								
Depth (inc	ches):						Hydric Soil	Present? Yes No
Pomarka:								
Remarks.								
Hydric s	soil present							
	•							
HYDROLO	GY							
Wetland Hyd	drology Indicator	s:						
Primary Indic	ators (minimum o	f one is requ	ired; check all that	at apply)			Seconda	ry Indicators (minimum of two required)
Surface	Water (A1)		<ul> <li>Water</li> </ul>	-Stained Lea	ves (B9)		Surf	ace Soil Cracks (B6)
High Wa	ter Table (A2)		Aquati	c Fauna (B1	3)		V Drai	nage Patterns (B10)
Saturatio	on (A3)		True A	quatic Plants	s (B14)		Drv-	Season Water Table (C2)
Vater M	arks (B1)		Hvdro	aen Sulfide C	Odor (C1)		Crav	fish Burrows (C8)
Sedimer	nt Deposits (B2)		V Oxidiz	ed Rhizosph	eres on Liv	ing Roots	(C3) Satu	ration Visible on Aerial Imagery (C9)
Drift Dep	osits (B3)		Prese	nce of Reduc	ed Iron (C4	4)	Stun	ited or Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Recen	t Iron Reduc	tion in Tille	., d Soils (C6	5) 🖌 Geo	morphic Position (D2)
Iron Dep	osits (B5)		Thin M	luck Surface	(C7)		FAC	-Neutral Test (D5)
Inundatio	on Visible on Aeria	l Imagery (F	37) Gauge	or Well Data	(0.) a (D9)		<u> </u>	
Sparsely	Vegetated Conce	ve Surface	(B8) Other	(Explain in R	emarks)			
Field Obser	vations				ionianto)			
Surface Wet	ar Drecent?	Vec		(inches);				
Mater Table		Vee		(inches).				
vvater Table	Present?	res	No Depti	i (incries):		-		
Saturation Pr	resent?	Yes	No _ Depth	n (Inches):		_   Wetl	and Hydrology	Present? Yes No
Describe Red	corded Data (strea	m gauge, m	onitoring well. ae	rial photos. n	revious ins	pections).	if available:	
	(		<b>,</b>			, ,		

Remarks:

Hydrology present

Project/Site: 1730 AEP North Delphos - Rockhill De	lineation	Citv/Countv	Lima/Al	len Sampling Date: 2021-12-09			
Applicant/Owner: AEP		, , ,		State: Ohio Sampling Point: 4-C			
Investigator(s); C. Kwolek, E. Wilson		Section Township Range: S019 T003 R007					
Landform (hillslope, terrace, etc.). Depression		,	(concave convex none): Concave				
Slope (%): 1 Lat: 40.763632		Long: 84.099604 Datum: WGS 84					
Soil Map Unit Name <sup>.</sup> Pewamo silty clay loam, 0 to	1 percent	slopes (F	PmA)	NWI classification: N/A			
Are climatic / hydrologic conditions on the site typical for the	his time of ve	ar2 Vec	No	(If no, evolution in Remarks )			
	cignificantly	disturbed?	NO				
Are Vegetation, Soil, or Hydrology	significantiy	disturbed?	Are	Normal Circumstances present? Tes No			
				eeded, explain any answers in Remarks.)			
SOMMARY OF FINDINGS – Attach site map	snowing	j sampiin	g point i	ocations, transects, important features, etc.			
Hydrophytic Vegetation Present? Yes	No	ls th	e Sampleo	Area			
Wetland Hydrology Present?		with	in a Wetla	nd? Yes VNo			
Remarks:							
Wetland sample point for PEM 4-C. Wetland s three wetland criteria present.	stretches a	along dep	ression a	idjacent to railroad berm and upland forest. All			
VEGETATION – Use scientific names of plant	S.						
Tree Stratum (Plot size: 30 ft r )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1.			010100	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)			
2.				()			
3				Total Number of Dominant Species Across All Strata: 1 (B)			
4.				(-,			
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)			
1E ft -		= Total Cov	/er				
Sapling/Shrub Stratum (Plot size: 15111 )				Prevalence Index worksheet:			
1				Total % Cover of: Multiply by:			
2				OBL species 0 x 1 = 0			
3				FACW species $100 \times 2 = 200$			
4				FAC species $0$ $x^3 = 0$			
5				FACU species $0 \times 4 = 0$			
Horb Stratum (Plot size: 5 ft r )		= Total Cov	/er	UPL species $0 \times 5 = 0$			
1. Phalaris arundinacea	100	<ul> <li>✓</li> </ul>	FACW	Column Totals: 100 (A) 200 (B)			
2				Prevalence Index = B/A = 2.0			
3				Hydrophytic Vegetation Indicators:			
4				✓ 1 - Rapid Test for Hydrophytic Vegetation			
5				2 - Dominance Test is >50%			
6				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>			
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting			
8				Problematic Hydrophytic Vegetation <sup>1</sup> (Evaluation)			
9							
10				<sup>1</sup> Indicators of hydric soil and wetland hydrology must			
Woody Vine Stratum (Plot size: 30 ft r )	100%	= Total Cov	/er	be present, unless disturbed or problematic.			
1				Hydrophytic			
2				Vegetation			
		= Total Cov	/er	Present? Yes No			
Remarks: (Include photo numbers here or on a separate	e sheet.)						

SOIL								Sampling Point: <u>4-C</u>	
Profile Desc	ription: (Describe	to the dep	oth needed to docu	ment the	indicator	or confirm	n the absence	of indicators.)	
Depth	Matrix		Red	ox Feature	es				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0 - 20	10YR 4/1	90	10YR 5/8	10	С	PL / M	Clay Loam		
-									
-									
-									
<sup>1</sup> Type: C=Co	oncentration, D=Dep	pletion, RM	=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location	: PL=Pore Lining, M=Matrix.	
Hydric Soil I	ndicators:						Indicators	for Problematic Hydric Soils':	
Histosol	(A1)		Sandy	Gleyed M	atrix (S4)		Coast	Prairie Redox (A16)	
Histic Ep	pipedon (A2)		Sandy	Redox (S	5)		Dark S	Surface (S7)	
Black Hi	stic (A3)		Strippe	d Matrix (	S6)		Iron-M	anganese Masses (F12)	
Hydroge	n Sulfide (A4)		Loamy	Mucky M	Ineral (F1)		Very S	hallow Dark Surface (TF12)	
Stratified	Layers (AD)		Loamy	Gleyed IV	(E2)			(Explain in Remarks)	
2 cm Ma	Below Dark Surfac	e (A11)	<u> </u>	Dark Surf	(F6)				
Thick Da	Thick Dark Surface (A12) Depleted Dark Surface (F7)					)	<sup>3</sup> Indicators of hydrophytic vegetation and		
Sandy M	lucky Mineral (S1)		Redox	Depressio	ons (F8)	,	wetland hydrology must be present.		
5 cm Mu	cky Peat or Peat (S	3)	_		. ,		unless	disturbed or problematic.	
Restrictive L	ayer (if observed)	:							
Туре:									
Depth (inc	ches):						Hydric Soil	Present? Yes No No	
Remarks:									
	••								
Hydric s	soil present								
	<u> </u>								
HIDROLO	GT								
Wetland Hyd	drology indicators:								
Primary Indic	ators (minimum of c	one is requ	ired; check all that a	pply)			Seconda	ary Indicators (minimum of two required)	
Surface	Water (A1)		Water-Sta	ained Lea	ves (B9)		Surf	ace Soil Cracks (B6)	
High Wa	ter Table (A2)		Aquatic F	auna (B1	3)		Drai	nage Patterns (B10)	
Saturatio	on (A3)		True Aqu	atic Plants	s (B14)		Dry-	Season Water Table (C2)	
Water M	arks (B1)		Hydrogen	Sulfide C	odor (C1)		Cray	fish Burrows (C8)	
Sedimer	nt Deposits (B2)		<u> </u>	Rhizosph	eres on Liv	ing Roots	(C3) Satu	ration Visible on Aerial Imagery (C9)	
Drift Dep	oosits (B3)		Presence	of Reduc	ed Iron (C4	4)	Stur	nted or Stressed Plants (D1)	
Algal Ma	t or Crust (B4)		Recent Ire	on Reduc	tion in Tille	d Soils (C	6) 🖌 Geo	morphic Position (D2)	
Iron Dep	osits (B5)		Thin Muc	k Surface	(C7)		🖌 FAC	C-Neutral Test (D5)	
Inundation	on Visible on Aerial	Imagery (B	(7) Gauge or	Well Data	a (D9)				
Sparsely	Vegetated Concav	e Surface (	B8) Other (Ex	plain in R	emarks)				
Field Observ	vations:								
Surface Wate	er Present? Y	'es	No Depth (ir	nches):		_			
Water Table	Present? Y	'es	No Depth (ir	nches):		_			
Saturation Pr	resent? Y	′es	No Depth (ir	nches):		_ Wet	and Hydrology	y Present? Yes 🖌 No	
(includes cap	oillary fringe)			-			16		
Describe Red	corded Data (stream	i gauge, m	onitoring well, aerial	photos, p	revious ins	pections),	ii available:		

Remarks:

Hydrology present

Project/Site: 1730 AEP North Delphos - Rockhill Delinea	ation City/County	Lima/Allen	s	ampling Date: 2021-12-09			
Applicant/Owner: AEP		State: Ohio Sampling Point: 4-D					
Investigator(s): C. Kwolek, E. Wilson	Section, To	Section, Township, Range: S019 T003 R007					
Landform (hillslope, terrace, etc.): Depression		Local relief (conca	ve, convex, none): _	Concave			
Slope (%): 1 Lat: 40.763238	Long: 84.	097616	D	atum: WGS 84			
Soil Map Unit Name: Blount-Urban land complex, 0 to	2 percent slop	es (BsA)	NWI classificati	ion: PEM1A			
Are climatic / hydrologic conditions on the site typical for this tin	ne of year? Yes	✓ No	(If no, explain in Ren	narks.)			
Are Vegetation, Soil, or Hydrology signi	ificantly disturbed?	Are "Norma	l Circumstances" pre	sent? Yes 🖌 No			
Are Vegetation, Soil, or Hydrology natu	rally problematic?	(If needed, o	explain any answers	in Remarks.)			
SUMMARY OF FINDINGS – Attach site map sho	owing samplin	g point locatio	ons, transects, i	mportant features, etc.			
Hydrophytic Vegetation Present? Yes No							
Hydric Soil Present? Yes No	Is th	e Sampled Area					
Wetland Hydrology Present? Yes <u>Ves</u> No _	with	in a Wetland?	Yes	_ No			
Remarks:				united investige All			
three wetland criteria present.	ent within fores	ted depression	i and adjacent to	railroad junction. All			
<b>VEGETATION</b> – Use scientific names of plants.							
Tree Stratum (Blat aire) 30 ft r	bsolute Dominant	Indicator Dom	inance Test worksh	ieet:			
Fraxinus pennsylvanica 7	0 V	FACW Numi	ber of Dominant Spe	cies			
2 Populus deltoides 2		FAC	Ale OBL, FACW, O	FAC. (A)			
3.		Total	Number of Dominan	ιt · 4 (Β)			
4.				(5)			
5		Perce	ent of Dominant Specers Are OBL, FACW, or	cies FAC: 100 (A/B)			
15 ft r 90	0% = Total Co	ver					
Sapling/Shrub Stratum (Plot size: 15111 )	0 4	EACW Prev	alence Index works	heet:			
			1 otal % Cover of: 25	$\frac{\text{Multiply by:}}{25}$			
2			species <u>-0</u>	$x_{1} = \frac{20}{200}$			
3			species 20	$x_{3} = \frac{200}{60}$			
4			I species 0	$\frac{1}{x^4} = \frac{0}{0}$			
3	0% = Total Cor		species 0	$x_{5} = 0$			
Herb Stratum (Plot size: 5 ft r )	= 10tal 00	Colui	mn Totals: 145	(A) 285 (B)			
1. Carex lupulina 2	25 🖌	OBL					
2			Prevalence Index =	B/A = 2.0			
3		Hydr	rophytic Vegetation	Indicators:			
4			1 - Rapid Test for Hy	drophytic Vegetation			
5			2 - Dominance Test is	s >50%			
6			3 - Prevalence Index	$ S \leq 3.0^{\circ}$			
7		'	data in Remarks o	or on a separate sheet)			
8		F	Problematic Hydroph	ytic Vegetation <sup>1</sup> (Explain)			
9							
		<sup>1</sup> Indic	cators of hydric soil a	nd wetland hydrology must			
Woody Vine Stratum (Plot size: <u>30 ft r</u> )	= 10tal 00	be pr	resent, unless disturb	ed or problematic.			
1		Hydr	rophytic				
2		Vege	etation	V No.			
	= Total Co	ver Pres	tes_				
Remarks: (Include photo numbers here or on a separate she	et.)						

## 2011

SOIL								Sampling Point: <u>4-D</u>	
Profile Desc	ription: (Describe	to the dep	th needed to docur	nent the	indicator	or confirm	n the absence of	of indicators.)	
Depth	 Matrix		Redo	x Feature	s				
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0 - 20	10YR 3/1	95	7.5YR 5/8	5	С	PL / M	Clay Loam		
					·				
-									
-									
-									
'Type: C=Co	oncentration, D=Dep	pletion, RM	=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.	
Hydric Soll	indicators:						Indicators	for Problematic Hydric Solis :	
Histosol	(A1)		Sandy C	Gleyed Ma	atrix (S4)		Coast F	Prairie Redox (A16)	
Block Hi	opedon (A2)		Sandy F	Kedox (55	)) 26)		Dark St		
Hydroge	siic (A3) n Sulfide (A4)		Supped	u watrix (a Mucky Mi	50) neral (F1)		Iron-Ma	anganese masses (FT2) pallow Dark Surface (TE12)	
Stratified	Lavers (A5)		Loamy	Gleved M	atrix (F2)		Other (I	Explain in Remarks)	
2 cm Mu	ick (A10)		Deplete	d Matrix (	F3)				
Depleted	d Below Dark Surfac	e (A11)	🗹 Redox [	Dark Surfa	ace (F6)				
Thick Da	ark Surface (A12)		Deplete	d Dark Su	urface (F7	)	<sup>3</sup> Indicators of hydrophytic vegetation and		
Sandy M	lucky Mineral (S1)		Redox [	Depressio	ns (F8)		wetland hydrology must be present,		
5 cm Mu	icky Peat or Peat (S	3)					unless	disturbed or problematic.	
Restrictive I	_ayer (if observed)	:							
Туре:							Hydric Soil I	Brosont2 Vos V No	
Depth (ind	ches):						Hyunc Soin		
Remarks:							-		
	soil prosent								
	son present								
	GY								
Wetland Hw									
	arology indicators						C		
Primary India	cators (minimum of o	one is requi		<u>() () () () () () () () () () () () () (</u>			<u>Secondal</u>	ry indicators (minimum of two required)	
Surface	Water (A1)		Water-Sta	ined Leav	res (B9)		Surfa	ace Soil Cracks (B6)	
High Wa	ter Table (A2)		Aquatic Fa	auna (B13	5) 		Drain	hage Patterns (B10)	
Saturatio	on (A3)		True Aqua	itic Plants	(B14)		Dry-s	Season Water Table (C2)	
Water M	arks (B1)		Hydrogen	Sulfide O	dor (C1)		Cray	fish Burrows (C8)	
Sedimer	t Deposits (B2)			Rhizosphe	eres on Liv	ing Roots	(C3) Satu	ration Visible on Aerial Imagery (C9)	
Drift Dep	oosits (B3)		Presence	of Reduce	ed Iron (C	4)	Stun	ted or Stressed Plants (D1)	
Algal Ma	at or Crust (B4)		Recent Iro	n Reduct		d Solls (Ct	5) <u>v</u> Geor	norphic Position (D2)	
Iron Dep	osits (B5)		Thin Muck	Surface	(C7)		FAC-	-Neutral Test (D5)	
Inundation	on Visible on Aerial	Imagery (B	7) Gauge or	Well Data	(D9)				
Sparsely	Vegetated Concav	e Surface (	B8) Other (Exp	plain in Re	emarks)				
Field Obser	vations:		4						
Surface Wate	er Present?	'es	No Depth (in	ches):					
Water Table	Present?	'es	No Depth (in	ches):					
Saturation P	resent?	′es	No Depth (in	ches):		_ Wetl	and Hydrology	Present? Yes No	
Describe Re	corded Data (stream	aluae m	onitoring well aerial	ohotos n	evious ins	spections)	if available:		
		. gaage, m	entering wen, denar		e no de me	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	aranabio.		

Remarks:

Hydrology present

Project/Site: 1730 AEP North Delphos - Rockhill Delin	eation	City/County:	Lima/Al	len	Sampling Date:	2021-12-09				
Applicant/Owner: AEP				State: Ohio	Sampling Point:	4-E PEM				
Investigator(s): C. Kwolek, E. Wilson	:	Section, Tov	vnship, Ra	nge: S020 T003 R00	7					
Landform (hillslope, terrace, etc.): Depression		L	ocal relief	(concave, convex, none):	Concave					
Slope (%): 1 Lat: 40.764381		Long: 84.087449			Datum: WGS 8	34				
Soil Map Unit Name: Blount silt loam, end moraine, C	) to 2 pe	rcent slop	bes (Ble1	A1) NWI classific	ation: N/A					
Are climatic / hydrologic conditions on the site typical for this	time of yea	ar? Yes	No	(If no, explain in R	emarks.)					
Are Vegetation 🖌 Soil 🖌 or Hydrology 🖌 sig	nificantly	disturbed?	Are	"Normal Circumstances" p	resent? Yes	✓ No				
Are Vegetation Soil or Hydrology na	turally pro	blematic?	(If ne	eeded, explain any answe	rs in Remarks.)					
SUMMARY OF FINDINGS – Attach site map s	howing	sampling	g point l	ocations, transects	, important fe	atures, etc.				
Hydrophytic Vegetation Present? Yes No										
Hydric Soil Present? Yes 🖌 No		Is the	e Sampled	I Area						
Wetland Hydrology Present? Yes <u>Ves</u> No		withi	n a Wetla	nd? Yes	No	-				
Remarks:										
Wetland sample point for PEM portion of 4-E. W	etland s	tretches	along sm	all depression adjac	ent to disturb	ed upland				
area. All three wetland criteria present.										
<b>VEGETATION</b> – Use scientific names of plants.										
Tree Stratum (Plot size: 30 ft r )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test work	sheet:					
1.	10 00101	0,000.00.	otatao	That Are OBL, FACW, of	or FAC: 2	(A)				
2				Total Number of Denia						
3				Species Across All Stra	ant ta: 3	(B)				
4				Percent of Deminent Sr						
5				That Are OBL, FACW, of	or FAC: 67	(A/B)				
a transfer to the state of the		= Total Cov	er	Drevelence Index worl	kabaati					
Sapling/Shrub Stratum (Plot size:)				Total % Cover of:	(sneet:	ly by:				
1				OBL species 0		iy by.				
3				FACW species 80	x 2 = 160	<u> </u>				
4				FAC species 0	x 3 = 0					
5.				FACU species 20	x 4 = 80					
		= Total Cov	er	UPL species 0	x 5 = 0					
Herb Stratum (Plot size: 5 ft r )				Column Totals: 100	(A)	0 (B)				
1. Phalaris arundinacea	60		FACW		24					
2. Setaria faberi	20	<u> </u>	FACU	Prevalence Index	= B/A = <u>2.4</u>					
3. Symphyotrichum praeaitum			FACW	A Reprid Test for b	In Indicators:	tation				
4				☐ 1 - Rapid Test for F	t is >50%	lation				
5				✓ 3 - Prevalence Inde	$x is < 3.0^{1}$					
0				4 - Morphological A	daptations <sup>1</sup> (Prov	vide supporting				
8				data in Remarks	or on a separate	e sheet)				
9				Problematic Hydrop	ohytic Vegetation	(Explain)				
10.										
	100%	= Total Cov	er	<sup>1</sup> Indicators of hydric soil	and wetland hyd	Irology must				
Woody Vine Stratum (Plot size: 30 ft r )					issu or probleme					
1				Hydrophytic						
2				Present? Yes	s 🖌 No					
Pomarke: (Include photo numbers have as an a constrate sh		= Total Cov	er							
include proto numbers here of on a separate sr	leet.)									
Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features O - 20 10YR 4/1 90 10YR 5/8 10 C PL / M Clay Loa <sup>+</sup> Texture Remarks O - 20 10YR 4/1 90 10YR 5/8 10 C PL / M Clay Loam O - 20 10YR 4/1 90 10YR 5/8 10 C PL / M Clay Loam O - 20 10YR 4/1 90 10YR 5/8 10 C PL / M Clay Loam O - 20 0 10YR 4/1 90 10YR 5/8 10 C PL / M Clay Loam O - 20 0 10YR 4/1 90 10YR 5/8 10 C PL / M Clay Loam O - 20 0 0 YR 4/1 90 10YR 5/8 10 C PL / M Clay Loam O - 20 0 0 YR 4/1 90 10YR 5/8 10 C PL / M Clay Loam O - 20 0 0 YR 4/1 90 10YR 5/8 10 C PL / M Clay Loam O - 20 0 0 YR 4/1 90 10YR 5/8 10 C PL / M Clay Loam O - 20 0 0 YR 4/1 90 10YR 5/8 10 C PL / M Clay Loam O - 20 0 0 YR 4/1 90 10YR 5/8 10 C PL / M Clay Loam O - 20 0 0 YR 4/1 90 10YR 5/8 10 C PL / M Clay Loam O - 20 0 0 YR 4/1 90 10YR 5/8 10 C PL / M Clay Loam O - 20 0 VR 4/1 90 10YR 5/8 10 C PL / M Clay Loam O - 20 0 VR 4/1 90 10YR 5/8 10 C PL / M Clay Loam O - 20 0 VR 4/1 90 10YR 5/8 10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/1 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20 0 VR 4/10 C PL / M Clay Loam O - 20										
---	---	--	-------------	------------------------------	------------	----------------	-------------------	---	---	--
Depth       Matrix       Redox Features         (inches)       Color (moist)       %       Type'       Loc'       Texture       Remarks         0 - 20       10YR 4/1       90       10YR 5/8       10       C       PL / M       Clay Loam         -       -       -       -       -       -       -       -         -       -       -       -       -       -       -       -         -       -       -       -       -       -       -       -       -         -       -       -       -       -       -       -       -       -         -       -       -       -       -       -       -       -       -         -	Profile Desc	cription: (Describ	e to the de	pth needed to docu	ment the	indicator	or confirn	n the absence	of indicators.)	
(Inches)       Color (moist)       %       Type'       Loc'       Texture       Remarks         0 - 20       10YR 4/1       90       10YR 5/8       10       C       PL / M       Clay Loam         -       -       -       -       -       -       -       -       -         - <td< td=""><td>Depth</td><td>Matrix</td><td></td><td>Rede</td><td>x Featur</td><td>es</td><td></td><td></td><td></td></td<>	Depth	Matrix		Rede	x Featur	es				
0 - 20       10YR 4/1       90       10YR 5/8       10       C       PL / M       Clay Loam         -	(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc	Texture	Remarks	
-	0 - 20	10YR 4/1	90	10YR 5/8	10	<u> </u>	PL/M	Clay Loam		
-	-									
<td< td=""><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	-									
''Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       ?Location: PL=Pore Lining, M=Matrix.         ''Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       ?Location: PL=Pore Lining, M=Matrix.         ''Hyto: Soil Indicators:       Indicators for Problematic Hydric Soils':										
.       . </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>										
'Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       ?Location: PL=Pore Lining, M=Matrix.         Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histic Epipedon (A2)       Sandy Redox (S5)         Black Histic (A3)       Stripped Matrix (S6)         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)         Yethore Surface (S7)       Coast Prairie Redox Surface (TF12)         Stratified Layers (A5)       Loamy Mucky Mineral (F1)       Very Shallow Dark Surface (TF12)         2 cm Muck (A10)       ✓       Depleted Matrix (F3)       Other (Explain in Remarks)         2 cm Muck (A10)       ✓       Depleted Matrix (F3)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       wetland hydrology must be present, unless disturbed or problematic.         Type:	-									
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.         Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :	-									
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.         Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Sandy Gleyed Matrix (S4)       Coast Prairie Redox (A16)         Histic Epipedon (A2)       Sandy Redox (S5)       Dark Surface (S7)         Black Histic (A3)       Stripped Matrix (S6)       Iron-Manganese Masses (F12)         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)       Very Shallow Dark Surface (TF12)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)	_									
Type:								<sup>2</sup> Location	. PI - Poro Liping M-Matrix	
Image: Secondary Indicators       Image: Secondary Indicators (minimum of two required)         Image: Secondary Indicators (minimat	Hydric Soil	Indicators:			S-Maske	u Sanu Gra	ans.	Indicators	for Problematic Hydric Soils <sup>3</sup>	
	Historol	(A 1)		Sandy	Cloved M	atrix (SA)		Coast	Prairie Redex (A16)	
	Histic Fr	ninedon (A2)		Sandy	Redox (S	5)		Dark S	Surface (S7)	
	Black Hi	istic (A3)		Strippe	d Matrix (	S6)		Iron-M	langanese Masses (F12)	
	Hydroge	en Sulfide (A4)		Loamy	Mucky M	ineral (F1)		Very S	Shallow Dark Surface (TF12)	
2 cm Muck (A10)       ✓       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         S andy Mucky Peat or Peat (S3)       Redox Depressions (F8)       wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed):	Stratified	d Layers (A5)		Loamy	Gleyed N	latrix (F2)		Other	(Explain in Remarks)	
Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       3 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Peat or Peat (S3)       Redox Depressions (F8)       wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed):	2 cm Mu	uck (A10)		<ul> <li>Deplete</li> </ul>	ed Matrix	(F3)				
	Depleted	d Below Dark Surfa	ace (A11)	Redox	Dark Sur	face (F6)		2		
	Thick Da	ark Surface (A12)		Deplete	ed Dark S	urface (F7)		<sup>3</sup> Indicators of hydrophytic vegetation and		
	Sandy Mucky Mineral (S1) Redox Depressions (F8) wetland hydrology n			d hydrology must be present,						
Type:   Depth (inches):     Hydric Soil Present?     Yes     Hydric Soil Present?     Hydric Soil Present?     Yes     No     Remarks:     Hydric Soil Present?     Yes     No     Remarks:     Hydric Soil Present?     Yes     No        Hydric Soil Present?        Hydric Soil Present?	5 CM MU	LCKY Peat or Peat (	53)					uniess	disturbed or problematic.	
Type.   Depth (inches):     Remarks:        Hydric Soil Present? Yes Yes No     Remarks:     Hydric soil present     IYDROLOGY     Wetland Hydrology Indicators:   Primary Indicators (minimum of one is required; check all that apply)	Tuno	Layer (II observed	1).							
Depin (incres):	Type:							Hydric Soil	Present? Yes No	
Remarks:         Hydric soil present         1YDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)	Depth (In	cnes):						-		
Hydric soil present         IYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)	Remarks:									
IYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)	Hydric s	soil present								
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)		•								
IYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)										
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)										
Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required)	HYDROLO	GY								
Primary Indicators (minimum of one is required: check all that apply)       Secondary Indicators (minimum of two required)         Surface Water (A1)       Water-Stained Leaves (B9)       Surface Soil Cracks (B6)	Wetland Hy	drology Indicators	s:							
Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6)	Primary India	cators (minimum of	one is reau	uired: check all that a	(vlac			Seconda	arv Indicators (minimum of two required)	
	Surface	Water (A1)		Water-Sta	ined Lea	ves (B9)		Sur	face Soil Cracks (B6)	
High Water Table (A2) Aquatic Fauna (B13)	High Wa	ater Table (A2)		Aquatic E	auna (B1)	3)			inage Patterns (B10)	
Saturation (A3) True Aquatic Plants (B14) Drv-Season Water Table (C2)	Saturatio	right water rable (A2) Aquatic Fauna (B13) Saturation (A3) True Aquatic Plants (B14)						Drv	-Season Water Table (C2)	
Water Marks (B1) Hvdrogen Sulfide Odor (C1) Cravfish Burrows (C8)	Water Marks (B1) Hydrogen Sulfide Odor (C1)						Cra	vfish Burrows (C8)		
Sediment Deposits (B2) Violated Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)	Sediment Deposits (B2)						(C3) Sat	uration Visible on Aerial Imagery (C9)		
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)	Drift Der	nosits (B3)		Presence	of Reduc	ed Iron (C4	1)	Stu	nted or Stressed Plants (D1)	
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6)	Algal Ma	at or Crust (B4)		Recent Ire	on Reduc	tion in Tille	., d Soils (Cé	6) 🖌 Geo	pmorphic Position (D2)	
Iron Deposits (B5) Thin Muck Surface (C7)	Iron Der	posits (B5)		Thin Mucl	Surface	(C7)		, <u> </u>	C-Neutral Test (D5)	
Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9)	Inundati	on Visible on Aeria	l Imagery (	B7) Gauge or	Well Data	(0.) a (D9)		<u> </u>		
Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks)	Sparsely	v Vegetated Conca	ve Surface	(B8) Other (Ex	plain in R	emarks)				
Field Observations:		vatione:		<u>,</u>						
Surface Water Present? Yes No Competition (inches):	Field Obser	vauons.								
Water Table Present? Yes No V Depth (inches):	Field Obser	er Present?	Yes	No 🖌 Depth (in	ches):					

Yes \_\_\_\_\_ No 🚩 Depth (inches): \_\_\_\_\_

(includes capillary fringe) [Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation Present?

Hydrology present

Wetland Hydrology Present? Yes \_\_\_\_ No \_\_\_

Project/Site: 1730 AEP North Delphos - Rockhill Delineation	City/County: Lima/Allen	Sa	ampling Date:	2021-12-09			
Applicant/Owner: AEP	Sta	<sub>te:</sub> Ohio Sa	ampling Point:	4-E PFO			
Investigator(s): C. Kwolek, E. Wilson	Section, Township, Range: <u>S02</u>	0 T003 R007					
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, none): Concave						
Slope (%): 1 Lat: 40.76408	Long: 84.087707	Da	atum: WGS 84	4			
Soil Map Unit Name: Blount silt loam, end moraine, 0 to 2 p	Soil Map Unit Name: Blount silt loam, end moraine, 0 to 2 percent slopes (Ble1A1) NWI classification: N/A						
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🖌 No (If r	no, explain in Rem	arks.)				
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Ci	rcumstances" pres	sent?Yes 📕	No			
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, exp	lain any answers i	n Remarks.)				
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations	s, transects, in	mportant fe	atures, etc.			

Hydrophytic Vegetation Present?	Yes 🖌	No			
Hydric Soil Present?	Yes	No	Is the Sampled Area		
Wetland Hydrology Present?	Yes 🖌	No	within a Wetland?	Yes 🔽	No

Remarks:

Wetland sample point for PFO portion of 4-E. Wetland present within forested depression. All three wetland criteria present.

**VEGETATION** – Use scientific names of plants.

00 (i	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1. Populus deltoides	70	<ul> <li>✓</li> </ul>	FAC	That Are OBL, FACW, or FAC: 4 (A)
2				
2				Total Number of Dominant
3				Species Across All Strata: 4 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
	70%	= Total Cov	er	
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1. Quercus palustris	30	<ul> <li>✓</li> </ul>	FACW	Total % Cover of: Multiply by:
2. Cornus alba	15	~	FACW	OBL species 15 x 1 = 15
3				FACW species $45$ x 2 = 90
				EAC appealed $\frac{70}{10}$ x 3 = $\frac{210}{10}$
4				$70 \times 3 = 210$
5				FACU species $0$ $x 4 = 0$
<b>F t</b> + -	45%	= Total Cov	er	UPL species $0 \times 5 = 0$
Herb Stratum (Plot size: 5 Tt r )			0.01	Column Totals: 130 (A) 315 (B)
1. Carex lupulina	15		OBL	
2				Prevalence Index = B/A = 2.4
3.				Hydrophytic Vegetation Indicators:
A.				1 - Rapid Test for Hydrophytic Vegetation
4				✓ 2 - Dominance Test is >50%
5				
6				
7				4 - Morphological Adaptations' (Provide supporting
8				data in Remarks or on a separate sheet)
9				Problematic Hydrophytic Vegetation' (Explain)
10				
10	150/			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Weady Vine Stratum (Plataize: 30 ft r	15%	= Total Cov	er	be present, unless disturbed or problematic.
(Plot size)				
1				Hydrophytic
2				Vegetation
		= Total Cov	er	Present? Yes No
Remarks: (Include photo numbers here or on a separate s	sheet.)			

### 2011

SOIL								Sampling Point: 4-E FFO		
Profile Desc	cription: (Descri	be to the de	pth needed to docu	ment the	e indicator	or confirm	n the absence o	of indicators.)		
Depth	Matrix	(	Redo	ox Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks		
0 - 20	10YR 4/1	90	10YR 6/8	10	C	PL / M	Clay Loam			
-										
-										
-										
-										
1							2			
Type: C=C	oncentration, D=D	epletion, RM	A=Reduced Matrix, M	S=Maske	ed Sand Gr	ains.	- Location:	PL=Pore Lining, M=Matrix.		
Hydric Soli	indicators:		0 - m to	0			Indicators f	or Problematic Hydric Solls :		
Histosol	(A1) ninodon (A2)		Sandy		hatrix (S4)		Coast P			
HISUC E	pipedon (A2)		Sandy	Redox (3	(56)		Dark Su	ngapese Masses (E12)		
Black H	n Sulfide (A4)		Suppe	Mucky M	(50) lineral (F1)		Werv Sh	allow Dark Surface (TE12)		
Stratified	d Lavers (A5)		Loamy	Gleved N	Matrix (F2)		Other (E	Explain in Remarks)		
2 cm Mu	uck (A10)		V Deplete	ed Matrix	(F3)					
Deplete	d Below Dark Sur	face (A11)	Redox	Dark Sur	face (F6)					
Thick Da	ark Surface (A12)		Deplete	ed Dark S	Surface (F7)	)	<sup>3</sup> Indicators of	of hydrophytic vegetation and		
Sandy Mucky Mineral (S1) Redox Depressions (F8) wetland hydrology must be prese				hydrology must be present,						
5 cm Mu	ucky Peat or Peat	(S3)					unless o	disturbed or problematic.		
Restrictive	Layer (if observe	d):								
Туре:							Hydric Soil F	Prosent2 Vos V No		
Depth (in	ches):						riyune Son r			
Remarks:							·			
Hydric	soil proson	+								
i iyunc .	son presen	L								
HYDROLO	GY									
Wetland Hy	drology Indicato	rs:								
Primary India	cators (minimum o	of one is requ	uired; check all that a	pply)			Secondar	y Indicators (minimum of two required)		
Surface	Water (A1)		<ul> <li>Water-Sta</li> </ul>	ained Lea	ves (B9)		Surfa	ce Soil Cracks (B6)		
 High Wa	ater Table (A2)		Aquatic F	auna (B1	3)		Drainage Patterns (B10)			
Saturati	on (A3)		True Aqua	atic Plant	s (B14)		Drv-Season Water Table (C2)			
✓ Water Marks (B1)						Crayf	ish Burrows (C8)			
 Sedimer	nt Deposits (B2)		V Oxidized	Rhizosph	neres on Liv	ing Roots	(C3) Satur	ation Visible on Aerial Imagery (C9)		
Drift De	posits (B3)		Presence	of Redu	ced Iron (C4	4)	Stunt	ed or Stressed Plants (D1)		
Algal Ma	at or Crust (B4)		Recent Ire	on Reduc	tion in Tille	d Soils (C	6) 🔽 Geon	norphic Position (D2)		
Iron Der	posits (B5)		Thin Mucl	k Surface	e (C7)	ζ-	✓ FAC-	Neutral Test (D5)		
Inundati	on Visible on Aeri	al Imagery (	B7) Gauge or	Well Dat	a (D9)		_			
Sparsely	y Vegetated Conc	ave Surface	(B8) Other (Ex	plain in F	Remarks)					
Field Obser	vations:		`	-						
Surface Wat	er Present?	Yes	No 🖌 Depth (ir	nches):						
Water Table	Present?	Yes	No V Depth (in	iches):		_				
Saturation P	resent?	Yes	No V Depth (in	iches).		-   Wet	and Hydrology	Present? Yes V		
/	- (III		Bobul (ii			-				

(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Hydrology present

Project/Site: 1730 AEP North Delphos - Rockhill Delin	eation c	City/County:	Lima/All	en	Sampling Date:	2021-12-09		
Applicant/Owner: AEP		State: Ohio Sampling Point: 4-E UPL						
Investigator(s): C. Kwolek, E. Wilson	5	Section, Township, Range: S020 T003 R007						
Landform (hillslope, terrace, etc.): Upland		L	ocal relief (	(concave, convex, none):	Linear			
Slope (%): 0 Lat: 40.764284	L	ong: 84.0	087348	(,,,	Datum: WGS 8	34		
Soil Map Unit Name: Pewamo silty clay loam, 0 to 1	percent s	slopes (P	mA)	NWI classific	ation: N/A			
Are climatic / hydrologic conditions on the site typical for this t	time of vea	r? Yes	No	(If no explain in R	emarks )			
Are Vegetation Soil or Hydrology sig	mificantly d	listurbed?	Are "I	Normal Circumstances" n	present? Yes	No		
Are Vegetation Soil or Hydrology na	turally prot	plematic?	(If ne	eded explain any answe	rs in Remarks )			
SUMMARY OF FINDINGS – Attach site map s	howing	sampling	g point lo	ocations, transects	, important fe	eatures, etc.		
Hydrophytic Vegetation Present? Yes No	~					-		
Hydric Soil Present? Yes No	<ul> <li>✓</li> </ul>	Is the	e Sampled	Area				
Wetland Hydrology Present? Yes No	<u> </u>	withi	n a Wetlan	d? Yes	No	-		
Remarks:								
Upland sample point for 4-E. Sample taken with	in uplanc	d area adj	jacent to	railroad junction. No	wetland crite	eria present.		
<b>VEGETATION</b> – Use scientific names of plants.								
	Absolute	Dominant	Indicator	Dominance Test work	sheet:			
Cetrva virginiana	<u>% Cover</u>	Species?		Number of Dominant Sp	pecies			
Quercus palustris	40		FACW	That Are OBL, FACW, o	or FAC: 3	(A)		
2				Total Number of Domin	ant ta: 7			
а				Species Across All Stra		(B)		
5.				Percent of Dominant Sp	becies			
		– Total Cov	er	That Are OBL, FACW, C	5FFAC: <u>42.5</u>	(A/B)		
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worl	ksheet:			
1. <u>Amelanchier arborea</u>	25		FACU	Total % Cover of:	Multipl	ly by:		
2. Quercus palustris	20	<u> </u>	FACW	OBL species 0	$x_1 = 0$	<u> </u>		
3				FACW species 60	$x_2 = \frac{120}{120}$	5		
4				FAC species <u>45</u>	$x_{4} = 580$	0		
o	45%	- Total Cav		LIPL species 10	x 5 = 50			
Herb Stratum (Plot size: 5 ft r )			ei	Column Totals: 260	(A) 88	5 (B)		
1. Setaria faberi	30	<u> </u>	FACU		( , ,	(2)		
2. Festuca rubra	20	<u> </u>	FACU	Prevalence Index	= B/A = <u>3.40</u>			
3. Panicum virgatum	20	<u> </u>	FAC	Hydrophytic Vegetatio	on Indicators:			
4. <u>Setaria pumila</u>	15		FAC	1 - Rapid Test for H	lydrophytic Veget	tation		
5. Rumex crispus	10		FAC	2 - Dominance Tes	t  is  >50%			
6. Verbascum thapsus	10			3 - Prevalence Inde	x is ≥3.0 Identationa <sup>1</sup> (Prov	ido ourporting		
7				data in Remarks	s or on a separate	e sheet)		
8				Problematic Hydror	phytic Vegetation	<sup>1</sup> (Explain)		
9								
10	105% :	= Total Cov	er	<sup>1</sup> Indicators of hydric soil	l and wetland hyd	Irology must		
Woody Vine Stratum (Plot size: 30 ft r )		10101 001	0.	be present, uniess distu	Irbed or problema	atic.		
1				Hydrophytic				
2				Vegetation Present? Ver	s No	v		
		= Total Cov	er	Testine Tes				
Remarks: (Include photo numbers here or on a separate sh	leet.)							
No dominant hydrophytic vegetation	n prese	ent						

	vistions (Describe	to the denth of					
Profile Desc	ription: (Describe	to the depth n	eeded to docun	nent the indicator	or confirm	n the absence of	indicators.)
Depth	Matrix	0/	Redo:	x Features	1.0.02	Texture	Bemerke
		100		<u></u>	LOC		Remarks
	10YR 3/3	100				Clay Loam	
-							
-							
-							
-							
		lotion PM-Ro	duced Matrix MS	-Masked Sand Gr		<sup>2</sup> Location:	PL-Poro Liping M-Matrix
Hydric Soil	Indicators	ellon, RIVI-Re	duced Matrix, Mo	S-Maskeu Sanu Gra	anis.	Indicators fo	PL-Pole Linnig, M-Mainx.
History	(44)		Candy	Neved Metrix (C4)		Coost Dr	airia Daday (A16)
HISTOSOI	(A1) Singdon (A2)		Sandy G	Bleyed Matrix (54)		Coast Pr	
Black Hi	stic (A3)		Sanuy P	Matrix (S6)		Dark Sur	Idce (S7)
Hvdroge	en Sulfide (A4)			Mucky Mineral (F1)		Verv Sha	allow Dark Surface (TF12)
Stratified	d Lavers (A5)		Loamy (	Gleved Matrix (F2)		Other (E)	xplain in Remarks)
2 cm Mu	ick (A10)		Deplete	d Matrix (F3)			
Depleted	d Below Dark Surfac	e (A11)	Redox D	Dark Surface (F6)			
Thick Da	ark Surface (A12)		Deplete	d Dark Surface (F7)	)	<sup>3</sup> Indicators of	f hydrophytic vegetation and
Sandy M	lucky Mineral (S1)		Redox D	Depressions (F8)		wetland h	nydrology must be present,
5 cm Mu	icky Peat or Peat (S	3)				unless di	sturbed or problematic.
Restrictive I	Layer (if observed)	:					
Туре:			-				
Depth (ind	ches):		_			Hydric Soll Pi	resent? Yes No
Remarks:							
	in nail proop	t					
ινο πγαι	ric soli prese	ent					
	<u> </u>						
HIDROLO	GY						
Wetland Hye	drology Indicators:						
Primary Indic	cators (minimum of c	one is required;	check all that ap	ply)		<u>Secondary</u>	Indicators (minimum of two required)
Surface	Water (A1)		Water-Stai	ned Leaves (B9)		Surfac	e Soil Cracks (B6)
High Wa	ater Table (A2)		Aquatic Fa	una (B13)		Draina	ge Patterns (B10)
Saturatio	on (A3)		True Aqua	tic Plants (B14)		Dry-Se	eason Water Table (C2)
Water Marks (B1) Hydrogen Sulfide						Crayfis	sh Burrows (C8)
Sedimer	nt Deposits (B2)		Oxidized R	Rhizospheres on Liv	ing Roots	(C3) Satura	tion Visible on Aerial Imagery (C9)
Drift Dep	oosits (B3)		Presence of	of Reduced Iron (C4	4)	Stunte	d or Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Recent Iro	n Reduction in Tille	d Soils (C	6) Geom	orphic Position (D2)
Iron Dep	oosits (B5)		Thin Muck	Surface (C7)		FAC-N	leutral Test (D5)
Inundati	on Visible on Aerial I	magery (B7)	Gauge or \	Well Data (D9)			
Sparsely	Vegetated Concave	e Surface (B8)	Other (Exp	lain in Remarks)			
Field Obser	vations:						
Surface Wate	er Present? Y	es No	Pepth (ind	ches):	_		
Water Table	Present? Y	es No	<ul> <li>Depth (inc</li> </ul>	ches):			

Yes \_\_\_\_\_ No \_\_\_\_ Depth (inches): \_\_\_\_

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Saturation Present? (includes capillary fringe)

Remarks:

Wetland Hydrology Present? Yes \_\_\_\_\_ No \_\_\_\_

Applicant/Owner: AEP       State: O         Investigator(s): C. Kwolek, E. Wilson       Section, Township, Range: S020 TO         Landform (hillslope, terrace, etc.): Ditch       Local relief (concave, conve         Slope (%): 1       Lat: 40.765032       Long: 84.089094         Soil Map Unit Name: Pewamo silty clay loam, 0 to 1 percent slopes (PmA)       NW         Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>v</u> No ((ff no, exp	hio Sampling Point: 4-F 03 R007 ex, none): Concave Datum: WGS 84
Investigator(s): <u>C. Kwolek, E. Wilson</u> Landform (hillslope, terrace, etc.): <u>Ditch</u> Slope (%): <u>1</u> Lat: <u>40.765032</u> Soil Map Unit Name: <u>Pewamo silty clay loam, 0 to 1 percent slopes (PmA)</u> Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>v</u> No (If no, exp	03 R007 (x, none): <u>Concave</u> Datum: WGS 84
Landform (hillslope, terrace, etc.): _Ditch       Local relief (concave, conve         Slope (%): _1       Lat: _40.765032       Long: _84.089094         Soil Map Unit Name: _Pewamo silty clay loam, 0 to 1 percent slopes (PmA)       NW         Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explanation)       No (If no, explanation)	ex, none): <u>Concave</u> Datum: WGS 84
Slope (%):       1       Lat:       40.765032       Long:       84.089094         Soil Map Unit Name:       Pewamo silty clay loam, 0 to 1 percent slopes (PmA)       NW         Are climatic / hydrologic conditions on the site typical for this time of year?       Yes       V       No       (If no, explicitly of the stress o	Datum: WGS 84
Soil Map Unit Name: Pewamo silty clay loam, 0 to 1 percent slopes (PmA) NW Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>V</u> No (If no, exp	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, exp	l classification: N/A
	plain in Remarks )
Are Vegetation 🗸 Soil 🖌 or Hydrology 🗸 significantly disturbed? Are "Normal Circums	stances" present? Yes V No
Are Vegetation Soil or Hydrology naturally problematic? (If peeded explain ar	ny answers in Remarks )
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, tra	insects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes <u>V</u> No Is the Sampled Area	
Wetland Hydrology Present? Yes <u>V</u> No <u>within a Wetland?</u> Y	res No
Remarks:	
Wetland sample point for PEM 4-F. Wetland stretches along small ditch adjacent to mo	owed area and railroad tracks. All
three wetland criteria present.	
VEGETATION – Use scientific names of plants.	
Tree Stratum (Plot size: 30 ft r ) Absolute Dominant Indicator Dominance Tr	est worksheet:
1. Number of Dor That Are OBL	minant Species
2.	
3 Total Number Species Acros	of Dominant as All Strata: 3 (B)
4	
5 Percent of Dor That Are OBL,	, FACW, or FAC: 100 (A/B)
15 ft r = Total Cover	
Sapling/Shrub Stratum (Plot size: 13111 ) Prevalence In	idex worksheet:
	20 v 1 - 20
2 Oble species	$x = \frac{70}{140}$
4 FAC species	$\overline{0}$ $x_3 = \overline{0}$
5. FACU species	x = 0 $x = 0$
= Total Cover UPL species	<u>10</u> x 5 = <u>50</u>
Herb Stratum (Plot size: 5 ft r ) Symphystrichum propolitum	s: <u>100</u> (A) <u>210</u> (B)
1. Symphyothchum praeanum 40 FACW	P(A = 21)
2. <u>Invision de la correctiona /u>	
3.     Carex rupulina       4.     Dipsacus laciniatus       10.     IID	Test for Hydrophytic Vegetation
	ance Test is >50%
5 2 bonna	ence Index is $\leq 3.0^{1}$
7 4 - Morphe	ological Adaptations <sup>1</sup> (Provide supporting
8. data in	Remarks or on a separate sheet)
9 Problemat	tic Hydrophytic Vegetation <sup>1</sup> (Explain)
10	
<u>100%</u> = Total Cover be present, un	hydric soil and wetland hydrology must less disturbed or problematic.
Woody Vine Stratum (Plot size: 30 It I )	
1 Hydrophytic	
1.      Hydrophytic       2.         Present?     Present?	Yes No
1.	Yes No

501L								
Profile Desc	cription: (Describe	to the dep	th needed to docu	ment the	indicator	or confirn	n the absence of	indicators.)
Depth	Matrix		Redo	x Feature	es1	. 2		
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc	Texture	Remarks
0 - 20	10YR 4/1	_ <u>90</u>	10YR 5/8	10	_ <u>C</u>	PL/M	Clay Loam	
-								
-								
-								
-								
<sup>1</sup> Type: C=C	oncentration, D=De	pletion, RM	=Reduced Matrix, M	S=Maske	d Sand G	ains.	<sup>2</sup> Location: P	L=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for	Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy	Gleyed M	latrix (S4)		Coast Pra	irie Redox (A16)
Histic Ep	oipedon (A2)		Sandy	Redox (S	5)		Dark Surfa	ace (S7)
Black Hi	istic (A3)		Strippe	d Matrix (	S6)		Iron-Mang	ganese Masses (F12)
Hydroge	en Sulfide (A4)		Loamy	Mucky M	ineral (F1)		Very Shal	low Dark Surface (TF12)
Stratified	uck (A10)		Loamy	Gleyed IV	(E3)			plain in Remarks)
2 cm Mc	d Below Dark Surfa	ce (A11)	Depict	Dark Surf	(F6)			
Thick Da	ark Surface (A12)		Deplete	d Dark S	urface (F7	)	<sup>3</sup> Indicators of	hydrophytic vegetation and
Sandy M	lucky Mineral (S1)		Redox	Depressio	ons (F8)		wetland hy	ydrology must be present,
5 cm Mu	ucky Peat or Peat (S	\$3)					unless dis	turbed or problematic.
Restrictive	Layer (if observed)	):						
Туре:							Hydric Soil Pr	asant2 Vas 🗸 No
Depth (in	ches):							
Remarks:								
Hydric	soil present							
HYDROLO	GY							
Wetland Hy	drology Indicators	:						
Primary India	cators (minimum of	one is requi	red; check all that a	oply)			Secondary	Indicators (minimum of two required)
<ul> <li>Surface</li> </ul>	Water (A1)		Water-Sta	ined Lea	ves (B9)		Surface	e Soil Cracks (B6)
🖌 High Wa	ater Table (A2)		Aquatic Fa	auna (B1	3)		🗾 Drainag	ge Patterns (B10)
🖌 Saturati	on (A3)		True Aqua	atic Plants	s (B14)		Dry-Sea	ason Water Table (C2)
Water M	larks (B1)		Hydrogen	Sulfide C	Odor (C1)		Crayfis	h Burrows (C8)
Sedimer	nt Deposits (B2)		✓ Oxidized	Rhizosph	eres on Liv	ing Roots	(C3) Saturat	ion Visible on Aerial Imagery (C9)
Drift Dep	posits (B3)		Presence	of Reduc	ed Iron (C	4)	Stunted	or Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Recent Irc	on Reduc	tion in Tille	d Soils (C6	6) 🖌 Geomo	orphic Position (D2)
Iron Dep	posits (B5)		Thin Mucl	Surface	(C7)		FAC-Ne	eutral Test (D5)
Inundati	on Visible on Aerial	Imagery (B	7) Gauge or	Well Data	a (D9)			
Sparsely	y Vegetated Concav	e Surface (	B8) Other (Ex	plain in R	emarks)			
Field Obser	vations:			5	:			
Surface Wat	er Present?	res	No Depth (in	iches):	,			
Water Table	Present?	Yes	No Depth (in	iches): 0		—		
Saturation P (includes cap Describe Re	resent? oillary fringe)	Yes	No Depth (in	ches): 0		Wetl	and Hydrology P	resent? Yes No
Describe Re	concer Data (stream	n gauge, m	sintoring well, aerial	priotos, p	nevious in	spections),	n avaliable.	
Remarks:								
Hydrolo	av present							
	a) present							

Project/Site: 1730 AEP North Delphos - Rockhill Delineation	City/County: Lima/Allen		Sampling Date:	2021-12-09
Applicant/Owner: AEP		_ <sub>State:</sub> Ohio	Sampling Point:	4-F UPL
Investigator(s): C. Kwolek, E. Wilson	_ Section, Township, Range:	S020 T003 R00	)7	
Landform (hillslope, terrace, etc.): Upland	Local relief (con	cave, convex, none):	Linear	
Slope (%): 0 Lat: 40.764997	_ Long: 84.089176		Datum: WGS 8	4
Soil Map Unit Name: Pewamo silty clay loam, 0 to 1 perce	nt slopes (PmA)	NWI classific	cation: N/A	
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes 🖌 No	_ (If no, explain in R	(emarks.)	
Are Vegetation, Soil, or Hydrology significar	tly disturbed? Are "Nor	mal Circumstances" p	present? Yes	No
Are Vegetation, Soil, or Hydrology naturally	problematic? (If neede	d, explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showi	ng sampling point loca	tions, transects	, important fe	atures, etc.
Hydrophytic Vegetation Present? Yes No	_			
Hydric Soil Present? Yes No _	Is the Sampled Are	a		
Wetland Hydrology Present? Yes No _	within a Wetland?	Yes	No	-
Remarks:				

Upland sample point for PEM 4-F. Sample taken within upland area adjacent to railroad junction. No wetland criteria present.

**VEGETATION** – Use scientific names of plants.

00 ft	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>1</u> (B)
4				
5.				Percent of Dominant Species
		= Total Cov	er	
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2.				OBL species x 1 =
3.				FACW species $0 \qquad x = 0$
4				FAC species $0$ x 3 = $0$
5				EACU species $100$ $x = 400$
5	·	- Total Car		$\frac{1}{1} = \frac{1}{2} = \frac{1}{2}$
Herb Stratum (Plot size: 5 ft r )			er	Column Totala: $100$ (A) $400$ (B)
1 Festuca rubra	95	~	FACU	
2. Plantago lanceolata	5		FACU	Prevalence Index = B/A = 4.0
3.				Hydrophytic Vegetation Indicators:
4.				1 - Rapid Test for Hydrophytic Vegetation
5.				2 - Dominance Test is >50%
6.				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
0	·			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
9	·			
10	100%			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )	100%	= Total Cov	er	be present, unless disturbed or problematic.
1				Hades desta
2	·			Hydropnytic Vegetation
2	·			Present? Yes No
Pomorko: (Includo photo numbero horo er en e concrete -	hoot )		er	
remains. (include proto numbers here of on a separate s	sneet.)			
No dominant hydrophytic vegetatic	on pres	ent		

Profile Desc	ription: (Describe	to the depth	needed to docum	nent the in	dicator o	or confirm	n the absence of	f indicators.)
Depth	Matrix		Redo	x Features	Tumo <sup>1</sup>	1 a a <sup>2</sup>	Texture	Bemerke
(incres)			Color (moist)		Туре	LOC		Remarks
	10YR 3/3							
-								
-								
_								
-								
<sup>1</sup> Type: C=Co	oncentration, D=Der	bletion, RM=R	Reduced Matrix, MS	S=Masked	Sand Gra	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicators for	or Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy C	Bleyed Mat	rix (S4)		Coast Pr	airie Redox (A16)
Histic Ep	ipedon (A2)		Sandy F	Redox (S5)			Dark Sur	face (S7)
Black His	stic (A3)		Stripped	Matrix (S6	3)		Iron-Mar	iganese Masses (F12)
Hydroge	n Sulfide (A4)		Loamy I	Mucky Mine	eral (F1)		Very Sha	allow Dark Surface (TF12)
Stratified	Layers (A5)		Loamy (	Gleyed Mat	trix (F2)		Other (E	xplain in Remarks)
2 cm Mu	ck (A10)		Deplete	d Matrix (F	3)			
Depleted	Below Dark Surfac	æ (A11)	Redox [	Dark Surfac	ce (F6)		31	f hushes hudio us rededion and
Thick Da	Irk Surface (A12)		Deplete	d Dark Sun			Indicators o	r nydropnytic vegetation and
Sandy M	cky Peat or Peat (ST)	3)		epression	s (го)			isturbed or problematic
Restrictive L	aver (if observed)	:						subed of problematic.
Type <sup>.</sup>	,,	•						
Depth (inc	thes):						Hydric Soil P	resent? Yes No
Bomorko:								
Remarks.								
No hydr	ic soil prese	ent						
	•							
HYDROLO	GY							
Wetland Hyd	rology Indicators:	:						
Primary Indic	ators (minimum of o	one is require	d; check all that ap	ply)			Secondary	Indicators (minimum of two required)
Surface	Water (A1)		Water-Stai	ned Leave	s (B9)		Surfac	ce Soil Cracks (B6)
High Wa	ter Table (A2)		Aquatic Fa	una (B13)			Draina	age Patterns (B10)
Saturatio	on (A3)		True Aqua	tic Plants (I	B14)		Dry-S	eason Water Table (C2)
Water M	arks (B1)		Hydrogen	Sulfide Odd	or (C1)		Crayfi	sh Burrows (C8)
Sedimen	t Deposits (B2)		Oxidized F	hizosphere	es on Livi	ng Roots	(C3) Satura	ation Visible on Aerial Imagery (C9)
Drift Dep	osits (B3)		Presence	of Reduced	l Iron (C4	.)	Stunte	ed or Stressed Plants (D1)
Algal Ma	t or Crust (B4)		Recent Iro	n Reductio	n in Tilleo	d Soils (Ce	6) Geom	orphic Position (D2)
Iron Dep	osits (B5)		Thin Muck	Surface (C	(7)		FAC-N	Neutral Test (D5)
Inundatio	on Visible on Aerial	Imagery (B7)	Gauge or	Nell Data (	D9)		_	
Sparsely	Vegetated Concav	e Surface (B8	3) Other (Exp	lain in Ren	narks)			
Field Observ	vations:							
Surface Wate	er Present?	esN	o 🗾 Depth (ind	ches):				
Water Table	Present?	es No	Depth (ind	ches):		_		
Saturation Pr	resent?	es No	Depth (ind	ches):		Wet	and Hydrology	Present?Yes No 🗸
(includes cap	illary fringe)							
Describe Rec	corded Data (stream	n gauge, mon	itoring well, aerial p	photos, pre	vious ins	pections),	if available:	

Remarks:

### No hydrology present

Project/Site: 1730 AEP North Delphos - Rockhill Deli	neation	Citv/Countv	: Lima/Al	llen	Sampling Date:	2021-12-09
Applicant/Owner: AEP		,		State: Ohio	Sampling Point:	4-G
Investigator(s): C. Kwolek, E. Wilson		Section. To	wnship. Ra	nge: S020 T003 R00	7	
Landform (hillslope, terrace, etc.); Ditch		,	Local relief	(concave, convex, none):	Concave	
Slope (%); 1 Lat: 40.765288		Long: 84.	087319	(,	Datum: WGS 8	34
Soil Map Unit Name: Blount silt loam, end moraine,	0 to 2 pe	ercent slo	pes (Ble1	IA1) NWI classific	ation: N/A	
Are climatic / hydrologic conditions on the site typical for this	time of ve	ar? Yes	No	(If no, explain in R	emarks )	
Are Vegetation Soil Conditions on the site typical of this	ignificantly	disturbed?	NO	"Normal Circumstances" r	present? Ves	No
Are Vegetation, Soil, or Hydrology s	aturally pro	blomatic?	(If pr	adad avalain any answa	resin Romarke )	NO
SUMMARY OF FINDINGS – Attach site map	showing	samplin	g point l	ocations, transects	, important fe	eatures, etc.
Hydrophytic Vegetation Present? Yes V	- 0					
Hydric Soil Present? Yes <u>V</u> No	00	ls th	ne Sampled	d Area		
Wetland Hydrology Present? Yes _ V	o 0	with	in a Wetla	nd? Yes 🗸	No	-
Remarks:						
Wetland sample point for PEM 4-G. Wetland st	retches a	along dep	ression a	adjacent to railroad t	racks. All three	e wetland
criteria present.						
VEGETATION – Use scientific names of plants.						
The Otention (Distributed 30 ft r	Absolute	Dominant	Indicator	Dominance Test work	sheet:	
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant S	pecies	
2					JI FAC. <u>-</u>	(A)
3				Total Number of Domin	ant ta: 2	(B)
4.					<u></u>	(0)
5.				Percent of Dominant Sp That Are OBL_EACW	pecies	(A/B)
45.0		= Total Co	ver		511AC. 100	(7,0)
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index wor	ksheet:	
1		·		Total % Cover of:	<u> </u>	ly by:
2				OBL species 40	x 1 = <u>43</u>	
3				FACW species 40	$x_2 = \frac{30}{45}$	
4				FAC species 15	x 3 = <u>43</u>	
b		= Total Cox		UPL species 0	$x_{5} = 0$	
Herb Stratum (Plot size: <u>5 ft r</u> )		- 10tal C0	vei	Column Totals: 100	(A) 170	) (B)
1. Carex lupulina	45	·	OBL		( , ,	(2)
2. Elymus virginicus	40	<u> </u>	FACW	Prevalence Index	= B/A = <u>1.7</u>	
3. Panicum virgatum	15		FAC	Hydrophytic Vegetatio	on Indicators:	
4				1 - Rapid Test for H	lydrophytic Veget	tation
5				2 - Dominance Tes	t is >50%	
6				3 - Prevalence Inde	ex is ≤3.0°	ide commentioner
7		·		data in Remarks	s or on a separate	e sheet)
8				Problematic Hydro	phytic Vegetation	<sup>1</sup> (Explain)
9						
Woody Vine Stratum (Plot size: 30 ft r )	100%	= Total Co	ver	<sup>1</sup> Indicators of hydric soi be present, unless distu	l and wetland hyd urbed or problema	Irology must atic.
1.				Hydrophytic		
2.				Vegetation		
		= Total Co	ver	Present? Yes	s No	
Remarks: (Include photo numbers here or on a separate s	sheet.)			1		

### \_ \_ .

SOIL								Sampling Point: 4-6
Profile Desc	ription: (Describe	to the dep	th needed to docur	nent the	indicator	or confirn	n the absence	of indicators.)
Depth	 Matrix		Redo	x Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
0 - 20	10YR 5/1	90	10YR 5/8	10	С	PL / M	Clay Loam	
-								
-								
-								
_								
		letion RM:	-Reduced Matrix M	 S=Maske	 d Sand Gr	aine	<sup>2</sup> Location	· PL=Pore Lipipg_M=Matrix
Hydric Soil	Indicators:			5-IVIASKE	u Sanu Gra	ams.	Indicators	for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy (	Sleved M	atrix (S4)		Coast	Prairie Redox (A16)
Histic Er	pipedon (A2)		Sandy F	Redox (S	5)		Dark S	Surface (S7)
Black Hi	stic (A3)		Stripped	d Matrix (	S6)		lron-M	anganese Masses (F12)
Hydroge	n Sulfide (A4)		Loamy	Mucky M	ineral (F1)		Very S	hallow Dark Surface (TF12)
Stratified	d Layers (A5)		Loamy	Gleyed N	latrix (F2)		Other (	(Explain in Remarks)
2 cm Mu	ick (A10)		<ul> <li>Deplete</li> </ul>	d Matrix	(F3)			
Depleted	d Below Dark Surfac	e (A11)	Redox [	Dark Surf	ace (F6)		31	
Thick Da	ark Surface (A12)		Deplete	d Dark S	ufface (F7)	)	Indicators	of hydrophytic vegetation and
5 cm Mu	icky Peat or Peat (S	3)		Jepressi	JIIS (FO)		unless	disturbed or problematic
Restrictive I	Laver (if observed)							
Type:								
Depth (inc	ches):						Hydric Soil	Present? Yes No
Remarks:								
i tomanto.								
Hydric s	soil present							
L								
HYDROLO	GY							
Wetland Hyd	drology Indicators:							
Primary Indic	cators (minimum of c	ne is requi	red; check all that ap	oply)			Seconda	ary Indicators (minimum of two required)
Surface	Water (A1)		Water-Sta	ined Lea	ves (B9)		Surf	ace Soil Cracks (B6)
High Wa	ter Table (A2)		Aquatic Fa	auna (B13	3)		💆 Drai	nage Patterns (B10)
Saturatio	on (A3)		True Aqua	tic Plants	s (B14)		Dry-	Season Water Table (C2)
Water M	arks (B1)		Hydrogen	Sulfide C	dor (C1)		Cray	yfish Burrows (C8)
Sedimer	nt Deposits (B2)		Oxidized F	Rhizosph	eres on Liv	ing Roots	(C3) Satu	ration Visible on Aerial Imagery (C9)
Drift Dep	posits (B3)		Presence	of Reduc	ed Iron (C4	4)	Stur	nted or Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Recent Iro	n Reduct	tion in Tille	d Soils (Ce	6) 🖌 Geo	morphic Position (D2)
Iron Dep	oosits (B5)		Thin Muck	Surface	(C7)		🖌 FAC	C-Neutral Test (D5)
Inundatio	on Visible on Aerial	magery (B	7) Gauge or	Well Data	a (D9)			
Sparsely	Vegetated Concave	e Surface (	B8) Other (Exp	plain in R	emarks)			
Field Obser	vations:		·· · · ·					
Surface Wate	er Present? Y	es	No Depth (in	ches):		-		
Water Table	Present? Y	es	No Depth (in	ches):				
Saturation P	resent? Y	es	No Depth (in	ches):		_   Wetl	and Hydrology	y Present? Yes 🔽 No
Describe Red	corded Data (stream	gauge, mo	onitoring well, aerial	photos, p	revious ins	pections),	if available:	

Remarks:

Hydrology present

Project/Site: 1730 AEP North Delphos - Rockhill Deli	neation	City/County	Lima/Al	len	Sampling Date: 2021-12-09		
Applicant/Owner: AEP				State: Ohio	Sampling Point: 4-G/H UPL		
Investigator(s): C. Kwolek, E. Wilson		Section To	wnshin Ra	nge: S020 T003 R003	7		
Landform (hillslope terrace etc.): Upland		_ decion, rownship, range					
Slope (%): 0 Lat: 40.765385		Long: 84.0	087405		Datum: WGS 84		
Soil Man Unit Name: Pewamo silty clay loam, 0 to 1	percent	slopes (P	mA)	N\\// classifier	ntion: N/A		
Are elimetic / hydrologic conditions on the site turical for this	time of us						
Are climatic / hydrologic conditions on the site typical for this	s time of ye	ar? res	NO	(if no, explain in Re			
Are Vegetation, Soil, or Hydrology s	ignificantly	disturbed?	Are	"Normal Circumstances" p	resent? Yes No		
Are Vegetation, Soil, or Hydrology n	aturally pro	oblematic?	(If ne	eeded, explain any answer	s in Remarks.)		
SUMMARY OF FINDINGS – Attach site map	showing	ı samplin	g point l	ocations, transects,	important features, etc.		
Hydrophytic Vegetation Present? Yes N	• <u> </u>						
Hydric Soil Present? Yes N	°	Is th	e Sampled	l Area			
Wetland Hydrology Present? Yes N	o_ <b>/</b>	with	in a Wetla	nd? Yes	No		
Remarks:							
Upland sample point for PEM 4-G and PFO 4-H	. Sample	e taken wi	thin uplai	nd area adjacent to s	tream and PEM. No		
wetland criteria present.							
VEGETATION – Use scientific names of plants.							
Tree Stratum (Plot size: 30 ft r )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test works	sheet:		
1.	70 00101		Oldido	Number of Dominant Sp That Are OBL_FACW_c	pecies or FAC: 1 (A)		
2.							
3				Total Number of Domina Species Across All Strat	ant ta: 1 (B)		
4							
5				That Are OBL, FACW, o	or FAC: 100 (A/B)		
15 ft r		= Total Cov	er				
Sapling/Shrub Stratum (Plot size: 1311)	<u>00</u>			Prevalence Index work	sheet:		
1. Difficer a maackii	20	·	FAC		<u>wuitiply by:</u>		
				EACW species 0	$x^{2} = 0$		
3				FAC species 20	$x_3 = \frac{60}{60}$		
5				FACU species 0	$x_{4} = 0$		
···	100%	= Total Cov	/er	UPL species 0	x 5 = 0		
Herb Stratum (Plot size: 5 ft r )				Column Totals: 20	(A) 60 (B)		
1					20		
2	·			Prevalence Index	= B/A = <u>3.0</u>		
3	·	·		Hydrophytic Vegetatio	n Indicators:		
4		·		1 - Rapid Test for H			
5				3 - Prevalence Inde	$x = 50.0^{1}$		
0		·		4 - Morphological A	daptations <sup>1</sup> (Provide supporting		
8				data in Remarks	or on a separate sheet)		
9				Problematic Hydrop	hytic Vegetation <sup>1</sup> (Explain)		
10.							
		= Total Cov	/er	<sup>1</sup> Indicators of hydric soil	and wetland hydrology must		
Woody Vine Stratum (Plot size: <u>30 ft r</u> )				be present, unless distu	rbed of problematic.		
1				Hydrophytic			
2				Vegetation	No 🗸		

No dominant hydrophytic vegetation present

SOIL								
Profile Desc	ription: (Describe	to the depth	needed to docur	nent the in	dicator of	or confirm	n the absence of	indicators.)
Depth	Matrix		Redo	x Features				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
0 - 20	10YR 3/3	100					Clay Loam	
-								
				· ·				
				· ·				
				· ·				
-								
-								
			educed Metrix M	- <u> </u>	Sand Cro		<sup>2</sup> Location:	I = Poro Lipipa M=Motrix
Hydric Soil	ndicators:		educed Matrix, M		Sanu Gra	ans.	Indicators for	Problematic Hydric Soils <sup>3</sup>
Histosol	(A 1)		Sandy	Cloved Mat	riv (SA)		Coast Pra	hiria Radov (A16)
Histic Fr	(AT) binedon (A2)		Sandy G	Redox (S5)	fix (34)		Coast Pla	
Black Hi	stic (A3)		Stripped	Matrix (Sf	5)		Iron-Man	anese Masses (F12)
Hvdroge	n Sulfide (A4)		Loamv	Mucky Mine	eral (F1)		Verv Shal	low Dark Surface (TF12)
Stratified	Layers (A5)		Loamy	Gleved Mat	trix (F2)		Other (Ex	plain in Remarks)
2 cm Mu	ck (A10)		Deplete	d Matrix (F	3)			,
Depleted	Below Dark Surfac	æ (A11)	Redox I	Dark Surfac	e (F6)			
Thick Da	ark Surface (A12)		Deplete	d Dark Surf	face (F7)		<sup>3</sup> Indicators of	hydrophytic vegetation and
Sandy Mucky Mineral (S1) Redox Depressions (F8)					s (F8)		wetland h	ydrology must be present,
5 cm Mu	cky Peat or Peat (S	3)					unless dis	sturbed or problematic.
Restrictive I	ayer (if observed)	:						
Туре:			_				Hudria Cail Dr.	acent? Yes No Y
Depth (ind	ches):						Hydric Soli Pro	esent? res No
Remarks:								
NI - 1								
No nyar	ic soll prese	ent						
	с <b>у</b>							
HIDROLO	GT							
Wetland Hyd	drology Indicators:							
Primary Indic	ators (minimum of o	one is required	<u>l; check all that ap</u>	oply)			Secondary	Indicators (minimum of two required)
Surface	Water (A1)		Water-Sta	ined Leave	s (B9)		Surface	e Soil Cracks (B6)
High Wa	ter Table (A2)		Aquatic Fa	auna (B13)			Drainag	ge Patterns (B10)
Saturatio	on (A3)		True Aqua	itic Plants (l	B14)		Dry-Se	ason Water Table (C2)
Water M	arks (B1)		Hydrogen	Sulfide Odd	or (C1)		Crayfis	h Burrows (C8)
Sedimer	t Deposits (B2)		Oxidized F	Rhizosphere	es on Livi	ng Roots	(C3) Saturat	ion Visible on Aerial Imagery (C9)
Drift Dep	oosits (B3)		Presence	of Reduced	l Iron (C4	)	Stunted	d or Stressed Plants (D1)
Algal Ma	t or Crust (B4)		Recent Iro	n Reductio	n in Tilleo	Soils (C	6) Geomo	orphic Position (D2)
Iron Dep	osits (B5)		Thin Muck	Surface (C	(7		FAC-N	eutral Test (D5)
Inundatio	on Visible on Aerial	Imagery (B7)	Gauge or	Well Data (	D9)			
Sparsely	Vegetated Concav	e Surface (B8	) Other (Exp	olain in Ren	narks)			
Field Obser	vations:							
Surface Wate	er Present? Y	/es No	Depth (in	ches):		_		
Water Table	Present? Y	′es No	Depth (in	ches):		_		
Saturation P	resent? Y	/esNo	Depth (in	ches):		Wet	land Hydrology P	resent? Yes No
(includes cap	oillary fringe)							
Describe Red	corded Data (stream	n gauge, moni	toring well, aerial	photos, pre	vious ins	pections),	if available:	

Remarks:

## No hydrology present

Project/Site: 1730 AEP North Delphos - Rockhill De	lineation	City/County:	Lima/Al	len	Sampling Date: 2021-12-09
Applicant/Owner: AEP				State: Ohio	Sampling Point: 4-H
Investigator(s): C. Kwolek, E. Wilson		Section, Tov	vnship, Ra	nge: S020 T003 R00	7
Landform (hillslope, terrace, etc.): Depression		L	ocal relief	(concave, convex, none):	Concave
Slope (%): <u>1</u> Lat: <u>40.765482</u>		Long: 84.0	87621		Datum: WGS 84
Soil Map Unit Name: Pewamo silty clay loam, 0 to	1 percent	slopes (P	mA)	NWI classific	ation: N/A
Are climatic / hydrologic conditions on the site typical for th	is time of ye	ear?Yes_	No	(If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology	significantly	disturbed?	Are "	Normal Circumstances" p	oresent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology	naturally pro	oblematic?	(lf ne	eded, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing	ı sampling	g point le	ocations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes N	lo				
Hydric Soil Present? Yes N	No	Is the	e Sampled	Area	
Wetland Hydrology Present? Yes _ Yes	lo	withi	n a Wetlar	nd? Yes	No
Remarks:					
Wetland sample point for PFO 4-H. Wetla	nd strete	ches with	in depre	ession. All three we	etland criteria present.
VEGETATION – Use scientific names of plants					
Tree Stratum (Plot size: 30 ft r )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test work	sheet:
1. Populus deltoides	40	<u> </u>	FAC	Number of Dominant Sp That Are OBL, FACW, of	pecies pr FAC: 4 (A)
2				Tatal Number of Dania	
3				Species Across All Stra	ta: <u>5</u> (B)
4				Percent of Dominant Sr	
5				That Are OBL, FACW, o	or FAC: <u>80</u> (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft r )	40%	= Total Cov	er	Prevalence Index wor	ksheet:
1. Populus deltoides	30	V	FAC	Total % Cover of:	Multiply by:
2. Cornus alba	15	~	FACW	OBL species 0	x 1 = 0
3				FACW species 15	x 2 = <u>30</u>
4				FAC species 115	x 3 = <u>345</u>
5				FACU species 55	× 4 = <u>220</u>
Harb Stratum (Plat size: 5 ft r )	45%	= Total Cov	er	UPL species 0	x 5 = 0
Solidago rugosa	45	~	FAC	Column Totals: 185	(A) <u>595</u> (B)
2. Festuca rubra	40	· ·	FACU	Prevalence Index	= B/A = <u>3.2</u>
3. Rubus allegheniensis	15		FACU	Hydrophytic Vegetatio	on Indicators:
4				1 - Rapid Test for H	lydrophytic Vegetation
5				2 - Dominance Tes	t is >50%
6				3 - Prevalence Inde	ex is ≤3.0 <sup>1</sup>
7				4 - Morphological A	Adaptations' (Provide supporting
8				Problematic Hydror	phytic Vegetation <sup>1</sup> (Explain)
9					
10	100%			<sup>1</sup> Indicators of hydric soi	and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )		10tai 00v	ei	be present, unless distu	irbed or problematic.
1				Hydrophytic	
2				Vegetation Present2	
		= Total Cov	er	Tesent: Tes	· · · · · · · · · · · · · · · · · · ·
Remarks: (Include photo numbers here or on a separate	sheet.)				

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SOIL								Sampling Point: <u>4-n</u>	
Profile Desc	ription: (Describe	to the dep	oth needed to docur	nent the	indicator	or confirn	n the absence	of indicators.)	
Depth	Matrix		Redo	x Feature	es				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0 - 20	10YR 5/1	90	10YR 5/8	10	С	PL / M	Clay Loam		
_									
-									
-									
_									
-				·					
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, MS	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.	
Hydric Soil I	ndicators:						Indicators	for Problematic Hydric Soils":	
Histosol	(A1)		Sandy (	Gleyed M	atrix (S4)		Coast I	Prairie Redox (A16)	
Histic Ep	pipedon (A2)		Sandy F	Redox (S	5)		Dark S	urface (S7)	
Black Hi	stic (A3)		Stripped	1 Matrix (	S6)		Iron-Ma	anganese Masses (F12)	
Hydroge Stratified			Loamy	Gleved M	latrix (F2)		Very S	Explain in Remarks)	
2 cm Mu	ck (A10)		✓ Deplete	d Matrix	(F3)				
Depleted	Below Dark Surfac	e (A11)	Redox [	Dark Surf	ace (F6)				
Thick Da	ark Surface (A12)	. ,	Deplete	d Dark S	urface (F7)	)	<sup>3</sup> Indicators	of hydrophytic vegetation and	
Sandy M	lucky Mineral (S1)		Redox I	Depressio	ons (F8)		wetland hydrology must be present,		
5 cm Mu	cky Peat or Peat (S	3)					unless	disturbed or problematic.	
Restrictive L	ayer (if observed)								
Туре:							Hudria Sail	Brocont? You No	
Depth (inc	ches):						Hydric 30i		
Remarks:									
Hydric	soil present								
	boli present								
HYDROLO	GY								
Wetland Hyd	drology Indicators:								
Primary Indic	ators (minimum of c	one is requ	ired; check all that ap	oply)			<u>Seconda</u>	ry Indicators (minimum of two required)	
Surface	Water (A1)		Water-Sta	ined Lea	ves (B9)		Surfa	ace Soil Cracks (B6)	
High Wa	ter Table (A2)		Aquatic Fa	auna (B13	3)		🖌 Draii	nage Patterns (B10)	
Saturatio	on (A3)		True Aqua	tic Plants	s (B14)		Dry-	Season Water Table (C2)	
Water M	arks (B1)		Hydrogen	Sulfide C	dor (C1)		Cray	fish Burrows (C8)	
Sedimer	nt Deposits (B2)		Oxidized F	Rhizosph	eres on Liv	ing Roots	(C3) Satu	ration Visible on Aerial Imagery (C9)	
Drift Dep	oosits (B3)		Presence	of Reduc	ed Iron (C4	4)	Stun	ted or Stressed Plants (D1)	
Algal Ma	t or Crust (B4)		Recent Iro	n Reduct	tion in Tille	d Soils (Ce	6) 🖌 Geo	morphic Position (D2)	
Iron Dep	osits (B5)		Thin Muck	Surface	(C7)		FAC	-Neutral Test (D5)	
Inundatio	on Visible on Aerial	Imagery (B	(7) Gauge or	Well Data	a (D9)				
Sparsely	Vegetated Concave	e Surface (	(B8) Other (Exp	olain in R	emarks)				
Field Observ	vations:								
Surface Wate	er Present? Y	'es	No Depth (in	ches):		_			
Water Table	Present? Y	'es	No Depth (in	ches):		_			
Saturation Pr	resent? Y	'es	No Depth (in	ches):		_ Wetl	and Hydrology	Present? Yes 🖌 No	
(includes cap	oillary fringe)	-		abates -	naviaus las	mantiana'	if available:		
Describe Red	corded Data (stream	i gauge, m	onitoring well, aerial	priotos, p	revious ins	spections),	ii available:		

Remarks:

Hydrology present

Project/Site: 1730 AEP North Delp	hos - Rockhill Delinea	tion City/County: Lima/A	Allen	Sampling Date: 2021-12-09					
Applicant/Owner: AEP			State: Ohio	Sampling Point: 4-I					
Investigator(s): C. Kwolek, E. Wils	son	Section, Township, R	ange: S020 T003 R00	07					
Landform (hillslope, terrace, etc.): De	pression	Local relie	ef (concave, convex, none)	<u>Concave</u>					
Slope (%): 1 Lat: 40.76	3439	Long: -84.089834	4	Datum: WGS 84					
Soil Map Unit Name: Blount silt loam, end moraine, 0 to 2 percent slopes (Ble1A1) NWI classification: N/A									
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)									
Are Vegetation, Soil, o	r Hydrology signif	icantly disturbed? Are	e "Normal Circumstances"	present? Yes 🔽 No					
Are Vegetation, Soil, o	r Hydrology natur	ally problematic? (If r	needed, explain any answ	ers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.									
Hydrophytic Vegetation Present?	Yes 🖌 No 🔄								
Hydric Soil Present?	Yes 🖌 No 🗌	Is the Sample	ed Area	,					
Wetland Hydrology Present?	Yes 🖌 No 🔤	within a Wetla	and? Yes 📕	No					

Remarks:

Wetland sample point for PFO 4-I. Wetland present within forested depression off of road. All three wetland criteria present.

**VEGETATION** – Use scientific names of plants.

20 (i	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1. Populus deltoides	90	<u> </u>	FAC	That Are OBL, FACW, or FAC: 4 (A)
2.				
2				Total Number of Dominant
S				Species Across All Strata: <u>4</u> (B)
4	·			Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
	90%	= Total Cov	/er	
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1. Cornus alba	25	<u> </u>	FACW	Total % Cover of: Multiply by:
2				OBL species 20 x 1 = 20
2				EACW species $85$ x 2 = $170$
3				$\frac{1}{2} = \frac{1}{2} = \frac{1}$
4	·			FAC species $\underline{90}$ $x_3 = \underline{270}$
5				FACU species 0 x 4 = 0
	25%	= Total Cov	ver	UPL species 0 x 5 = 0
Herb Stratum (Plot size: 5 ft r )				Column Totals: 195 (A) 460 (B)
1. Symphyotrichum praealtum	60	~	FACW	
2. Typha angustifolia	20	~	OBL	Prevalence Index = B/A = 2.4
3.				Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5.				✓ 2 - Dominance Test is >50%
6.				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
9				data in Remarks or on a separate sheet)
0	·			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5				
10				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
30 ft r	80%	= Total Cov	ver	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: 30 Tt 1 )				
1				Hydrophytic
2				Vegetation
		= Total Cov	ver	Present? Yes No
Remarks: (Include photo numbers here or on a separate s	sheet.)			
Hydrophytic vegetation present				

SOIL								Sampling Point: 4-1
Profile Desc	ription: (Describe	e to the de	oth needed to doc	ument the	indicator	or confirm	n the absence	of indicators.)
Depth	 Matrix		Red	lox Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 20	10YR 4/1	90	10YR 6/8	10	С	PL / M	Clay Loam	
-								
———								
-								
-								
-								
<u> </u>								
<sup>1</sup> Type: C=Co	oncentration, D=De	pletion, RM	I=Reduced Matrix, I	//S=Maske	d Sand Gr	ains.	<sup>2</sup> Location	: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicators	for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy	Gleyed M	latrix (S4)		Coast	Prairie Redox (A16)
Histic Ep	pipedon (A2)		Sandy	Redox (S	5)		Dark S	Surface (S7)
Black Hi	stic (A3)		Stripp	ed Matrix (	S6)		Iron-M	anganese Masses (F12)
Hydroge	n Sulfide (A4)		Loam	/ Mucky M	ineral (F1)		Very S	Shallow Dark Surface (TF12)
Stratified	Layers (A5)		Loam	Gleyed N	latrix (F2)		Other	(Explain in Remarks)
2 cm Mu	ICK (A1U) I Rolow Dork Surfo	00 (411)		Cork Surf	(F3) (F6)			
Depieted	ark Surface (A12)	ce (ATT)	Redo	ted Dark Sun	ace (FO) Jurface (F7)	<b>`</b>	<sup>3</sup> Indicators	s of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Redox Depressions (F8) wetland hydrology must be present					d hydrology must be present			
5 cm Mu	icky Peat or Peat (	S3)		Coprocon			unless	disturbed or problematic.
Restrictive L	_ayer (if observed	):						
Type:								,
Depth (inc	ches):						Hydric Soil	Present? Yes No
Bomarka:								
Remarks.								
Hydric s	soil present							
	•							
HYDROLO	GY							
Wetland Hyd	drology Indicators	:						
Primary Indic	ators (minimum of	one is requ	ired: check all that	(vlqqe			Seconda	ary Indicators (minimum of two required)
Surface	Water (A1)		✓ Water-S	ained Lea	ves (B9)		Sur	face Soil Cracks (B6)
High Wa	ter Table (A2)		Aquatic	Fauna (B1)	3)			inage Patterns (B10)
Saturatio	(A3)			latic Plants	s (B14)		Drv	-Season Water Table (C2)
Water M	arks (B1)		Hvdroge	n Sulfide (	dor(C1)		Cra	vfish Burrows (C8)
Sedimer	at Deposits (B2)			Rhizosnh	eres on Liv	ing Roots	(C3) Sati	uration Visible on Aerial Imagery (C9)
Drift Der	nosits (B3)		Presence	e of Reduc	ed Iron (C4	1)	(00) Out	nted or Stressed Plants (D1)
Algal Ma	of Crust (B4)		Recent I	ron Reduct	tion in Tille	t) d Soils (Cl		morphic Position (D2)
	nosite (B5)		Thin Mu	rk Surface	(07)			-Neutral Test (D5)
	on Visible on Aerial	Imagen/ (F		r Well Date			<u> </u>	
Spareely	Venetated Conca	ve Surface	(B8) Other (E	volain in P	emarke)			
Operation	vegetated conca	ve Sunace			emarks			
Surface Wet	Procest?	Vaa		nohoo);				
Surface wate	er Present?	res	No Depth (	inches):		-		
vvater Table	Present?	res	No Depth (	ncnes):		-		
Saturation Pr	resent?	Yes	No _ Depth (	nches):		_   Wetl	and Hydrolog	y Present? Yes No
Describe Red	corded Data (stream	m gauge, m	onitoring well, aeria	l photos, p	revious ins	pections),	if available:	

Remarks:

Hydrology present

Project/Site: 1730 AEP North Delphos - Rockhill De	lineation City/C	County: Lima/All	en	Sampling Date: 2021-12-09				
Applicant/Owner: AEP			State: Ohio	Sampling Point: 4-I UPL				
Investigator(s): C. Kwolek, E. Wilson	Sectio	Section, Township, Range: S020 T003 R007						
Landform (hillslope, terrace, etc.): Upland		Local relief (	(concave, convex, none):	Linear				
Slope (%): 0 Lat: 40.763373	Long:	-84.089861		Datum: WGS 84				
Soil Map Unit Name: Blount silt loam, end moraine	, 0 to 2 percer	nt slopes (Ble1	A1) NWI classific	ation: N/A				
Are climatic / hydrologic conditions on the site typical for th	is time of year? Y	′es No	(If no, explain in R	emarks.)				
Are Vegetation, Soil, or Hydrology	significantly distur	bed? Are "I	Normal Circumstances" p	present? Yes No				
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (If ne	eded, explain any answe	rs in Remarks.)				
SUMMARY OF FINDINGS – Attach site map	showing san	npling point lo	ocations, transects	, important features, etc.				
Hydrophytic Vegetation Present? Yes I	No							
Hydric Soil Present? Yes I	No	Is the Sampled	Area					
Wetland Hydrology Present? Yes N	No	within a Wetlan	id? Yes	No				
Remarks:								
Upland sample point for PFO 4-I. Sample take	n within upland	d grassy area a	adjacent to road. No	wetland criteria present.				
VEGETATION – Use scientific names of plants	<b>.</b>							
	Absolute Don	ninant Indicator	Dominance Test work	sheet:				
Tree Stratum (Plot size: <u>30 ft r</u> )	<u>% Cover</u> Spe	cies? <u>Status</u>	Number of Dominant S	pecies				
1			That Are OBL, FACW,	or FAC: 0 (A)				
2			Total Number of Domin	ant				
3			Species Across All Stra	ta: <u>1</u> (B)				
4			Percent of Dominant Sp	pecies				
5	= Tot	al Cover	That Are OBL, FACW,	or FAC: <u>0</u> (A/B)				
Sapling/Shrub Stratum (Plot size: 15 ft r )			Prevalence Index wor	ksheet:				
1			Total % Cover of:	Multiply by:				
2			OBL species 0	$x_1 = \frac{0}{2}$				
3			FACW species 0	$x 2 = \frac{0}{2}$				
4			FAC species 0	$x_3 = 0$				
5			FACU species 100	$x_4 = \frac{400}{0}$				
Herb Stratum (Plot size: 5 ft r )	= Tot	al Cover	Column Totals: 100	$x_{5} = \frac{0}{400}$ (B)				
1. Festuca rubra	95	FACU						
2. Plantago lanceolata	5	FACU	Prevalence Index	= B/A = <u>4.0</u>				
3			Hydrophytic Vegetation	on Indicators:				
4			1 - Rapid Test for H	Hydrophytic Vegetation				
5			2 - Dominance Tes	ut is >50%				
6			3 - Prevalence Inde	ex is ≤3.0'				
7			data in Remark	Adaptations' (Provide supporting sor on a separate sheet)				
8			Problematic Hydro	phytic Vegetation <sup>1</sup> (Explain)				
9								
10	- <u> </u>		<sup>1</sup> Indicators of hydric soi	I and wetland hydrology must				
Woody Vine Stratum (Plot size: 30 ft r )	= 100	ai Cover	be present, unless distu	urbed or problematic.				
1			Hydrophytic					
2			Vegetation					
	= Tot	al Cover	Present? Ye	s NO				
Remarks: (Include photo numbers here or on a separate	sheet.)							
No dominant hydrophytic vegetati	on present							
	-							
L								

SUL							
Profile Desc	cription: (Describe	to the dept	h needed to docum	nent the indicator or	confirm	the absence of i	indicators.)
Depth	Matrix		Redo	x Features			-
(inches)	Color (moist)	%	Color (moist)	% Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 20	10YR 3/3	100				Clay Loam	
-							
				·			
-							
-							
_							
		'					
-		·		·			
<sup>1</sup> Type: C=C	oncentration, D=Dep	pletion, RM=	Reduced Matrix, MS	S=Masked Sand Grain	IS.	<sup>2</sup> Location: P	L=Pore Lining, M=Matrix.
Hydric Soil	Indicators:					Indicators for	Problematic Hydric Soils':
Histosol	(A1)		Sandy C	Gleyed Matrix (S4)		Coast Pra	irie Redox (A16)
Histic E	pipedon (A2)		Sandy F	Redox (S5)		Dark Surfa	ace (S7)
Black H	istic (A3)		Stripped	Matrix (S6)		Iron-Mang	anese Masses (F12)
Hydroge	en Sulfide (A4)		Loamy I	Mucky Mineral (F1)		Very Shall	ow Dark Surface (TF12)
Stratifie	d Layers (A5)		Loamy (	d Matrix (F2)		Other (Exp	plain in Remarks)
2 cm ivit	d Below Dark Surfac	o (A11)	Depiete	a Matrix (F3)			
Depieter	ark Surface (A12)	ле (АТТ)	Redux L	d Dark Surface (F0)		<sup>3</sup> Indicators of	hydrophytic vegetation and
Sandy M	Aucky Mineral (S1)		Bedox [	Depressions (F8)		wetland hy	drology must be present.
5 cm Mi	ucky Peat or Peat (S	3)				unless dis	turbed or problematic.
Restrictive	Layer (if observed)	:					•
Type:							
Depth (in	ches):					Hydric Soil Pre	esent? Yes No
Remarke:							
r ternarito.							
No hyd	ric soil prese	ent					
IYDROLO	GY						
Wetland Hy	drology Indicators	:					
Primary Indi	cators (minimum of	one is requir	ed: check all that ap	ply)		Secondary I	ndicators (minimum of two required)
Surface	Water (A1)		Water-Stai	ned Leaves (B9)		Surface	Soil Cracks (B6)
— Hiah Wa	ater Table (A2)		Aquatic Fa	una (B13)		Drainad	e Patterns (B10)
Saturati	on (A3)		True Aqua	tic Plants (B14)		Drv-Sea	ason Water Table (C2)
Water M	larks (B1)		Hydrogen	Sulfide Odor (C1)		Cravfish	Burrows (C8)
Sedime	nt Deposits (B2)		Oxidized F	hizospheres on Living	n Roots ((	(3) Saturati	on Visible on Aerial Imagery (C9)
Drift De	posits (B3)		Presence	of Reduced Iron (C4)	,	Stunted	or Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Recent Iro	n Reduction in Tilled S	Soils (C6)	Geomo	rphic Position (D2)
Iron Der	posits ( $B5$ )		Thin Muck	Surface (C7)	50113 (00)	EAC-Ne	eutral Test (D5)
Inundati	on Visible on Aerial	Imagery (B7	Gauge or V	Vell Data (D9)			
Sparsel	v Vegetated Concav	e Surface (F	(Fyr Cauge of 38) Other (Fyr	lain in Remarks)			
Field Obser	vations.			nam in iveniarioj	1		
Surface Wet	or Present?		Donth (in	chec):			
Water Table		/oc N	lo V Depth (inc	shos):			
vvaler rable	FIESEIIL?	es r	NU Depth (Inc	ules).	1		

\_ No 🗹 Depth (inches): \_\_\_

(includes capillary fringe) [Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation Present?

### No hydrology present

Yes \_\_\_\_

Wetland Hydrology Present? Yes \_\_\_\_

~

\_\_\_ No \_\_

Project/Site: 1732 Lima-Kalida 69kV Retirement	City	City/County: Gomer/Allen Sampling Date: 2021-12					
Applicant/Owner: AEP				State: Ohio	Sampling Point:	5-A	
Investigator(s): C. Kwolek, E. Wilson	Sec	Section, Township, Range: S028 T002 R006					
Landform (hillslope, terrace, etc.): Depression		Lo	ocal relief (	concave, convex, none	Concave		
Slope (%): 1 Lat: 40.835409	Lon	<sub>g:</sub> -84.1	175686		Datum: WGS	34	
Soil Map Unit Name: Pewamo silty clay loam, 0 to 1 per	cent slo	pes (Pr	nA)	NWI classifi	cation: N/A		
Are climatic / hydrologic conditions on the site typical for this time	of year?	Yes 🗸	No	(If no, explain in I	Remarks.)		
Are Vegetation 🗸 , Soil 🖌 , or Hydrology 🖌 signific	cantly dist	urbed?	Are "I	Normal Circumstances"	present? Yes	No	
Are Vegetation Soil or Hydrology natural	llv probler	natic?	(If ne	eded. explain any answ	ers in Remarks.)		
SUMMARY OF FINDINGS – Attach site map show	wing sa	mpling	point lo	ocations, transect	s, important f	eatures, etc.	
Hydrophytic Vegetation Present? Yes V							
Hydric Soil Present? Yes No		Is the	Sampled	Area			
Wetland Hydrology Present? Yes No		withir	n a Wetlan	d? Yes	No	_	
Remarks: Wetland sample point for PEM 5-A. PEM stretches a	alongsic	de highv	way in di	tch. All three wetla	nd criteria pre	sent.	
VEGETATION – Use scientific names of plants.							
Abso Tree Stratum (Plot size: 30 ft r ) % C	olute Do Cover Sr	ominant l becies?	ndicator Status	Dominance Test wor	ksheet:		
1				That Are OBL, FACW,	or FAC: 1	(A)	
2				Total Number of Domi	nont		
3				Species Across All Str	ata: <u>1</u>	(B)	
4				Percent of Dominant 6	and a second		
5				That Are OBL, FACW,	or FAC: <u>100</u>	(A/B)	
Continue (Charles 15 ft r	= T	otal Cove	er j	Provalance Index we	rkabaat:		
Sapling/Shrub Stratum (Plot size: 1911)				Total % Cover of:	rksneet:	alu bur	
1				OBL species 100	<u></u>	0	
2				FACW species 0	$x^{2} = 0$		
3				FAC species 0	$x_3 = 0$		
5				FACU species 0	x 4 = 0		
···	—— — = т	otal Cove		UPL species 0	$x_{5} = 0$		
Herb Stratum (Plot size: 5 ft r )				Column Totals: 100	(A) 10	0 (B)	
1. Typha angustifolia 100	<u> </u>	<u> </u>	OBL			(=/	
2				Prevalence Inde	x = B/A = 1.0		
3				Hydrophytic Vegetat	ion Indicators:		
4				✓ 1 - Rapid Test for	Hydrophytic Vege	tation	
5				2 - Dominance Te	st is >50%		
6				3 - Prevalence Inc	lex is ≤3.0'		
7				4 - Morphological data in Remarl	Adaptations' (Pro	vide supporting e sheet)	
8				Problematic Hydro	ophytic Vegetation	<sup>1</sup> (Explain)	
9				_ ,		()	
	0% = T	otal Cove	er l	<sup>1</sup> Indicators of hydric so	bil and wetland hyd	drology must	
Woody Vine Stratum (Plot size: 30 ft r )				are process, unless the	in sea er problem		
				Hydrophytic			
2				vegetation Present? Ye	es 🖌 No		
	= T	otal Cove	er				
Remarks: (include photo numbers here or on a separate sheet.	.)						
Hydrophytic vegetation present							

SOIL								Sampling Point: <u>5-A</u>
Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	 Matrix		Redo	x Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
0 - 20	10YR 4/1	95	10YR 4/6	5	С	PL	Clay Loam	
-								
-								
-								
<sup>1</sup> Type: C=Co	oncentration, D=Dep	pletion, RM	=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location	: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators	for Problematic Hydric Soils":
Histosol	(A1)		Sandy (	Gleyed M	atrix (S4)		Coast	Prairie Redox (A16)
Histic Ep	bipedon (A2)		Sandy F	Redox (S	5)		Dark S	urface (S7)
Black Hi	stic (A3)		Stripped	d Matrix (	S6)		Iron-Ma	anganese Masses (F12)
Stratified			Loamy	Gleved M	latrix (E2)		Very S	(Explain in Remarks)
2 cm Mu	ick (A10)			d Matrix	(F3)			
Depleted	d Below Dark Surfac	e (A11)	Redox I	Dark Surf	ace (F6)			
Thick Dark Surface (A12) Depleted Dark Surface (F7)						)	<sup>3</sup> Indicators	of hydrophytic vegetation and
Sandy M	Redox I	Depressio	ons (F8)		wetland	d hydrology must be present,		
5 cm Mu	icky Peat or Peat (S	3)					unless	disturbed or problematic.
Restrictive I	Layer (if observed)	:						
Туре:								
Depth (ind	ches):						Hydric Soil	Present? Yes No
Remarks:								
Hydric s	soil present							
HYDROLOGY								
Wetland Hy	drology Indicators:							
Primary Indic	cators (minimum of o	one is requi	red; check all that ap	oply)			Seconda	ry Indicators (minimum of two required)
🖌 Surface	Water (A1)		Water-Sta	ined Leav	<b>/es (</b> B9)		Surf	ace Soil Cracks (B6)
🖌 🗹 High Wa	ater Table (A2)		Aquatic Fa	auna (B13	3)		Drai	nage Patterns (B10)
🖌 🗹 Saturatio	on (A3)		True Aqua	tic Plants	s (B14)		Dry-	Season Water Table (C2)
Water M	larks (B1)		Hydrogen	Sulfide C	dor (C1)		Cray	/fish Burrows (C8)
Sedimer	nt Deposits (B2)		Oxidized F	Rhizosphe	eres on Liv	ing Roots	(C3) 🗹 Satu	ration Visible on Aerial Imagery (C9)
Drift Dep	oosits (B3)		Presence	of Reduc	ed Iron (C4	4)	Stur	ted or Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Recent Irc	n Reduct	ion in Tille	d Soils (Ce	6) 🖌 Geo	morphic Position (D2)
Iron Dep	oosits (B5)		Thin Muck	Surface	(C7)		🖌 FAC	-Neutral Test (D5)
Inundatio	on Visible on Aerial	Imagery (B	7) Gauge or	Well Data	a (D9)			
Sparsely	Vegetated Concav	e Surface (	B8) Other (Exp	olain in R	emarks)			
Field Obser	vations:							
Surface Wate	er Present? Y	′es 🖌	No Depth (in	ches): 1		_		
Water Table	Present? Y	′es 🖌	No Depth (in	ches): 0				
Saturation P	resent? Y	′es 🗸	No Depth (in	ches): 0		Wet	and Hydrology	v Present? Yes 🗸 No
(includes cap	oillary fringe)		=================================					
Describe Re	corded Data (stream	n gauge, m	onitoring well, aerial	photos, p	revious ins	pections),	if available:	

Remarks:

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Applicant/Owner: <u>AEP</u> Investigator(s): <u>C. Kwolek, E. Wils</u> Landform (hillslope, terrace, etc.): <u>Up</u> Subregion (LRR or MLRA): <u>M</u> Soil Map Unit Name: <u>PmA</u>	on land, Hillslope Lo	Stat	a Ohio Complian Dainty 5-A LIPI					
Investigator(s): <u>C. Kwolek, E. Wils</u> Landform (hillslope, terrace, etc.): <u>Up</u> Subregion (LRR or MLRA): <u>M</u> Soil Map Unit Name: <u>PmA</u>	on land, Hillslope <sub>Lo</sub>		e: <u>Sampling Point:</u> Sampling Point:					
Landform (hillslope, terrace, etc.): <u>Up</u> Subregion (LRR or MLRA): <u>M</u> Soil Map Unit Name: <u>PmA</u>	land, Hillslope	Section, Township, Range: S028 T	002 R006					
Subregion (LRR or MLRA): <u>M</u> Soil Map Unit Name: <u>PmA</u>		cal relief (concave, convex, none):	inear Slope (%): 0					
Soil Map Unit Name: PmA	Lat: 40.835361	Long: -84.1756	572 Datum: WGS 84					
		2019	IWI classification: N/A					
Are climatic / bydrologic conditions on	the site typical for this time of w	par2 Ves V No (If no	evolain in Remarks )					
Are Vegetation Soil of	ar Hydrology significantly	disturbed? Are "Normal Circuit	mstances" present? Ves 🖌 No					
Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)								
SUMMARY OF FINDINGS –	Attach site map showing	y sampling point locations, t	ransects, important features, etc.					
Hydrophytic Vegetation Present?	Yes No _	Is the Sampled Area						
Hydric Soil Present?	Yes No	within a Wetland?	Yes No					
Wetland Hydrology Present?	Yes No	If yes, optional Wetland Site II	D:					
Remarks: (Explain alternative proce	dures here or in a separate repo	ort.)						
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3)	is required; check all that apply) Water-Stained Aquatic Fauna Marl Deposits	Second          S           Leaves (B9)        D           (B13)        M           (B15)        D	ndary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2)					
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Ima Sparsely Vegetated Concave St	is required; check all that apply) Water-Stained Aquatic Fauna Marl Deposits Hydrogen Sulfi Oxidized Rhizo Presence of Re Recent Iron Re Thin Muck Sur gery (B7) Other (Explain urface (B8)	Secon           Leaves (B9)         D           (B13)         M           (B15)         D           ide Odor (C1)         C           ospheres on Living Roots (C3)         S           educed Iron (C4)         S           eduction in Tilled Soils (C6)         G           face (C7)         S           in Remarks)         M	ndary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Vis ble on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Seomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) GC-Neutral Test (D5)					
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one 	is required; check all that apply) Water-Stained Aquatic Fauna Marl Deposits Hydrogen Sulfi Oxidized Rhizo Presence of Re Recent Iron Re Thin Muck Sur gery (B7) Other (Explain Iface (B8)	Second           Leaves (B9)         D           (B13)         M           (B15)         D           ide Odor (C1)         C           pspheres on Living Roots (C3)         S           educed Iron (C4)         S           eduction in Tilled Soils (C6)         S           face (C7)         S           in Remarks)         K	ndary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Vis ble on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Seomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) GC-Neutral Test (D5)					

### **VEGETATION** – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft r )	Absolute Dominant % Cover Species?	Indicator Status	Dominance Test worksheet:
1			Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
2.			
3			Species Across All Strata: <u>1</u> (B)
4.			Percent of Dominant Species
5.			That Are OBL, FACW, or FAC: $0$ (A/B)
6.			Providence by decouved a based
7			Prevalence Index worksheet:
	- Total Cov	/er	$\begin{array}{c c} \hline 101a1 \% Cover 01. \\ \hline 001 \text{ species} & 0 \\ \hline x1 = 0 \\ \hline \end{array}$
Sapling/Shruh Stratum (Plot size: 15 ft r )			FACW species $0$ $x_2 = 0$
			FAC species $0$ $x_3 = 0$
1			FACU species 100 x 4 = 400
2			UPL species $0$ $x = 0$
3			Column Totals: 100 (A) 400 (B)
4			Prevalence Index = $B/A = 4.0$
6.			Hydrophytic Vegetation Indicators:
7			1 - Rapid Test for Hydrophytic Vegetation
/			2 - Dominance Test is >50%
black of the second sec		/er	3 - Prevalence Index is ≤3.0 <sup>1</sup>
Herb Stratum (Plot size: 3101 )	100		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
	100	FACU	data in Remarks or on a separate sheet)
2			
3			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4			be present, unless disturbed or problematic.
5			Definitions of Vegetation Strata:
6			Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7			at breast height (DBH), regardless of height.
8			Sapling/shrub – Woody plants less than 3 in. DBH
9			and greater than or equal to 3.28 ft (1 m) tall.
10			Herb – All herbaceous (non-woody) plants, regardless
11			of size, and woody plants less than 3.28 ft tall.
12			Woody vines – All woody vines greater than 3.28 ft in beight
	<u>100%</u> = Total Cov	/er	noight.
Woody Vine Stratum (Plot size: 30 ft r )			
1			
2			
3	<u> </u>		Hydrophytic
4			Vegetation Present? Yes No V
	= Total Cov	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)		
No hydrophytic vegetation present			

Profile Desc	ription: (Describe	to the depth	needed to docu	nent the i	ndicator	or confirm	n the absence	of indicator	s.)	
Depth	Matrix		Redo	x Feature	s	0				
<u>(inches)</u>	Color (moist)		Color (moist)	%	Type'	Loc <sup>2</sup>	Texture		Remarks	
0 - 20	10YR 3/3	100		<u> </u>			Clay Loam			
-										
										<u>.</u>
-										
-										
										<u> </u>
_				<u> </u>						
-										
										<u>.</u>
-										
-										
_										
-										
17 0.0				- <u> </u>			2			
	oncentration, D=Dep	pletion, RM=R	educed Matrix, M	S=Masked	Sand Gra	ains.		PL=Pore Li	ining, M=Ma atic Hydric	trix.
			Daharahaa Dala							
Histosol	(A1)	_	_ Polyvalue Belo	w Surrace	(58) ( <b>LR</b>	<b>К</b> ,		IUCK (ATU) (L Prairia Raday	.KK K, L, MIL V (A16) (I DE	_RA 149B)
Black Hi	stic (A3)		Thin Dark Surf	) ace (S9) ( <b>I</b>		RA 1498	$\sim 5 \text{ cm M}$	lucky Peat of	r Peat (S3) (I	
Hvdroge	n Sulfide (A4)	—	Loamv Muckv I	Mineral (F	) (LRR K	. L)	Dark S	urface (S7) (	LRR K. L)	Litti it, L, it)
Stratified	d Layers (A5)	_	Loamy Gleyed	Matrix (F2	)	, _,	Polyval	ue Below Su	urface (S8) (I	LRR K, L)
Depleted	d Below Dark Surfac	e (A11)	Depleted Matrix	(F3)	,		Thin Da	ark Surface (	S9) (LRR K,	, L)
Thick Dark Surface (A12) Redox Dark Surface (F6)							Iron-Ma	anganese Ma	asses (F12)	(LRR K, L, R)
Sandy M	lucky Mineral (S1)	_	Depleted Dark	Surface (F	7)		Piedmo	ont Floodplai	n Soils (F19)	(MLRA 149B)
Sandy G	Bleyed Matrix (S4)	_	_ Redox Depress	ions (F8)			Mesic S	Spodic (TA6)	(MLRA 144	A, 145, 149B)
Sandy R	ledox (S5)						Red Pa	arent Materia	l (F21)	
Stripped	Matrix (S6)						Very SI	hallow Dark	Surface (TF1	12)
Dark Su	rface (S7) (LRR R, I	<b>MLRA 149B</b> )					Other (	Explain in Re	emarks)	
<sup>3</sup> Indiactors of	f hydrophytic ycacto	tion and wath	and hydrology mu	the proof	nt unloc	diaturbad	or problematic			
Postrictivo I	aver (if observed)	tion and wetta	and hydrology mus	st be prese	ent, uniess	saisturbea	I of problematic	•		
Turner	Layer (il observeu).									
Type:										
Depth (ind	ches):						Hydric Soil	Present?	Yes	No <u> </u>
Remarks:										
No bydri	ic soil prosor	<b>^</b> +								
NO Hyun	ic son preser	it i								

Project/Site: 1732 Lima-Kalida 69kV Retirement	City/County: Gomer//	Allen	Sampling Date: 2021-12-07				
Applicant/Owner: AEP		State: Ohio	Sampling Point: <u>5-B</u>				
Investigator(s): C. Kwolek, E. Wilson	Section, Township, Rar	nge: S028 T002 R00	)6				
Landform (hillslope, terrace, etc.): Depression	Local relief (	(concave, convex, none)	Concave				
Slope (%): 1 Lat: 40.841439	Long: -84.176074		Datum: WGS 84				
Soil Map Unit Name: Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded (SbA) NWI classification: N/A							
Are climatic / hydrologic conditions on the site typical for this time of year? Yes 🗾 🖌 No (If no, explain in Remarks.)							
Are Vegetation 🔽, Soil 🔽, or Hydrology 🖌 significantly disturbed? Are "Normal Circumstances" present? Yes 🔽 No							
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If ne	eded, explain any answe	ers in Remarks.)				
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.							

Hydrophytic Vegetation Present?	Yes 🖌 🖌	No			
Hydric Soil Present?	Yes 🖌 I	No	Is the Sampled Area		
Wetland Hydrology Present?	Yes 🖌	No	within a Wetland?	Yes 🔽	No

Remarks:

Wetland sample point for PEM 5-B. PEM stretches along depression with stream running through. All three wetland criteria present.

**VEGETATION** – Use scientific names of plants.

00.6	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft r</u> )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4.				(-)
5				Percent of Dominant Species
0		- Total Ca		That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft r )		- Total Co	/er	Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
0				$\frac{1}{1} \frac{1}{1} \frac{1}$
2				EACIM appealed $55$ x 2 = 110
3				FACtive species $\frac{1}{20}$ $\frac{1}{22} = \frac{1}{10}$
4				FAC species $0$ $x^3 = 0$
5	·			FACU species $15$ $x 4 = 60$
Eft r		= Total Cov	/er	UPL species $0 \times 5 = 0$
Herb Stratum (Plot size: 5111)	40			Column Totals: 100 (A) 200 (B)
	40			20
2. Carex lurida	30	<u> </u>	OBL	Prevalence Index = B/A = 2.0
3. Elymus virginicus	15		FACW	Hydrophytic Vegetation Indicators:
4. Dactylis glomerata	10		FACU	✓ 1 - Rapid Test for Hydrophytic Vegetation
5. Oenothera biennis	5		FACU	✓ 2 - Dominance Test is >50%
6				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7.				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
9				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
10	100%			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )	100 %	= Total Cov	/er	be present, unless disturbed or problematic.
1				Hydrophytic
2				Vegetation
		= Total Cov	/er	Present? Yes No No
Remarks: (Include photo numbers here or on a separate s	sheet.)			1
Hydrophytic vegetation present				

SOIL								Sampling Point: 3 D
Profile Desc	ription: (Describe	to the dept	h needed to docur	nent the	indicator	or confirm	n the absence of i	indicators.)
Depth	Matrix		Redo	x Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
0 - 20	10YR 4/1	95	10YR 4/6	5	<u>C</u>	PL	Clay Loam	
-								
		·						
		·						
-								
-								
		letion PM=	Reduced Matrix M	S-Maske		aine	<sup>2</sup> Location: R	I = Pore Liping M=Matrix
Hydric Soil	Indicators:		Reduced Matrix, Mit		u Sanu Gi	airis.	Indicators for	Problematic Hydric Soils <sup>3</sup> :
Histosol	(Δ1)		Sandy (	Sloved M	atrix (S4)		Coast Pra	irie Redox (A16)
Histic Er	vipedon (A2)		Sandy F	Redox (St	5)		Dark Surfa	ace (S7)
Black Hi	stic (A3)		Stripped	d Matrix (	S6)		Iron-Mano	anese Masses (F12)
Hydroge	n Sulfide (A4)		Loamy I	Mucky Mi	neral (F1)		Very Shal	low Dark Surface (TF12)
Stratified	Layers (A5)		Loamy (	Gleyed M	atrix (F2)		Other (Ex	plain in Remarks)
2 cm Mu	ıck (A10)		<ul> <li>Deplete</li> </ul>	d Matrix (	(F3)			
Depleted	d Below Dark Surfac	æ (A11)	Redox [	Dark Surf	ace (F6)			
Thick Dark Surface (A12) Depleted Dark Surface (F7)						<sup>3</sup> Indicators of	hydrophytic vegetation and	
Sandy Mucky Mineral (S1) Redox Depressions (F8)						wetland hy	/drology must be present,	
5 cm ML	icky Peat or Peat (S	3)					uniess dis	turbed or problematic.
Tuno	Layer (II observed)	•						
Type:							Hydric Soil Pre	esent? Yes 🖌 No
Depth (in	ches):							
Hydric	soil present							
HYDROLO	GY							
Wetland Hy	drology Indicators:							
Primary India	cators (minimum of c	one is requir	ed; check all that ap	oply)			Secondary I	Indicators (minimum of two required)
<ul> <li>Surface</li> </ul>	Water (A1)		Water-Sta	ined Leav	/es (B9)		Surface	e Soil Cracks (B6)
🖌 🗹 High Wa	iter Table (A2)		Aquatic Fa	auna (B13	3)		Drainag	ge Patterns (B10)
🖌 Saturatio	on (A3)		True Aqua	tic Plants	(B14)		Dry-Sea	ason Water Table (C2)
Water M	arks (B1)		Hydrogen	Sulfide O	dor (C1)		Crayfisl	h Burrows (C8)
Sedimer	nt Deposits (B2)		Oxidized F	Rhizosphe	eres on Liv	ing Roots	(C3) 🗹 Saturat	ion Visible on Aerial Imagery (C9)
Drift Dep	posits (B3)		Presence	of Reduce	ed Iron (C	4)	Stunted	or Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Recent Iro	n Reduct	ion in Tille	d Soils (C	6) 🖌 Geomo	rphic Position (D2)
Iron Dep	oosits (B5)		Thin Muck	Surface	(C7)		🖌 FAC-Ne	eutral Test (D5)
Inundati	on Visible on Aerial	Imagery (B7	) Gauge or	Well Data	(D9)			
Sparsely	Vegetated Concav	e Surface (E	38) Other (Exp	plain in Re	emarks)			
Field Obser	vations:	~		1				
Surface Wat	er Present? Y	'es N	No Depth (in	ches):		—		
Water Table	Present? Y	'es 🗾 N	No Depth (in	ches): 0		_		
Saturation P	resent? Y	′es 🖍 🖊	No Depth (in	ches): <u>0</u>		Wet	land Hydrology P	resent? Yes 🦯 No
(Includes car	oillary tringe)		nitoring well serial	nhotos n	revious ind	spections)	if available.	
Describe i/e	onded Data (Sireall	gauge, mo	moning wen, aeriar	p.10.05, p		spections),	, il avaliable.	
Remarke								
INCLUCING.								

Project/Site: 1732 Lima-Kalida 69kV Retirement	Ci	ity/County:	Gomer/A	Allen	Sampling Date: _	2021-12-07
Applicant/Owner: AEP		State: Ohio Sampling Point: 5-B/C				
Investigator(s): C. Kwolek, E. Wilson	S	Section, Township, Range: S028 T002 R006				
Landform (hillslope, terrace, etc.): Upland		L	ocal relief (	concave, convex, none):	Linear	
Slope (%): 0 Lat: 40.841713	Lo	ong: -84.	176214		Datum: WGS 84	4
Soil Map Unit Name: Cygnet Ioam, 0 to 3 percent slop	bes (CyA	4)		NWI classific	ation: N/A	
Are climatic / hydrologic conditions on the site typical for this tin	me of year	? Yes 🖊	No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology sign	ificantly di	sturbed?	Are "N	Normal Circumstances" p	oresent? Yes 💆	No
Are Vegetation, Soil, or Hydrology natu	arally probl	lematic?	(If nee	eded, explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS - Attach site map sh	owing s	ampling	g point lo	ocations, transects	, important fe	atures, etc.
Hydrophytic Vegetation Present? Yes No _	~					
Hydric Soil Present? Yes No _	<u> </u>	Is the	Sampled	Area		
Wetland Hydrology Present? Yes No _	<u> </u>	withi	n a Wetland	d? Yes	NO	
Remarks:	omplo to	akon with	in mowo	d area. No wotland	oritoria procon	.+
	ample ta		IIII IIIOwe	a area. No wettanu	citteria presen	it.
VEGETATION – Use scientific names of plants.						
A	bsolute	Dominant	Indicator	Dominance Test work	sheet:	
Tree Stratum         (Plot size:30 ft r)         %           1.	6 Cover	Species?	<u>Status</u>	Number of Dominant Sp That Are OBL, FACW, o	pecies or FAC: 0	(A)
2				Total Number of Domination	ant	
3				Species Across All Stra	ta: <u>2</u>	(B)
4				Percent of Dominant Sp That Are OBL, FACW, o	oecies or FAC: 0	(A/B)
Sapling/Shrub Stratum (Plot size: 15 ft r )	=	Total Cove	ər _	Prevalence Index wor	ksheet:	
1				Total % Cover of:	Multiply	/ by:
2				OBL species 0	x 1 =	
3				FACW species 0	x 2 =	
4				FAC species 0	x 3 = <u>0</u>	
5				FACU species 100	× 4 = <u>400</u>	)
Horb Stratum (Plot airo: 5 ft r )	=	Total Cove	er	UPL species 0	x 5 = 0	
Festuca rubra 7	75	~	FACU	Column Totals: 100	(A)	(B)
2. Trifolium pratense 2	25	~	FACU	Prevalence Index	= B/A = 4.0	
3				Hydrophytic Vegetatio	on Indicators:	
4				1 - Rapid Test for ⊦	lydrophytic Vegeta	ation
5				2 - Dominance Tes	t is >50%	
6				3 - Prevalence Inde	ex is ≤3.0 <sup>1</sup>	
7				4 - Morphological A	Adaptations <sup>1</sup> (Provi	de supporting
8				Problematic Hydror	phytic Vegetation <sup>1</sup>	(Explain)
9					,	(/
10		Total Cov		<sup>1</sup> Indicators of hydric soil	l and wetland hydr	ology must
Woody Vine Stratum (Plot size: 30 ft r )		Total Cove	-	be present, unless distu	Irbed or problemat	ic.
1				Hydrophytic		
2				Vegetation Present? Yes	s No	v
	= =	Total Cove	er			
No hydrophytic vegetation present	Remarks: (Include photo numbers here or on a separate sheet.)					

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)         Depth       Matrix       Redox Features         (inches)       Color (moist)       %       Type¹       Loc²       Texture       Remarks         0 - 20       10YR 3/3       100       %       Type¹       Loc²       Texture       Remarks         -       -       -       -       -       -       -       -       -         -       -       -       -       -       -       -       -       -         - <td< th=""></td<>								
Depth (inches)       Matrix       Redox Features         0 - 20       10YR 3/3       100       Clay Loam         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -       -         -       -       -       -       -       -         Histic Coil A(								
(inches)       Color (moist)       %       Type <sup>1</sup> Loc <sup>2</sup> Texture       Remarks         0 - 20       10YR 3/3       100								
0 - 20       10YR 3/3       100       Clay Loam         -								
Image:								
-       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -       -         -       -       -       -       -       -         -       -       -       -       -       -       -         -       -       -       -       -       -       -       -         -       -       -       -       -       -       -       -       -         -       - </td								
Image: Section in the problem of th								
Image:								
-       -       - <sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.         Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :         -       -       Coast Prairie Redox (A16)         -       -       -         Histosol (A1)       _       Sandy Gleyed Matrix (S4)       _         -       -       Coast Prairie Redox (A16)         -       -       -       Dark Surface (S7)         Black Histic (A3)       _       Stripped Matrix (S6)       _       Iron-Manganese Masses (F12)         -       Hydrogen Sulfide (A4)       _       Loamy Mucky Mineral (F1)       _       Very Shallow Dark Surface (TF12)         _       Stratified Layers (A5)       _       Loamy Gleyed Matrix (F2)       _       Other (Explain in Remarks)         _       2 cm Muck (A10)       _       Depleted Matrix (F3)       _       _       _         _       Depleted Below Dark Surface (A11)       _       Redox Dark Surface (F7)       3 <sup>1</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         _       Sandy Mucky Peat or Peat (S3)       _       unless disturbed or problematic.         _       Type:       _<								
1       Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       2 Location: PL=Pore Lining, M=Matrix.         Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :								
-       -								
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.         Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :								
Type:       C-Collicentiation, D-Depletion, RM-Reduced Matrix, MS-Masked Sand Grans.       Location:       PL-Pole Lining, M-Matrix.         Hydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Sandy Gleyed Matrix (S4)       Coast Prairie Redox (A16)         Histic Epipedon (A2)       Sandy Redox (S5)       Dark Surface (S7)         Black Histic (A3)       Stripped Matrix (S6)       Iron-Manganese Masses (F12)         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)       Very Shallow Dark Surface (TF12)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Other (Explain in Remarks)         2 cm Muck (A10)       Depleted Matrix (F3)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Peat or Peat (S3)       Redox Depressions (F8)       unless disturbed or problematic.         Type:       Type:       Hydric Soil Present? Yes       No								
Inside Lippedon (A2)       County Recover (60)       Definition Count of the constraint o								
2 cm Muck (A10)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)       unless disturbed or problematic.         Restrictive Layer (if observed):         Type:       Hvdric Soil Present? Yes								
Depleted Below Dark Surface (A11)     Redox Dark Surface (F6)     Thick Dark Surface (A12)     Depleted Dark Surface (F7)     Sandy Mucky Mineral (S1)     Redox Depressions (F8)     wetland hydrology must be present,     unless disturbed or problematic.								
Thick Dark Surface (A12)     Depleted Dark Surface (F7)     Sandy Mucky Mineral (S1)     Redox Depressions (F8)     unless disturbed or problematic.    Restrictive Layer (if observed):     Type:     Ty								
Sandy Mucky Mineral (S1)       Redox Depressions (F8)       wetland hydrology must be present, unless disturbed or problematic.         Sestrictive Layer (if observed):       Type:       Hydric Soil Present? Yes       No								
5 cm Mucky Peat or Peat (S3)     unless disturbed or problematic.       Restrictive Layer (if observed):								
Restrictive Layer (if observed):         Type:         Type:         Hvdric Soil Present?								
Type:								
Depth (inches): 10 10								
Remarks:								
No hydric coil present								
No nyune son present								
HYDROLOGY								
Wettand hydrology indicators.								
Primary indicators (minimum of one is required; check all that apply) Secondary indicators (minimum of two required)								
Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6)								
High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)								
Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (C2)								
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)								
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)								
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)								
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)								
Iron Deposits (B5) Lhin Muck Surface (C7) EAC-Neutral Lest (D5)								
Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9)								
Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9)     Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks)								
Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9)     Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks)  Field Observations:								
Inumination Connect (D7)     Inumination								
Internation Contract (Cor)   Gauge or Well Data (D9)   Sparsely Vegetated Concave Surface (B8)   Other (Explain in Remarks)   Field Observations:   Surface Water Present?   Yes   No   V   Depth (inches):   Saturation Present?   Yes   No   V   Depth (inches):   Wetland Hydrology Present? Yes   No   No								

Remarks:

## No hydrology present

Project/Site: 1732 Lima-Kalida 69kV Retirement	City/County: Gomer/Allen	Sampling Date: 2021-12-07					
Applicant/Owner: AEP	State: Ohio	Sampling Point: 5-C					
Investigator(s): C. Kwolek, E. Wilson	Section, Township, Range: S028 T002 R00	6					
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, none):	Concave					
Slope (%): 1 Lat: 40.84091	Long: 84.176037	Datum: WGS 84					
Soil Map Unit Name: Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded (SbA) NWI classification: N/A							
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)							
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Circumstances" p	present? Yes 🔽 No					
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, explain any answe	rs in Remarks.)					

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No	
Hydric Soil Present?	Yes V No	Is the Sampled Area
Wetland Hydrology Present?	Yes 🔽 No	within a Wetland? Yes <u>V</u> No
D		4

Remarks:

Wetland sample point for PSS 5-C. PSS stretches along depression with stream and drains into perennial stream. All three wetland criteria present.

VEGETATION - Use scientific names of plants.

00 ft	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1. Quercus palustris	10	<u> </u>	FACW	That Are OBL, FACW, or FAC: 4 (A)
2				Total Number of Deminent
3.				Species Across All Strata: 4 (B)
4				
5				Percent of Dominant Species
0	10%	- Total Ca		That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft r )	1070		er	Prevalence Index worksheet:
1 Cornus alba	60	~	FACW	Total % Cover of: Multiply by:
2				OBL species 40 $x_1 = 40$
2				EACW species $100$ $x_2 = 200$
3				EAC appeales $0$ $x^2 = 0$
4	·			FACt species $0$ $x = 0$
5				FACU species $0$ $x 4 = 0$
Horb Stratum (Plot size: 5 ft r )	60%	= Total Cov	ver	UPL species $0 \times 5 = 0$
Carex lurida	30	~	OBL	Column Totals: 140 (A) 240 (B)
Dhalaris arundinacea	30			Provelance Index = P/A = 1.7
2. Pridali Salundinacea	10			
3. Persicana nyuropiperoides				Hydrophytic Vegetation Indicators:
4				✓ 1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
6				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
9.				Problematic Hydrophytic Vegetation' (Explain)
10.				
	70%	= Total Cov		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )		- 10(a) 001		be present, unless disturbed or problematic.
1.				Hydrophytic
2				Vegetation
		= Total Cov	/er	Present? Yes No
Remarks: (Include photo numbers here or on a separate	sheet.)			1
Hydrophytic vegetation present				

SOIL								Sampling Point: <u>5-C</u>
Profile Descrip	otion: (Describe	to the dep	th needed to docur	nent the	indicator	or confirn	n the absence	of indicators.)
Depth Matrix Redox Features							,	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-20 1	10YR 4/1	95	10YR 4/6	5	С	PL	Clay Loam	
-								
-								
					·			
'Type: C=Conc	centration, D=Dep	oletion, RM	=Reduced Matrix, MS	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
Hydric Soil Ind	licators:						Indicators	for Problematic Hydric Soils":
Histosol (A	1)		Sandy C	Gleyed Ma	atrix (S4)		Coast I	Prairie Redox (A16)
Histic Epipe     Disak Listic	edon (A2)		Sandy F	Redox (St	) )		Dark S	
Black Histic	c (A3) Sulfide (A4)		Stripped	u watrix (a Mucky Mi	50) noral (E1)			anganese Masses (F12)
Stratified L	avers (A5)		Loamy (	Gleved M	atrix (F2)		Other (	Explain in Remarks)
2 cm Muck	(A10)		✓ Deplete	d Matrix (	F3)			
Depleted B	Below Dark Surfac	ce (A11)	Redox [	Dark Surfa	ace (F6)			
Thick Dark	Surface (A12)		Deplete	d Dark Su	urface (F7)	)	<sup>3</sup> Indicators	of hydrophytic vegetation and
Sandy Muc	ky Mineral (S1)		Redox [	Depressio	ons (F8)		wetland	hydrology must be present,
5 cm Muck	y Peat or Peat (S	3)					unless	disturbed or problematic.
Restrictive Lay	yer (if observed)	:						
Туре:							Hudria Sail	Present? Yes No
Depth (inche	es):						Hydric 30i	
Remarks:								
Hydric so	il procont							
	in present							
HYDROLOGY								
Wetland Hydro	logy Indicators	:						
Primary Indicate	ors (minimum of a	one is requi	red: check all that an	(vla			Seconda	ry Indicators (minimum of two required)
<ul> <li>Surface Wa</li> </ul>	ater (A1)		Water-Sta	ined Leav	(B9)		Surfa	ace Soil Cracks (B6)
High Water	r Table (A2)		Aquatic Fa	una (B13	3)			nage Patterns (B10)
✓ Saturation	(A3)		True Aqua	tic Plants	(B14)		Drv-	Season Water Table (C2)
Water Mark	ks (B1)		Hydrogen	Sulfide O	dor (C1)		Crav	/fish Burrows (C8)
Sediment [	Deposits (B2)		✓ Oxidized F	Rhizosphe	eres on Liv	ina Roots	(C3) 🗸 Satu	ration Visible on Aerial Imagery (C9)
Drift Depos	sits (B3)		Presence	of Reduce	ed Iron (C4	4)	Stun	ited or Stressed Plants (D1)
Algal Mat o	or Crust (B4)		Recent Iro	n Reduct	ion in Tille	., d Soils (C6	6) 🖌 Geo	morphic Position (D2)
Iron Depos	its (B5)		Thin Muck	Surface	(C7)		✓ FAC	-Neutral Test (D5)
Inundation	Visible on Aerial	Imagery (B	7) Gauge or	Well Data	(D9)			
Sparsely V	egetated Concav	e Surface (	B8) Other (Exr	plain in Re	emarks)			
Field Observat	tions:		<u> </u>		,			
Surface Water	Present?	res 🗸	No Depth (in	ches): 4				
Water Table Pro	esent?	(es 🗸	No Depth (in	ches): 0		_		
Saturation Pres	ent?		No Depth (in	ches) 0		Wetl	and Hydrology	Present? Yes 🗸 No
(includes capilla Describe Recor	ary fringe) rded Data (stream	n gauge, mo	onitoring well, aerial p	photos, p	revious ins	pections),	if available:	

Remarks:

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1730 AEP North Del	phos - Rockhill	Delineation City/C	<sub>ounty:</sub> Fort Jennings	/ Putnam	Sampling Date: 2021-06-29		
Applicant/Owner: AEP				<sub>State:</sub> Ohio	Sampling Point: 1-SP-001		
Investigator(s): E. Wilson, J. Holn	nes	Sectio	n, Township, Range:	S004, T	002, R005		
Landform (hillslope, terrace, etc.): U	pland	Local reli	ef (concave, convex, no	ne): None	Slope (%): 0		
Subregion (LRR or MLRA): L 99	Lat:	40.8914398	Long: -84	1.2894924	Glope (%) Datum: WGS 84		
Seil Man Linit Name: HtA	Lat.		Long		etion: PFO1A		
			<b>V</b>				
Are climatic / hydrologic conditions or	n the site typical fo	r this time of year? Y	es No	(If no, explain in R	emarks.)		
Are Vegetation, Soil,	or Hydrology	significantly disturb	bed? Are "Norma	I Circumstances" p	resent? Yes <u>No</u> No		
Are Vegetation, Soil,	or Hydrology	naturally problema	tic? (If needed, e	explain any answe	rs in Remarks.)		
SUMMARY OF FINDINGS -	Attach site m	ap showing sam	pling point location	ons, transects	, important features, etc.		
Hydrophytic Vegetation Present?	Yes	No 🖌	Is the Sampled Area				
Hydric Soil Present?	Yes	No 🖌	within a Wetland?	Yes	No		
Wetland Hydrology Present?	Yes	No 🖌	If yes, optional Wetland	d Site ID:			
Remarks: (Explain alternative proce	edures here or in a	separate report.)					
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indica	tors (minimum of two required)		
Primary Indicators (minimum of one	is required; check	all that apply)		Surface Soil	Cracks (B6)		
Surface Water (A1)		Water-Stained Leaves	s (B9)	Drainage Pat	terns (B10)		
High Water Table (A2)		Aquatic Fauna (B13)		Moss Trim Li	nes (B16)		
Saturation (A3)		Marl Deposits (B15)		Dry-Season \	Nater Table (C2)		
Water Marks (B1)		Hydrogen Sulfide Odd	or (C1)	Crayfish Burr	rows (C8)		
Sediment Deposits (B2)	—	Oxidized Rhizosphere	es on Living Roots (C3)	Saturation Vi	s ble on Aerial Imagery (C9)		
Drift Deposits (B3)		Presence of Reduced	Iron (C4)	Stunted or St	ressed Plants (D1)		
Algal Mat or Crust (B4)	—	Recent Iron Reduction	n in Tilled Soils (C6)	is (C6) Geomorphic Position (D2)			
Iron Deposits (B5)		Thin Muck Surface (C	()	Shallow Aquitard (D3)			
Sparsely Vegetated Concave S	Surface (B8)	Other (Explain in Ken	iaiks)	EAC-Neutral	Test (D5)		
Field Observations:							
Surface Water Present? Yes	No 🖌	Depth (inches):					
Water Table Present? Yes	No 🖌	Depth (inches):					
Saturation Present? Yes	No 🖌	Depth (inches):	Wetland H	Hydrology Presen	t? Yes No 🖌		
(includes capillary fringe)		ell aerial photos prev	vious inspections) if ava	ailable:			
Describe Necolded Data (stream ga	adge, monitoring w	ell, aeriai priotos, pre-		anabie.			
Remarks:							
Some hydrology due to	o topograph	iy. Not a wetla	and				

# **VEGETATION** – Use scientific names of plants.

Tree Stratum (Plat aire: 30 ft r	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 TCT</u> )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2			·	Total Number of Dominant
3				Species Across All Strata: <u>3</u> (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Co	ver	OBL species 0 x 1 = 0
Sapling/Shrub Stratum (Plot size: 15 ft r )				FACW species $0$ $x 2 = 0$
1				FAC species 15 x 3 = 45
2				FACU species <u>30</u> x 4 = <u>120</u>
2				UPL species $20$ x 5 = $100$
3			·	Column Totals: <u>65</u> (A) <u>265</u> (B)
4				Prevalence Index - B/A - 4.1
5				
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
		= Total Co	ver	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5 ft r )				3 - Prevalence Index is ≤3.0*
<sub>1.</sub> Zea mays	35	~	NI	data in Remarks or on a separate sheet)
2. Dactylis glomerata	30	~	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3 Asclepias svriaca	20	~	UPL	
4. Calystegia sepium	15		FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata
6				
7.				<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8	- <u></u>			
9				and greater than or equal to 3.28 ft (1 m) tall.
3 10			·	
10			·	<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11			·	We advertise a All was during a greater than 2.00 ft is
12			·	woody vines – All woody vines greater than 3.28 ft in height.
	100%	= Total Co	ver	5
Woody Vine Stratum (Plot size: 30 ft r )				
1				
2				
3				Hydrophytic
4.				Vegetation
	- <u></u>	= Total Co	ver	Present? Yes No
Remarks: (Include photo numbers here or on a separate s	sheet.)	- 10101 00		
	, 			
Hydrophytic vegetation is not prese	nt.			

Profile Desc	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth	Matrix		Redo	x Features	S						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remark	3	
0 - 20	10YR 4/4	100					Sandy Loam				
				·							
-											
-											
		·									
-											
		·									
		·									<u> </u>
-											
		·					·				
-		·									
-											
		·									
-		. <u> </u>									
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM=F	Reduced Matrix, M	S=Masked	Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore L	ining, M=N	latrix.	
Hydric Soil I	ndicators:						Indicators	for Problen	natic Hydri	c Soils <sup>3</sup> :	
Histosol	(A1)	_	Polyvalue Belov	w Surface	(S8) (LRF	RR,	2 cm M	luck (A10) ( <b>I</b>	LRR K, L, I	MLRA 149	<b>B</b> )
Histic Ep	oipedon (A2)		<b>MLRA 149B</b>	)			Coast F	Prairie Redo	ox (A16) ( <b>L</b>	R K, L, R	2)
Black His	stic (A3)	_	Thin Dark Surfa	ace (S9) (L	RR R, M	LRA 149B	) 5 cm M	lucky Peat o	or Peat (S3)	) (LRR K, I	L, R)
Hydroge	n Sulfide (A4)	_	Loamy Mucky N	Mineral (F1	1) ( <b>LRR K</b>	., L)	Dark Si	Dark Surface (S7) (LRR K, L)			
Stratified	I Layers (A5)	- (644)	_ Loamy Gleyed	Matrix (F2	)		Polyvalue Below Surface (S8) (LRR K, L)				
Depleted	Below Dark Surraci	e (ATT) _	_ Depleted Matrix	((F3) rfaaa (E6)			Thin Dark Sufface (S9) (LRR K, L)				
Thick Da	lucky Minoral (S1)	_	Redux Dark Su	nace (Fo) Surfaco (E	(7)		Piedmont Eloodolain Soils (E19) ( <b>MI RA 149B</b> )				
Sandy G	loved Matrix (S4)	_	Depieted Dark	Sunace (F8)	()		Mesic Spodic (TA6) (MI RA 144A 145 149B)				
Sandy C	edox (S5)	_					Red Parent Material (F21)				
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)				
Dark Sur	face (S7) (LRR R. N	<b>ILRA 149B</b> )					Other (	Explain in R	emarks)	1 12)	
									ionnanito)		
<sup>3</sup> Indicators of	hydrophytic vegetat	ion and wetl	and hydrology mus	st be prese	ent, unless	s disturbed	or problematic				
Restrictive L	ayer (if observed):						· ·				
Type: N/	A										
Denth (inc	a haa).						Hydric Soil	Present?	Yes	No	~
Deptil (Inc											
Remarks:											
No hvdri	c soils prese	nt.									
, , , , , , , , , , , , , , , , , , ,											

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: AEP North Delphos - Rockhill	City/County: Rimer/ Putna	m	Sampling Date: 2021-06-28
Applicant/Owner: AEP		State: Ohio	Sampling Point: 1-SP-002
Investigator(s): J. Holmes E. Wilson	Section, Township, Range:		R005
Landform (hillslope, terrace, etc.): Upland, Flat	ocal relief (concave, convex, nor	ne): None	Slope (%): 0
Subregion (LRR or MLRA): M Lat: 40.873940	Long:84	.237650	Datum: WGS 84
Soil Map Unit Name: <u>So</u>		NWI classific	cation: N/A
Are climatic / hydrologic conditions on the site typical for this time of y	rear? Yes No	(If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology significantl	y disturbed? Are "Normal	l Circumstances" p	present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed, e	explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locatio	ons, transects	, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present?	Yes Yes	No <u> </u>	Is the Sampled Area within a Wetland? Yes No 🖌				
Wetland Hydrology Present?	Yes	No 🖌	If yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a separate report.)							
Representative of field edge along proposed access road							

### HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Re	oots (C3) Saturation Vis ble on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils	s (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes <u>No</u> Depth (inches):	
Saturation Present? Yes No <u>V</u> Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspection	ons), if available:
Remarks:	
No primary and or secondary wetland hydrology indicate sampling	ors were present at the time of

### **VEGETATION** – Use scientific names of plants.

## Sampling Point: 1-SP-002

Tree Stratum (Plot size: 30 ft r )	Absolute % Cover	Dominant	Indicator Status	Dominance Test worksheet:
		<u>Species</u> :	Status	Number of Dominant Species
l			·	That Are OBL, FACW, or FAC: (A)
2			·	Total Number of Dominant
3				Species Across All Strata: $\underline{2}$ (B)
4				Percent of Dominant Species
5			·	That Are OBL, FACW, or FAC: 0 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Co	ver	OBL species 0 x 1 = 0
Sapling/Shrub Stratum (Plot size: 15 ft r )				FACW species $0$ $x 2 = 0$
1				FAC species $0   x 3 = 0$
2			·	FACU species 100 x 4 = 400
2				UPL species 0 x 5 = 0
3			·	Column Totals: <u>100</u> (A) <u>400</u> (B)
4			·	Prevalence Index – $B/A = 4.00$
5			·	
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
		= Total Co	ver	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5 ft r )				3 - Prevalence Index is ≤3.0°
<sub>1.</sub> Lolium perenne	45	~	FACU	data in Remarks or on a separate sheet)
2. Dactylis glomerata	40	~	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3 Plantago maior	10		FACU	
Trifolium repens	5		FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. <u></u>			1/100	be present, unless disturbed or problematic.
5			·	Definitions of Vegetation Strata:
6			·	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7			·	at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12				Woody vines – All woody vines greater than 3.28 ft in
	100%	= Total Co	ver	height.
Woody Vine Stratum (Plot size: 30 ft r )				
1				
··			·	
2			·	the describe of a
3			·	Hydrophytic Vegetation
4			·	Present? Yes No V
		= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			
A preponderance of hydrophytic veg	getatior	n is not	presen	t

Profile Desc	ription: (Describe	to the depth	needed to docur	nent the i	indicator	or confirm	the absence	of indicators.)		
Depth	Matrix		Redo	x Feature	s					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0 - 20	10YR 4/3	100					Silt Loam	10 coarse fragments		
					·					
-		·								
-										
		·			·					
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_										
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·		·			·		·			
-										
-										
		· ·								
-		·			·					
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM=F	Reduced Matrix, Ma	S=Masked	d Sand Gr	ains.	<sup>2</sup> Location	: PL=Pore Lining, M=Matrix.		
Hydric Soil	Indicators:						Indicators	for Problematic Hydric Soils':		
Histosol	(A1)	-	Polyvalue Belo	w Surface	(S8) ( <b>LR</b>	RR,	2 cm N	Auck (A10) (LRR K, L, MLRA 149B)		
Histic Ep	bipedon (A2)		MLRA 149B	)			Coast	Prairie Redox (A16) (LRR K, L, R)		
Black Hi	Stic (A3)	_	_ Thin Dark Suffa	ace (S9) (L Ainorol (E		LRA 149B)	) 5 cm N	/lucky Peat or Peat (S3) (LRR K, L, R)		
Hydroge Stratifior	n Suinde (A4)	-	_ Loamy Mucky r	Motrix (E2	1) ( <b>LKK K</b>	, L)	Dark S	Jun Bolow Surface (SR) (LPP K 1)		
	d Below Dark Surface	_ (۵11) م	_ Loanty Gleyed	(F3)	.)		Folyva Thin D	ark Surface (S9) (IRR K I)		
Thick Da	ark Surface (A12)	- (////) _	Redox Dark Su	rface (F6)			Iron-Manganese Masses (F12) (LRR K, L, R)			
Sandy M	luckv Mineral (S1)	-	Depleted Dark	Surface (F	7)		Piedmont Floodplain Soils (F19) (MLRA 149B)			
Sandy G	Bleyed Matrix (S4)	_	Redox Depress	ions (F8)	.,		Mesic	Spodic (TA6) ( <b>MLRA 144A, 145, 149B</b> )		
Sandy R	ledox (S5)	_		( )			Red Pa	arent Material (F21)		
Stripped	Matrix (S6)						Very S	hallow Dark Surface (TF12)		
Dark Su	rface (S7) (LRR R, N	<b>/LRA 149B</b> )					Other	(Explain in Remarks)		
<sup>3</sup> Indicators of	f hydrophytic vegetat	tion and wetl	and hydrology mus	st be prese	ent, unless	s disturbed	or problemation	2.		
Restrictive I	Layer (if observed):									
Туре:										
Depth (ind	ches):						Hydric Soil	Present? Yes No 🖌		
Remarks:										
rtomano.										
No by	dric soils prose	nt								
	une sons prese									
Project/Site: 1730 AEP North Delphos - Rockhill Delin	eation City/County: Fort Je	nnings/ Putnam Sa	mpling Date: 2021-06-29							
---	-------------------------------------	-------------------------------	--------------------------							
Applicant/Owner: AEP		State: Ohio	Sampling Point: 1-SP-003							
Investigator(s): E. Wilson, J. Holmes	Section, Township, Ra	ange: S019, T002	, R006							
Landform (hillslope, terrace, etc.): Upland	Local relief (concave, cor	ivex, none): None	Slope (%): 0							
Subregion (LRR or MLRA): <u>L 99</u> Lat: <u>40.8</u>	580884 Lo	ng: -84.2056083	Datum: WGS 84							
Soil Map Unit Name: <u>HtA</u>		NWI classificatio	<sub>n:</sub> None							
Are climatic / hydrologic conditions on the site typical for this t	ime of year? Yes 🔽 No _	(If no, explain in Rema	arks.)							
Are Vegetation, Soil, or Hydrologysig	nificantly disturbed? Are	"Normal Circumstances" prese	ent? Yes 🖌 No							
Are Vegetation, Soil, or Hydrology nat	urally problematic? (If n	eeded, explain any answers in	Remarks.)							
SUMMARY OF FINDINGS – Attach site map sl	nowing sampling point	locations, transects, im	nportant features, etc.							
Hydrophytic Vegetation Present? Yes <u>No</u>	✓ Is the Sample ✓ within a Wetla	d Area Ind? Yes	No							

Hydric Soil Present?	Yes	No 🖌	within a Wetland?	Yes	No	
Wetland Hydrology Present?	Yes	No 🗹	If yes, optional Wetland S	Site ID:		
Remarks: (Explain alternative proced	lures here or i	n a separate report.)				
Representative upland	sample p	oint.				

#### HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living I	Roots (C3) Saturation Vis ble on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled So	ils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes No 🗸 Depth (inches).	
Saturation Present? Yes No V Depth (inches):	Wetland Hydrology Present? Yes No
Saturation Present?       Yes No Depth (inches):         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	Wetland Hydrology Present? Yes No
Saturation Present? Yes No Pepth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	Wetland Hydrology Present? Yes No
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
Saturation Present?       Yes No Depth (inches):         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect         Remarks:       Remarks:	Wetland Hydrology Present? Yes No
Saturation Present? Yes No Depth (inches): Depth (inches): Depth (inches): Remarks:	Wetland Hydrology Present? Yes No
Saturation Present?       Yes No _       Depth (inches):         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect         Remarks:       Representative upland sample point to describe the surface	Wetland Hydrology Present? Yes No
Saturation Present?       Yes No _       Depth (inches):         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect         Remarks:       Representative upland sample point to describe the surface	Wetland Hydrology Present? Yes No
Saturation Present?       Yes No _       Depth (includo)         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect         Remarks:       Representative upland sample point to describe the surface	Wetland Hydrology Present? Yes No
Saturation Present?       Yes No _       Depth (include): [includes capillary fringe)         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect         Remarks:         Representative upland sample point to describe the surface	Wetland Hydrology Present? Yes <u>No</u> tions), if available:
Saturation Present?       Yes No Depth (include).         (includes capillary fringe)       Depth (inches):         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect         Remarks:         Representative upland sample point to describe the sult	Wetland Hydrology Present? Yes <u>No</u> tions), if available:
Saturation Present?       Yes No _       Depth (inches): [includes capillary fringe)         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect         Remarks:         Representative upland sample point to describe the sult	Wetland Hydrology Present? Yes <u>No</u> tions), if available:
Saturation Present?       Yes No Depth (inches):         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect         Remarks:       Representative upland sample point to describe the surface	Wetland Hydrology Present? Yes <u>No</u> tions), if available:
Saturation Present?       Yes No _       Depth (inches):         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect         Remarks:       Representative upland sample point to describe the surface	Wetland Hydrology Present? Yes No

# Sampling Point: 1-SP-003

Trop Stratum (Plot size: 30 ft r )	Absolute	Dominant	Indicator	Dominance Test worksheet:
		<u>Opecies</u> :	Status	Number of Dominant Species
				That Are OBL, FACW, or FAC: _1 (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>5</u> (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: $20$ (A/B)
6				Prevalence Index worksheet:
7.				Total % Cover of: Multiply by:
	- <u></u>	- Total Cov	vor	$\frac{1}{1} \frac{1}{1} \frac{1}$
Copling/Chruh Stratum (Distaire, 15 ft r )		- 10(0100)	VCI	EACW species $0$ $x_2 = 0$
Morus alba	20		EACU	FAC species $20 \times 3 = 60$
	20			FACU species $65$ $x 4 = 260$
2. Acer pensylvanicum	10	<u> </u>	FACU	$\frac{1}{100} \text{ species } 0  specie$
3				Column Totals: $85$ (A) $320$ (B)
4				
5				Prevalence Index = B/A = <u>3.8</u>
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
/·	30%			2 - Dominance Test is >50%
<b>F ( )</b> -	50%	= Total Cov	ver	3 - Prevalence Index is ≤3.0 <sup>1</sup>
Herb Stratum (Plot size: 5101)				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
1. Rubus allegheniensis	25	<u> </u>	FACU	data in Remarks or on a separate sheet)
2. Toxicodendron radicans	20	~	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3. Glycine max	15	~	NI	1
4. Parthenocissus quinquefolia	10		FACU	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5				
6				Definitions of vegetation Strata:
				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
/				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb - All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12				Woody vines – All woody vines greater than 3.28 ft in
	70%	= Total Co	ver	height.
Woody Vine Stratum (Plot size: 30 ft r )				
(i lot 0.20)				
2				
3				Hydrophytic Vegetation
4				Present? Yes No
		= Total Cov	ver	
Remarks: (Include photo numbers here or on a separate s	sheet.)			
Representative upland sample point	. No hvo	drophy	tic vea	etation present.
- Providence - Property - Propert	,		5	

Profile Desc	ription: (Describe	to the depth	n needed to docur	nent the i	ndicator	or confirm	n the absence of	indicator	rs.)	
Depth	Matrix		Redo	x Features	3		_		_	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0 - 20	10YR 4/3	100					Sandy Loam			
-										
-										
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-										
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-										
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							·			
-										
-										
17.000							21		inter at at	- <b>t</b> - <b>i</b> - <b>i</b>
Lype: C=Co	oncentration, D=Dep	pietion, RM=	Reduced Matrix, MS	s=Masked	Sand Gr	ains.	Location: P	L=Pore L	Ining, M=Ma	atrix.
Hydric Soli	indicators:			<i>.</i>	(0 a) (1 <b>b</b> i		Indicators for	Problem		; 50115 :
Histosol	(A1)	-	_ Polyvalue Belov	w Surface	(S8) (LRI	R,	2 cm Muc	к (А10) ( <b>I</b>		
HISTIC Ep	olpedon (A2)		MLRA 149B)				Coast Pra	airie Redo	X (A16) ( <b>LR</b>	
Black Hi	STIC (A3)	_	I nin Dark Surra	lice (59) (L Ainoral (E1		LRA 149B	) 5 cm Muc	ky Peat o		(LRRK,L,R)
Hydroge Stratifior	AL avors (A5)	-		Motrix (E2	) ( <b>LKK K</b> )	, L)	Dark Suri		(LKK K, L)	
Stratified	d Below Dark Surfac		Loanty Gleyeu	(E3)	)		Folyvalue	Surface		$(\mathbf{L}\mathbf{K}\mathbf{K},\mathbf{L})$
Depleted	ark Surface (A12)		Depleted Math	rface (F6)					(58) (ERK P	N, L)
Thick Da	Ark Surface (ATZ) Aucky Mineral (S1)	-	Neulox Dark Su	Surface (FO)	(7)			Floodolai	asses (F12) in Soile (F10	$(\mathbf{L}\mathbf{R}\mathbf{R},\mathbf{L},\mathbf{R})$
Sandy G	Sloved Matrix (S1)	-	Depieted Dark	ions (E8)	")		Fleamont	nic (TA6	) (MI PA 1/	A 145 149B)
Sandy R	Peday (S5)	-					Red Pare	nt Materia	) ( <b>111 – 117</b> al (F21)	-7, 1-3, 1-30)
Candy N	Matrix (S6)						Very Shal	llow Dark	Surface (TF	12)
Dark Su	rface (S7) (I RR R. I	MI RA 149B)					Other (Ex	nlain in R	emarks)	12)
								plainin	omanoj	
<sup>3</sup> Indicators of	f hvdrophvtic vegeta	tion and wet	land hydrology mus	t be prese	ent. unless	s disturbed	or problematic.			
Restrictive	Laver (if observed)									
	ayo: ( 00001100) A	•								
Type. <u></u>									M	
Depth (inc	ches):						Hydric Soli Pro	esent?	res	NO
Remarks:							•			
Donrooo	ntativa unlar	ad aamaa	la naint Na	budrid	مانه					
Represe	intative uplai	iu samp	ne point. No	nyund	5 50115	•				

Project/Site: 1730 AEP North Delpho	os - Rockhill De	lineation (	City/County: FC	ort Jennings/	Putnam	Sampling Date: 2	2021-06-29
Applicant/Owner: AEP					State: Ohio	Sampling Point	1-SP-004
Investigator(s): E. Wilson, J. Holmes		5	Section, Townsl	nip, Range:	S020, T	002, R006	
Landform (hillslope, terrace, etc.): Uplan	nd	Loca	al relief (concav	ve, convex, non	<sub>e):</sub> None	Slope	e (%): 0
Subregion (LRR or MLRA): L 99	Lat: <u>40</u>	.8564344		Long:84.	2004452	Datum	WGS 84
Soil Map Unit Name: <u>HtA</u>					NWI classific	cation: None	
Are climatic / hydrologic conditions on the	e site typical for thi	is time of yea	ar?Yes 🖌	_ No (I	lf no, explain in F	Remarks.)	
Are Vegetation, Soil, or H	ydrology s	significantly c	disturbed?	Are "Normal	Circumstances"	oresent? Yes 🦯	No
Are Vegetation, Soil, or H	ydrologyı	naturally prob	olematic?	(If needed, ex	xplain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS - Att	ach site map	showing	sampling p	oint locatio	ns, transects	, important fea	atures, etc.
Hydrophytic Vegetation Present?	Yes N	lo 🖌	Is the Sa	mpled Area			
Hydric Soil Present?	Yes N	lo 🖌	within a	Wetland?	Yes	No	
Wetland Hydrology Present?	Yes N	lo 🖌	If yes, op	tional Wetland	Site ID:		

Remarks: (Explain alternative procedures here or in a separate report.)

Representative upland sample point.

#### HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living	Roots (C3) Saturation Vis ble on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled So	oils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes No 🖌 Depth (inches):	
Water Table Present?       Yes No       Depth (inches):         Saturation Present?       Yes No _       Depth (inches):         (includes capillary fringe)       Ves No _       Ves No _	Wetland Hydrology Present? Yes No
Water Table Present?       Yes No _       Depth (inches):         Saturation Present?       Yes No _       Depth (inches):         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective	Wetland Hydrology Present? Yes No
Water Table Present?       Yes No _       Depth (inches):         Saturation Present?       Yes No _       Depth (inches):         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective         Remarks:	Wetland Hydrology Present? Yes No

# Sampling Point: 1-SP-004

Trac Stratum (Distaire: 30 ft r )	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>Sorth</u> )	<u>% Cover</u>	<u>Species</u> ?	Status	Number of Dominant Species
1			·	That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>3</u> (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6				Brovalanco Index workshoot:
7.				Total % Cover of: Multiply by:
		- Total Co	vor	$\begin{array}{c c} \hline 10 \text{ (a) } & 0 \text{ (b) (c) } \\ \hline 0 \text{ (b) } & 0 \text{ (c) } \\ \hline 0 \text{ (c) } \\ \hline 0 \text{ (c) } & 0 \text{ (c) } \\ \hline 0 \text{ (c) } & 0 \text{ (c) } \\ \hline 0 \text{ (c) } \\ \hline 0 \text{ (c) } & 0 \text{ (c) } \\ \hline 0 \text{ (c) } \hline 0 \text{ (c) } \\ \hline 0 \text{ (c) } \hline 0 \text{ (c) } \\ \hline 0 \text{ (c) } \hline 0  $
Conting/Charle Charles (Distained 15 ft r		- 10(a) 00	VEI	EACW species $0$ $x_2 = 0$
<u>Saping/Shub Stratum</u> (Plot size. 10111)				FAC species $5$ $x_3 = 15$
1			·	FACU species $65$ $x 4 = 260$
2			·	UPL species $10$ $x_5 = 50$
3				Column Totals: 80 (A) 325 (B)
4				
5				Prevalence Index = $B/A = \frac{4.1}{2}$
6.				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
		- Total Ca	vor	2 - Dominance Test is >50%
Hade Obstance (Distance 5 ft r			vei	3 - Prevalence Index is ≤3.0 <sup>1</sup>
Herb Stratum (Plot size: <u>5111</u> )	40			4 - Morphological Adaptations <sup>1</sup> (Provide supporting
1. Dactylis glomerata	40	<i>.</i>	FACU	data in Remarks or on a separate sheet)
2. Rubus allegheniensis	25	<ul> <li>✓</li> </ul>	FACU	Problematic Hydrophytic Vegetation' (Explain)
3. Glycine max	20	~	NI	<sup>1</sup> Indicators of hydric soil and wotland hydrology must
4. Asclepias syriaca	10		UPL	be present, unless disturbed or problematic.
5. Toxicodendron radicans	5		FAC	Definitions of Vegetation Strata:
6.				Definitions of Vegetation of ata.
7				<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter
0		-		at breast height (DDF), regardless of height.
o			·	<b>Sapling/shrub</b> – Woody plants less than 3 in. DBH
9			·	
10			·	Herb – All herbaceous (non-woody) plants, regardless
11			·	or size, and woody plants less than 5.20 it tall.
12				Woody vines – All woody vines greater than 3.28 ft in
	100%	= Total Co	ver	neight.
Woody Vine Stratum (Plot size: 30 ft r )				
1.				
2				
2			·	
3			·	Hydrophytic Vegetation
4			·	Present? Yes No V
		= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			
Representative upland sample point	. No hy	drophy	tic veg	etation present.
	-		-	

Interest       Color (moist)       %       Loc       lexture       Remarks         0 - 20       10YR 4/3       100	(incnes)		0/	Redo	<u>x Features</u>	<b>T</b> um a <sup>1</sup> l <sup>2</sup>	Taudum	5	1
0 - 20       10 YR 4/3       100       Sandy Leam         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -         -       -       -       -       -         -       -       -       -       -       -         -       -       -       -       -       -         -       -       -       -       -       -       -         -       -       -       -       -       -       -		Color (moist)	<u></u>	Color (moist)	%	lype Loc	lexture	Remar	ks
-	0 - 20	10YR 4/3	100				Sandy Loam		
-	-								
-	·		·		·				
-			·				· ·		
-	-								
Image: Stratific Layers (A5)       Polyvalue Below Surface (S8) (LRR R, MLRA 149B)         Istratified Layers (A5)       Indicators (C12)         Histic Epidedon (A2)       MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)         Polyvalue Below Surface (S9)       Polyvalue Below Surface (S9) (LRR K, L, R)         Black Histic (A3)       Thin Dark Surface (S9) (LR R, MLRA 149B)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)         Polyvalue Below Surface (S9) (LRR K, L)       Polyvalue Below Surface (S9) (LRR K, L)         Depleted Bolow Dark Surface (A11)       Depleted Matrix (F3)         Thin Cark Surface (F6)       Inon-Manganese Masses (F12) (LRR K, L, L)         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)         Sandy Gleyed Matrix (S4)       Redox Depressions (F8)         Sandy Gleyed Matrix (S6)       Metare (S7) (LRR K, L, R, Hat 144A, 145, 149E)         Sandy Redox (S5)       Greet Material (F21)         Dark Surface (S7)       Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 149E)         Sandy Redox (S5)       Redox Depressions (F8)         Stripped Matrix (S6)       Polytopernet Material (F21)         Dark Surface (S7) (LRR R, MLRA 149B)       Other (Explain in Remarks)									
.       .       .         .       .       .       .         .       .       .       .       .         .       .       .       .       .         .       .       .       .       .       .         .       .       .       .			·				·		
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'	·		·		·		·		
Type:       C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location:       PL=Pore Lining, M=Matrix.         ydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2)       MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       5 cm Muck (A16) (LRR K, L, R)         Phydrogen Sulfide (A4)       Loamy Mucky Mineral (F1) (LRR K, L)       Dark Surface (S9) (LRR K, L, R)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Polyvalue Below Surface (S9) (LRR K, L)         Depleted Below Dark Surface (A11)       Depleted Matrix (F3)       Thin Dark Surface (S9) (LRR K, L)         Thick Dark Surface (A12)       Redox Dark Surface (F6)       Iron-Manganese Masses (F12) (IRR K, L, RA 149B)         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       Piedmont Floodplain Soils (F19) (MLRA 1449, 145, 149E)         Sandy Redox (S5)       Red Parent Material (F21)       Red Parent Material (F21)         Stripped Matrix (S6)       Very Shallow Dark Surface (TF12)       Dark Surface (S7) (LRR R, MLRA 149B)         Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       estrictive Layer (if observed):         Type: N/A<									
-       -	-								
'ype: C_Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> : Indicators for Problematic Hydric Soils <sup>3</sup> : Histic Epipedon (A2) Histic Epipedon (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Hydrogen Suffide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Thic Dark Surface (F6) Sandy Mucky Mineral (S1) Stratified (S5) Stratige (S6) Surface (S1) (LRR K, L, R Sandy Gleyed Matrix (S4) Stray Redox (S5) Striped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Mode Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Mdicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Layer (if observed): Type: N/A Depth (inches): Type: N/A Depth (inches): errarks: epresentative upland sample point. No hydric soils.			·		·				
Type:       C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location:       PL=Pore Lining, M=Matrix.         ydric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :       Indicators for Problematic Hydric Soils <sup>3</sup> :       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Histic Epipedon (A2)       MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       5 cm Mucky Peat or Peat (S3) (LRR K, L, R)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Polyvalue Below Surface (S8) (LRR K, L)         Depleted Below Dark Surface (A11)       Depleted Matrix (F3)       Thin Dark Surface (S9) (LRR K, L)         Thric Dark Surface (A12)       Redox Dark Surface (F6)       Iron-Manganese Masses (F12) (LRR K, L, R         Sandy Gleyed Matrix (S4)       Redox Depressions (F8)       Mesic Spodic (TA6) (MLRA 1449, 145, 149E         Sandy Redox (S5)       Pred Matrix (S6)       Other (Explain in Remarks)         Dark Surface (S7) (LRR R, MLRA 149B)       Other (Explain in Remarks)         ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Present? Yes No         etrictive Layer (if observed):       Type: N/A       Hydric Soil Present? Yes       No         pepth (inches):       Hydric Soil Present? Yes       No       V			·				·		
ydric Soil Indicators:       Indicators for Problematic Hydric Soils*:         Histosol (A1)       Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Black Histic (A3)       Thin Dark Surface (S9) (LRR R, MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Stratified Layers (A5)       Loamy Mucky Mineral (F1) (LRR K, L)       Dark Surface (S9) (LRR K, L)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Polyvalue Below Surface (S8) (LRR K, L)         Depleted Below Dark Surface (A11)       Depleted Matrix (F3)       Thin Dark Surface (S9) (LRR K, L, R)         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       Piedmont Floodplain Soils (F19) (MLRA 149B)         Sandy Redox (S5)       Red Parent Material (F21)       Very Shallow Dark Surface (TF12)         Stripped Matrix (S6)       Other (Explain in Remarks)         Dark Surface (S7) (LRR R, MLRA 149B)       Other (Explain in Remarks)         ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.       Very Shallow Dark Surface (TF12)         Depth (inches):       M/A       Very Soil Present? Yes       No         Persentative upland sample point. No hydric soils.       Hydric Soil Present? Yes       No	Гуре: С=Со	ncentration, D=Dep	letion, RM=	=Reduced Matrix, MS	3=Masked	Sand Grains.	<sup>2</sup> Location: PL=P	ore Lining, M=	Matrix.
	ydric Soil Ir	ndicators:					Indicators for Pro	blematic Hyd	lric Soils':
Histic Epipedon (A2)       MLRA 149B)       Coast Prairie Redox (A16) (LRR K, L, R)         Black Histic (A3)	_ Histosol (	A1)		Polyvalue Belov	N Surface	(S8) ( <b>LRR R,</b>	2 cm Muck (A1	0) ( <b>LRR K, L</b> ,	, MLRA 149B)
Black Histic (A3)	Histic Epi	pedon (A2)		MLRA 149B)	)		Coast Prairie F	Redox (A16) ( <b>I</b>	LRR K, L, R)
Hydrogen Sulfide (A4)        Loamy Mucky Mineral (P1) (LRR K, L)        Dark Surface (S7) (LRR K, L)	Black His	tic (A3)		Thin Dark Surfa	ice (S9) (L	.RR R, MLRA 149B)	5 cm Mucky P	eat or Peat (S	3) (LRR K, L, R)
Strattlide Layers (A5)     Coamy Gleyed Matrix (F2)     Depleted Below Dark Surface (A11)     Depleted Matrix (F3)     Thick Dark Surface (A12)     Redox Dark Surface (F6)     Iron-Manganese Masses (F12) (LRR K, L, R     Sandy Mucky Mineral (S1)     Depleted Dark Surface (F7)     Piedmont Floodplain Soils (F19) (MLRA 1449     Sandy Redox (S5)     Redox Depressions (F8)     Red Parent Material (F21)     Stripped Matrix (S6)     Dark Surface (S7) (LRR R, MLRA 149B)     Other (Explain in Remarks)  ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  estrictive Layer (if observed):     Type: N/A     Depth (inches):     Type: N/A     Personnal completed Sample point. No hydric soils.	_ Hydrogen	Sulfide (A4)		Loamy Mucky N	/lineral (F1	) (LRR K, L)	Dark Surface (	S7) (LRR K, L	
Thick Dark Surface (A11) Depleted Matrix (P3) Inflin Dark Surface (S9) (LRR K, L) Inflin Dark Surface (S9) (LRR K, L, R Inflin Dark Surface (S9) (LRR K, L, R Inflin Dark Surface (S9) (LRR K, L, RInflin Dark Surface (F7) Inflin Dark Surface (S9) (LRR K, L, RInflin Dark Surface (F7) Inflin Dark Surface (S9) (LRR K, L, RInflin Dark Surface (F7) Inflin Dark Surface (S9) (LRR K, L, RInflin Dark Surface (S9) (LRR K, L, RInflin Dark Surface (F7)Inflin Dark Surface (S9) (LRR K, L, RInflin Dark Surface (F7)Inflin Dark Surface (S9) (LRR K, L, RInflin Dark Surface (F7)	_ Stratified	Layers (A5)	o (A11)	Loamy Gleyed	Viatrix (F2)	)	Polyvalue Belo	w Surface (St	$(\mathbf{L}\mathbf{R}\mathbf{R}\mathbf{K},\mathbf{L})$
Index Dark Sundee (12)   Index Dark Sundee (12) Image: Redox Dark Sundee (10)     Sandy Mucky Mineral (S1) Depleted Dark Surface (F7)   Sandy Gleyed Matrix (S4) Redox Depressions (F8)   Sandy Redox (S5) Red Parent Material (F21)   Stripped Matrix (S6) Very Shallow Dark Surface (TF12)   Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)   Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.   rype: N/A   Depth (inches): No   Indicators of hydric soil Present? Yes No	Depleted	below Dark Surface	e (ATT)	Depieted Math	rfaco (E6)				τ <b>η, μ</b> ) 12\ ( <b>Ιρρικ Ι ρ</b>
Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149E Mesic Spodic (TA6) (MLRA 144A, 145, 149E Mesic Spodic (TA6) (MLRA 144A, 145, 149E Red Parent Material (F21) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Hydric Soil Present? Yes No remarks:	Sandy Mi	ucky Mineral (S1)		Neulox Dark Su	Surface (F0)	7)	Piedmont Floo	dolain Soils (F	12) ( <b>μακ κ, μ, κ</b> 19) ( <b>ΜΙ ΒΔ 149</b>
Sandy Redox (S5)   Sandy Redox (S5) Red Parent Material (F21)   Stripped Matrix (S6) Very Shallow Dark Surface (TF12)   Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)   Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.   restrictive Layer (if observed):   Type:   N/A   Depth (inches):   Yes   Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.   Present?   Yes   No   Image: No	Sandy Gl	eved Matrix (S4)		Redox Depress	ions (F8)	,,	Mesic Spodic	(TA6) ( <b>MI RA</b>	144A 145 149F
Stripped Matrix (S6)	Sandy Re	edox (S5)					Red Parent Ma	aterial (F21)	
Dark Surface (S7) (LRR R, MLRA 149B)   Other (Explain in Remarks)     Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.     Image: N/A   Depth (inches):     Image: No     Image: N/A     Hydric Soil Present? Yes No      Image: Presentative upland sample point. No hydric soils.	Stripped	Matrix (S6)					Verv Shallow [	Dark Surface (	(TF12)
ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.			ILRA 149E	3)			Other (Explain	in Remarks)	
Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.     Image: N/A   Depth (inches):     Hydric Soil Present? Yes No   Image: Presentative upland sample point. No hydric soils.	Dark Surf	ace (37) (LKK K, N		,			、 .	,	
In the served of th	Dark Surf	ace (37) (LKK K, N		tland bydrology muc	t be prese	ent, unless disturbed	or problematic.		
Type: N/A       Hydric Soil Present? Yes No          Depth (inches):       No          remarks:       Pepresentative upland sample point. No hydric soils.	Dark Surf	hydrophytic vegetat	tion and we	and hydrology mus					
Depth (inches):	Dark Surf	hydrophytic vegetat ayer (if observed):	tion and we	enand hydrology mus					
epresentative upland sample point. No hydric soils.	Dark Surf	hydrophytic vegetat ayer (if observed):	tion and we						
epresentative upland sample point. No hydric soils.	Dark Surf Dark Surf ndicators of estrictive La Type: <u>N/A</u>	hydrophytic vegetat ayer (if observed):	tion and we				Hydric Soil Presen	t? Yes	No 🖌
epresentative upland sample point. No hydric soils.	Dark Surf ndicators of estrictive La Type: <u>N/A</u> Depth (inch	hydrophytic vegetat ayer (if observed): A	tion and we				Hydric Soil Presen	t? Yes	No
	Dark Surf ndicators of estrictive Li Type: <u>N/A</u> Depth (inch emarks:	hydrophytic vegetat ayer (if observed): A hes):	tion and we				Hydric Soil Presen	t? Yes	No
	Dark Surf ndicators of estrictive Li Type: <u>N/A</u> Depth (inch emarks: epreser	hydrophytic vegetat ayer (if observed): hes):	tion and we	ple point. No	hvdric	c soils.	Hydric Soil Presen	t? Yes	No
	Dark Surf ndicators of testrictive Li Type: <u>N/A</u> Depth (inch temarks:	hydrophytic vegetat ayer (if observed): hes):	tion and we	ple point. No	hydric	c soils.	Hydric Soil Presen	t? Yes	No
	Dark Surf ndicators of testrictive Li Type: <u>N/A</u> Depth (inch temarks:	hydrophytic vegetat ayer (if observed): hes):	iion and we	ple point. No	hydric	c soils.	Hydric Soil Presen	t?Yes	No
	Dark Surf	hydrophytic vegetat ayer (if observed): hes):	iion and we	ple point. No	hydric	c soils.	Hydric Soil Presen	t?Yes	No
	Dark Surf Indicators of Restrictive La Type: <u>N/A</u> Depth (incl Remarks: Represer	hydrophytic vegetat ayer (if observed): hes):	iion and we	ple point. No	hydric	c soils.	Hydric Soil Presen	t? Yes	No
	Dark Surf Indicators of Restrictive La Type: <u>N/A</u> Depth (incl Remarks: Represer	hydrophytic vegetat ayer (if observed): hes):	nd sam	ple point. No	hydric	c soils.	Hydric Soil Presen	t? Yes	No
	Dark Surf Indicators of Restrictive La Type: <u>N/A</u> Depth (incl Remarks: Represer	hydrophytic vegetat ayer (if observed): hes):	nd sam	ple point. No	hydric	c soils.	Hydric Soil Presen	t? Yes	No
	Dark Surf ndicators of estrictive La Type: <u>N/A</u> Depth (incl emarks:	hydrophytic vegetat ayer (if observed): hes):	nd sam	ple point. No	hydric	c soils.	Hydric Soil Presen	t? Yes	No
	Dark Surf ndicators of testrictive Li Type: <u>N/A</u> Depth (incl temarks:	hydrophytic vegetat ayer (if observed): hes):	nd sam	ple point. No	hydric	c soils.	Hydric Soil Presen	t? Yes	<u>No                                    </u>
	Dark Surf	hydrophytic vegetaf ayer (if observed): hes):	nd sam	ple point. No	hydric	c soils.	Hydric Soil Presen	t?Yes	No
	Dark Surf ndicators of testrictive Li Type: <u>N/A</u> Depth (incl temarks:	hydrophytic vegetaf ayer (if observed): hes):	nd sam	ple point. No	hydric	soils.	Hydric Soil Presen	t?Yes	No
	Dark Surf	hydrophytic vegetat ayer (if observed): hes):	nd sam	ple point. No	hydric	c soils.	Hydric Soil Presen	t? Yes	No
	Oripped Dark Surf ndicators of testrictive Li Type: <u>N/A</u> Depth (incl iemarks: tepreser	hydrophytic vegetat ayer (if observed): hes):	nd sam	ple point. No	hydric	c soils.	Hydric Soil Presen	t? Yes	No
	Original of Control of Contr	hydrophytic vegetat ayer (if observed): hes):	nd sam	ple point. No	hydric	c soils.	Hydric Soil Presen	t? Yes	No
	Oripped Dark Surf restrictive L Type: <u>N/A</u> Depth (incl emarks: epreser	hydrophytic vegetat ayer (if observed): hes):	nd sam	ple point. No	hydric	c soils.	Hydric Soil Presen	t? Yes	No

Project/Site: 1730 AEP North Delphos - Rockhill Delineation City/	County: Gomer/ Allen Sampling Date: 2021-07-02
Applicant/Owner: AEP	State: Ohio Sampling Point: 1-SP-005
Investigator(s): E. Wilson, J. Holmes	tion, Township, Range: \$020, T002, R006
Landform (hillslope, terrace, etc.): Upland	elief (concave, convex, none); Concave Slope (%); 0
Subregion (I RR or MI RA): L 99	Long: -84.194583 Datum: WGS 84
Soil Map Unit Name: SbA	NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes Vo (If no explain in Remarks )
Are Vegetation Soil or Hydrology significantly dist	Irbed? Are "Normal Circumstances" present? Ves V No
Are Vegetation, Soli, or Hydrology significantly dist	actic? (If peeded, explain any analysis in Remarks )
SUMMARY OF FINDINGS – Attach site map showing sa	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No 🖌	within a Wetland? Yes No
Wetland Hydrology Present? Yes No V	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
Upland representative sample point to describ	be the area. Sample point was taken between
two agriculture fields.	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leav	Les (B9)
High Water Table (A2) Aquatic Fauna (B13	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide O	dor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizosphe	res on Living Roots (C3) Saturation Vis ble on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduce	ed Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction	on in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface	(C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Re	emarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Pepth (inches):	
Water Table Present? Yes No Ves Depth (inches):	
Saturation Present? Yes No Ves Depth (inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
Pomorko:	
Remarks.	
No hydrology indicators present present.	

# Sampling Point: 1-SP-005

Tree Stratum (Plot cize: 30 ft r )	Absolute %	Dominant	Indicator	Dominance Test worksheet:
	<u>/// COver</u>	<u>Opecies:</u>	Status	Number of Dominant Species
l	·			That Are OBL, FACW, or FAC: 0 (A)
2	·			Total Number of Dominant
3	·			Species Across All Strata: <u>2</u> (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6				Prevalence Index worksheet:
7.				Total % Cover of: Multiply by:
	·	– Total Cov		$\frac{1}{10000000000000000000000000000000000$
Conting/Chruth Stratum (Distaire) 15 ft r		- 10(a) 00		EACW species $0$ $x_2 = 0$
<u>Saping/Shrub Stratum</u> (Plot size. <u>10 ktr</u> )				FAC species $0$ $x_3 = 0$
1	·			FACU species $30$ $x 4 = 120$
2				$\frac{1100 \text{ species}}{50} = \frac{1100 \text{ species}}{50} = \frac{1000  \text{ species}}{50} = \frac{1000 \text{ species}}{50} = 1000 \text{ speci$
3				Column Totals: $80$ (A) $370$ (B)
4				
5				Prevalence Index = B/A = 4.6
6.				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
7	·			2 - Dominance Test is >50%
E #+ -		= Total Cov	ver	3 - Prevalence Index is ≤3.0 <sup>1</sup>
Herb Stratum (Plot size: 5107)				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
1. Bromus inermis	50	<u> </u>	UPL	data in Remarks or on a separate sheet)
2. Trifolium repens	25	<ul> <li>✓</li> </ul>	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3. Zea mays	20	~		1
4. Taraxacum officinale	5		FACU	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5	·			
o	·			Definitions of Vegetation Strata:
	·			Tree – Woody plants 3 in. (7.6 cm) or more in diameter
/	·			at breast height (DBH), regardless of height.
8	·		<u> </u>	Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb - All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12				Woody vines – All woody vines greater than 3.28 ft in
	100%	= Total Cov	ver	height.
Woody Vine Stratum (Plot size: 30 ft r )				
<u>woody vine orradum</u> (Fiol Size:)				
I	·			
2	·			
3	·			Hydrophytic
4				Present? Yes No
		= Total Cov	ver	
Remarks: (Include photo numbers here or on a separate s	sheet.)			
No hydrophytic vegetation present				

Profile Desc	ription: (Describe	to the depth	needed to docu	ment the i	ndicator	or confirm	n the absence	of indicators.)	
Depth	Matrix		Redo	x Feature	s	0			
<u>(inches)</u>	Color (moist)		Color (moist)	%	Type'	Loc <sup>2</sup>	Texture	Remarks	
0 - 20	10YR 4/3	100					Sandy Loam		
-									
							·		
-									
-									
							· <u> </u>		
-									
		·							
-									
-									
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM=F	Reduced Matrix, M	S=Maskec	Sand Gra	ains.	<sup>2</sup> Location:	: PL=Pore Lining, M=Ma	trix.
Hydric Soil I	Indicators:						Indicators	for Problematic Hydric	Soils <sup>°</sup> :
Histosol	(A1)	_	Polyvalue Belo	w Surface	(S8) ( <b>LRF</b>	R,	2 cm N	luck (A10) ( <b>LRR K, L, M</b>	LRA 149B)
Histic Ep	oipedon (A2)		MLRA 149B	)			Coast I	Prairie Redox (A16) (LRF	₹ K, L, R)
Black Hi	stic (A3)	-	_ Thin Dark Surfa	ace (S9) ( <b>L</b>	_RR R, MI	LRA 149B	) 5 cm M	lucky Peat or Peat (S3) (	LRR K, L, R)
Hydroge	n Sulfide (A4)	_	_ Loamy Mucky I	Mineral (F	1) ( <b>LRR K</b>	, L)	Dark S	urface (S7) (LRR K, L)	
Stratified	l Layers (A5)	- (444)	_ Loamy Gleyed	Matrix (F2	.)		Polyva	lue Below Surface (S8) (	
Depleted	Below Dark Surfac	e (A11) _	Depleted Matrix	K (F3)			I nin Da	ark Sufface (S9) (LRR K	, L)
Thick Da	ark Surface (ATZ) Jucky Minoral (S1)	_	_ Redux Dark Su	Surface (FO)	7)		IION-IVIa	anganese Masses (F12)	(LKKK, L, K)
Sandy IV	lucky Milleral (ST)	-	_ Depleted Dark	Sunace (F	7)		Fleama	Spodia (TAB) ( <b>MI BA 1</b> 44	) (IVILKA 1490)
Sandy B	edox (S5)	—	_ Redux Depress				Nesic	arent Material (F21)	iA, 143, 143D)
Stripped	Matrix (S6)						Keura	hallow Dark Surface (TE	12)
Dark Su	rface (S7) (I RR R I						Other (	(Explain in Remarks)	12)
<sup>3</sup> Indicators of	hydrophytic vegetat	tion and wetla	and hydrology mus	st be prese	ent, unless	s disturbed	or problematic		
Restrictive L	_aver (if observed):		, ,,	•	,		Τ.		
Type No	one								
Death (in							Hydric Soil	Present? Ves	No 🖌
Depth (inc	ches):						Tryune Son		
Remarks:									
No hvdri	ic soils prese	ent							
i të nyan									
1									

#### WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 1730 AEP North Delphos - Rockhill Deli	neation	City/Co	ounty:	omer/A	llen	Samp	ling Date:	2021-06-	29
Applicant/Owner: AEP					State: Ohic	Samp	ling Point:	1-SP-006	;
Investigator(s): J. Holmes, E. Wilson		Sectior	n, Town	ship, Ran	<sub>ge:</sub> <u>S003 T003</u>	R006			
Landform (hillslope, terrace, etc.): Upland, Flat			Loo	cal relief (	concave, convex, r	none): Linea	ar		
Slope (%): 0 Lat: 40.811277		Long:	-84.1	50712		Datum	WGS 8	34	
Soil Map Unit Name: HrB					NWI cl	assification: _	N/A		
Are climatic / hydrologic conditions on the site typical for this	time of ye	ar? Ye	s	No	(If no, explai	n in Remarks	s.)		
Are Vegetation, Soil, or Hydrology si	ignificantly	disturb	ed?	Are "N	Normal Circumstan	ces" present	? Yes	✓ №	
Are Vegetation, Soil, or Hydrology n	aturally pro	blemat	ic?	(If nee	eded, explain any a	answers in Re	emarks.)		
SUMMARY OF FINDINGS – Attach site map	showing	sam	pling	point lo	cations, trans	ects, imp	ortant fe	eatures, e	tc.
Hydrophytic Vegetation Present? Yes No	· ·								
Hydric Soil Present? Yes No	⊳_ <b>∕</b> _		Is the S	Sampled /	Area				
Wetland Hydrology Present? Yes No	·		within	a Wetland	d? Yes	N	lo	-	
Remarks:									
Upland sample point to characterize	e uplar	nd co	ondit	ions.	No wetland	l criteria	prese	ent.	
VEGETATION – Use scientific names of plants									
	Absolute	Domi	nant In	dicator	Dominance Test	worksheet:			
Tree Stratum (Plot size: 30 ft r )	% Cover	Speci	ies?	Status	Number of Domin	ant Species			
1					That Are OBL, FA	CW, or FAC	0	(A)	
2					Total Number of [	Dominant			
3					Species Across A	II Strata:	2	(B)	
4					Percent of Domin	ant Species			
5					That Are OBL, FA	CW, or FAC	0	(A/	B)
Sanling/Shrub Stratum (Plot size: 15 ft r )		= Tota	l Cover	ŀ	Prevalence Inde	x worksheet	:		$\neg$
1					Total % Cove	er of:	Multip	lv by:	
2					OBL species	)	$x_{1} = 0$	<u>19 6 j.</u>	
3					FACW species	)	$x_{2} = 0$		
4					FAC species	)	$x_{3} = 0$		
5					FACU species	100	x 4 = 40	0	
··		= Total	l Cover		UPL species	)	x 5 = 0		
Herb Stratum (Plot size: 5 ft r )					Column Totals:	100	(A) 40	0 (B	3)
1. Lolium perenne	45		·	ACU			4.0		
2. Phleum pratense	40		<u> </u>	ACU	Prevalence	Index = B/A	= 4.0		
3. Irifolium pratense			— <u>-</u>	ACU	Hydrophytic Veg	etation Indi	cators:		
4. Lotus corniculatus	5		F	ACU	1 - Rapid Tes	st for Hydroph	nytic Vege	tation	
5					2 - Dominand	ce l'est is >50	)%		
6					3 - Prevalenc	e Index is ≤3	.0 <sup>-</sup>		
7					4 - Morpholog data in Re	gical Adaptat emarks or on	ions' (Prov a separate	vide supporti e sheet)	ng
8					Problematic I	Hydrophytic \	/egetation	<sup>1</sup> (Explain)	
9						.,	egetation	(_,,p.c.,)	
10	100%				<sup>1</sup> Indicators of hvd	ric soil and w	etland hvo	Iroloav must	
Woody Vine Stratum (Plot size: 30 ft r )	100%	= Tota	l Cover		be present, unles	s disturbed o	r problema	atic.	
1				ľ	l la colore colora de la color				
2					Vegetation				
		= Total	l Cover		Present?	Yes	No	<i>v</i>	
Remarks: (Include photo numbers here or on a separate s	sheet.)								-
Agriculture field	,								
Ayriculture nelu									

Profile Desc	rintion: (Describe	to the depth r	needed to docur	nent the in	dicator	or confin	m the absence	of indicators )
Dopth	Motrix	to the depth i	Redea to docal	v Ecoturoo	Turcator		in the absence	
(inches)	Color (moist)	%	Color (moist)	<u>x reatures</u> %		Loc <sup>2</sup>	Texture	Remarks
0 - 20	10YR 4/3	100					Silt Loam	
-								
-								
-								
-								
<sup>1</sup> Type: C=C	oncentration D=Den	letion RM=Re	duced Matrix MS	S=Masked	Sand Gra	ains	<sup>2</sup> Location	PI =Pore Lining M=Matrix
Hydric Soil	Indicators:		duood matrix, m	o muoneu	ound on	anto.	Indicators	for Problematic Hydric Soils <sup>3</sup> :
Histosol	(Δ1)		Sandy (	Sleved Mat	triv (SA)		Coast	Prairie Redox (A16)
Histic Fr	vinedon (A2)		Sandy F	Redox (S5)			Dark S	urface (S7)
Black Hi	stic (A3)		Stripped	Matrix (Se	, 6)		Iron-Ma	anganese Masses (F12)
Hydroge	en Sulfide (A4)		Loamy l	Mucky Mine	eral (F1)		Very S	hallow Dark Surface (TF12)
Stratified	d Layers (A5)		Loamy	Gleyed Mat	trix (F2)		Other (	Explain in Remarks)
2 cm Mu	ıck (A10)		Deplete	d Matrix (F	3)			
Depleted	d Below Dark Surfac	e (A11)	Redox [	Dark Surfac	ce (F6)			
Thick Da	ark Surface (A12)		Deplete	d Dark Sur	face (F7)		<sup>3</sup> Indicators	of hydrophytic vegetation and
Sandy M	lucky Mineral (S1)		Redox [	Depression	is (F8)		wetland	l hydrology must be present,
5 cm Mu	icky Peat or Peat (S	3)					unless	disturbed or problematic.
Restrictive I	Layer (if observed)	:						
Туре:			_				Undria Cail	Present? Yes No Y
Depth (in	ches):		_				Hydric Soli	Present? fes No
Remarks:								
ινο πγαι	ric soli prese	ent						
HYDROLO	GY							
Wetland Hy	drology Indicators:							
Primary India	cators (minimum of c	one is required;	check all that ap	ply)			Seconda	ry Indicators (minimum of two required)
Surface	Water (A1)		Water-Sta	ined Leave	es (B9)		Surfa	ace Soil Cracks (B6)
High Wa	ater Table (A2)		Aquatic Fa	una (B13)	. ,		Draii	nage Patterns (B10)
Saturatio	on (A3)		True Aqua	tic Plants (	(B14)		Drv-	Season Water Table (C2)
Water M	larks (B1)		Hydrogen	Sulfide Od	or (C1)		Crav	fish Burrows (C8)
Sedimer	at Deposits (B2)		Oxidized F	?hizospher	es on Livi	ina Roots	(C3) Satu	ration Visible on Aerial Imagery (C9)
Drift Der	nosits (B3)		Presence	of Reduced	d Iron (C4	1)	Stun	ted or Stressed Plants (D1)
	at or Crust (B4)		Recent Iro	n Reductio	n in Tille	n d Soile (C	6) <u>Geo</u>	morphic Position (D2)
Iron Der	nosits (B5)		Thin Muck	Surface (C		0) 6100 0	5, <u> </u>	-Neutral Test (D5)
	on Visible on Aericl	mageny (P7)		Voll Data /				
Sparach	Vegetated Concern		Gauge of	vieli Data (	narke)			
Oparsely	vegetated Concave	e Sunace (D0)		an n rer	naiks)			
Ourface Miles								
Surface Wat	er Present? Y	es No	Depth (in	cnes):		-		
Water Table	Present? Y	es No	<ul> <li>Depth (in</li> </ul>	ches):				

Yes \_\_\_\_\_ No \_\_\_\_ Depth (inches): \_\_\_

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Saturation Present? (includes capillary fringe)

Remarks:

Wetland Hydrology Present? Yes \_\_\_\_\_ No \_\_\_\_

#### WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: AEP North Delphos - Rockhill	City/County: Lima/ Allen		Sampling Date:	2021-06-29
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-SP-007
Investigator(s): J. Holmes E. Wilson	Section, Township, Range: _	S002 T003	R006	
Landform (hillslope, terrace, etc.): Upland, Flat	Local relief (conca	ve, convex, none):	None	
Slope (%): <u>1</u> Lat: <u>40.805174</u>	Long: -84.144109		Datum: WGS	84
Soil Map Unit Name: PmA		NWI classific	ation: PEM1A	d
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🔽 No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	l Circumstances" p	oresent? Yes	✓ №
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	rs in Remarks.)	

#### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	Is the Sampled Area within a Wetland?	Yes	No
Remarks:					

# Representative of existing ROW

#### **VEGETATION** – Use scientific names of plants.

20 ft r	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 Tt T)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>2</u> (B)
4				Development of Development
5				That Are OBL_EACW or EAC: 0 (A/B)
		= Total Cov	ver	
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1				Total % Cover of:Multiply by:
2				OBL species 0 x 1 = 0
3				FACW species x 2 =
4.				FAC species 0 x 3 = 0
5				FACU species 95 x 4 = 380
		= Total Cov	/er	UPL species $5$ x 5 = $25$
Herb Stratum (Plot size: 5 ft r )		10101 00		Column Totals: 100 (A) 405 (B)
1. Solidago canadensis	30	<ul> <li>✓</li> </ul>	FACU	
2. Medicago sativa	25	~	FACU	Prevalence Index = B/A = 4.1
3. Asclepias syriaca	15		FACU	Hydrophytic Vegetation Indicators:
4. Dipsacus fullonum	15		FACU	1 - Rapid Test for Hydrophytic Vegetation
5. Erigeron annuus	10		FACU	2 - Dominance Test is >50%
6. Apocynum androsaemifolium	5		UPL	3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8.				data in Remarks or on a separate sheet)
9.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10				
···	100%	= Total Cov		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )		- 101ai 001		be present, unless disturbed or problematic.
1				Hydrophytic
2.				Vegetation
		= Total Cov	/er	Present? Yes No
Remarks: (Include photo numbers here or on a separate	sheet.)			
A propondorance of hydrophytic yr	aatati	on ic n	at pres	opt
A preponderance of nydrophytic ve	egetatio		or pres	ent

Profile Desc	ription: (Describe	to the dep	oth needed to docur	nent the i	indicator	or confirm	m the absence of indicators.)				
Depth	Matrix		Redo	x Feature	s						
(inches)	Color (moist)	%	Color (moist)	%	_Type <sup>1</sup>	_Loc <sup>2</sup>	Texture Remarks				
0 - 9	10YR 4/3	100					Sandy Clay Loam				
<u> </u>	10YR 4/2	95	10YR 4/6	5	<u> </u>	<u>M</u>	Clay Loam				
-											
-											
								_			
							· ·	—			
								—			
-											
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, MS	S=Masked	d Sand Gr	ains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.				
Hydric Soil	indicators:						Indicators for Problematic Hydric Soils':				
Histosol	(A1)		Sandy C	Gleyed Ma	atrix (S4)		Coast Prairie Redox (A16)				
Histic Ep	pipedon (A2)		Sandy F	Redox (S5	5)		Dark Surface (S7)				
Black Hi	stic (A3)		Stripped	Matrix (S	56)		Iron-Manganese Masses (F12)				
Hydroge	n Sulfide (A4)		Loamy I	Mucky Mi	neral (F1)		Very Shallow Dark Surface (TF12)				
Stratified	Layers (A5)		Loamy (	Gleyed M	atrix (F2)		Other (Explain in Remarks)				
2 cm Mu	ick (A10)		<u>V</u> Deplete	d Matrix (	F3)						
Depleted	Below Dark Surfac	e (A11)	Redox [	Dark Surfa	ace (F6)		3				
Thick Da	ark Surface (A12)		Deplete	d Dark Su	Inface (F7	)	Indicators of hydrophytic vegetation and				
Sandy M	lucky Mineral (S1)	•	Redox I	Jepressio	ns (F8)		wetland hydrology must be present,				
5 cm Mu	icky Peat or Peat (S	3)					unless disturbed or problematic.				
Restrictive	_ayer (if observed)										
Type:							Hydric Soil Present? Yes V				
Depth (ind	ches):							-			
Remarks:							•				
The soli	prome mee	is the	chiena for h	aving	a uep	ieteu i	matrix				
HYDROLO	GY										
Wetland Hyd	drology Indicators:										
Primary Indic	ators (minimum of c	one is requi	ired; check all that ap	(ylq			Secondary Indicators (minimum of two require	ed)			
Surface	Water (A1)		Water-Sta	ined Leav	es (B9)		Surface Soil Cracks (B6)				
High Wa	ter Table (A2)		Aquatic Fa	una (B13	)		Drainace Patterns (B10)				
Saturatio	on (A3)		True Aqua	tic Plants	, (B14)		Drv-Season Water Table (C2)				
Water M	arks (B1)		Hydrogen	Sulfide O	dor (C1)		Cravfish Burrows (C8)				
Sedimer	nt Deposits (B2)		Oxidized F	Rhizosphe	res on Liv	ving Roots	(C3) Saturation Visible on Aerial Imagery (C9)				
Drift Der	(B3)		Presence	of Reduce	d Iron (C	4)	Stunted or Stressed Plants (D1)				
Algal Ma	at or Crust (B4)		Recent Iro	n Reducti	on in Tille	d Soils (Cl	(D1) Geomorphic Position (D2)				
Iron Den	(B5)		Thin Muck	Surface	(C7)	a cono (co	EAC-Neutral Test (D5)				
	on Visible on Aerial	magery (B	Z) Gauge or J	Well Data							
Sparsely	Vegetated Concave	e Surface (	B8) Other (Exc	plain in Re	emarks)						
Field Obser	vations:				,						
Surface Wat	er Present? Y	<b>6</b> 6	No V Depth (in	ches).							
Water Table	Present? V	<u> </u>	No V Depth (in	chee):							
Saturation P	resent? V	es	No <u>Pepth (inc</u>	ches)			land Hydrology Present? Yes No				
(includes cap	billary fringe)	cs		photos pr	evious in		if available				
No primarv	and or seconda	ary wetla	nd hydrology ind	licators	were pr	esent at	t the time of sampling				
Remarks:		-			•		. 3				

#### WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: AEP North Delphos - Rockhill	City/County: Lima / Allen		Sampling Date:	2021-06-29
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-SP-008
Investigator(s): J. Holmes E. Wilson	Section, Township, Range:	_S012 T003 R	R006	
Landform (hillslope, terrace, etc.): Upland, Flat	Local relief (conca	ve, convex, none):	None	
Slope (%): <u>1</u> Lat: <u>40.788693</u>	Long: -84.126655		Datum: WGS 8	4
Soil Map Unit Name: PmA		NWI classific	ation: N/A	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🗾 No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	l Circumstances" p	present? Yes	No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	rs in Remarks.)	

#### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	Is the Sampled Area within a Wetland?	Yes	No
Remarks:					

# Representative of field edges along wheat field.

**VEGETATION** – Use scientific names of plants.

20.64 -	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1	·			That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>2</u> (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
		= Total Cov	/er	( , ,
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1				Total % Cover of:Multiply by:
2				OBL species 0 x 1 = 0
3				FACW species 0 x 2 = 0
4				FAC species 0 x 3 = 0
5				FACU species 100 x 4 = 400
		= Total Cov	/er	UPL species 0 x 5 = 0
Herb Stratum (Plot size: 5 ft r )				Column Totals: 100 (A) 400 (B)
1. Lolium perenne	35	<u> </u>	FACU	
2. Phleum pratense	25	<u> </u>	FACU	Prevalence Index = B/A = <u>4.0</u>
<sub>3.</sub> Dipsacus fullonum	15		FACU	Hydrophytic Vegetation Indicators:
4. Medicago sativa	15		FACU	1 - Rapid Test for Hydrophytic Vegetation
5. Erigeron annuus	10		FACU	2 - Dominance Test is >50%
6.				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7.				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
9				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10				
10	100%	- Total Cox		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r )		- 10(a) 000		be present, unless disturbed or problematic.
1.				Hydrophytic
2.				Vegetation
		= Total Cov	/er	Present? Yes No
Remarks: (Include photo numbers here or on a separate s	sheet.)			
A preponderance of hydrophytic ve	egetatio	on is no	ot pres	ent

Profile Description: (Describe to the dep	th needed to document the indicator or c	confirm the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist)%Type <sup>1</sup> _ L	_oc <sup>2</sup> Texture Remarks
<u>0-</u> <b>20</b> <u>10YR 4/3</u> <u>100</u>		Sandy Clay Loam
-		
<u> </u>		
'Type: C=Concentration, D=Depletion, RM	Reduced Matrix, MS=Masked Sand Grains	s. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:		Indicators for Problematic Hydric Soils":
Histosol (A1)	Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
Histic Epipedon (A2)	Sandy Redox (S5)	Dark Surface (S7)
Black Histic (A3)	Stripped Matrix (S6)	Iron-Manganese Masses (F12)
Hydrogen Suinde (A4)	Loamy Mucky Mineral (F1)	Very Snallow Dark Surface (TFT2)
2 cm Muck (A10)	Depleted Matrix (F2)	
Depleted Below Dark Surface (A11)	Depleted Matrix (13)	
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	wetland hydrology must be present.
5 cm Mucky Peat or Peat (S3)		unless disturbed or problematic.
Restrictive Layer (if observed):		
Туре:		
Depth (inches):		Hydric Soil Present? Yes No
Remarks:		
The soli profile does not m	leet the criteria for any hyd	aric soil indicators
HYDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is requi	red: check all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)
Saturation (A3)	True Aquatic Plants (B14)	Drv-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Cravfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living	Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Sc	pils (C6) Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B	7) Gauge or Well Data (D9)	
Sparsely Vegetated Concave Surface (	B8) Other (Explain in Remarks)	
Field Observations:		
Surface Water Present? Yes	No Pepth (inches):	
Water Table Present? Ves	No V Depth (inches):	
Saturation Procent? Voc	No <u> </u>	Wetland Hydrology Present2 Ves
(includes capillary fringe)		
No primary and or secondary wetla	nd hydrology indicators were prese	ent at the time of sampling
Remarks:	•	. 2

#### WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: AEP North Delphos - Rockhill	City/County: Lima / Allen		Sampling Date:	2021-06-30
Applicant/Owner: AEP	St	<sub>ate:</sub> Ohio	Sampling Point:	1-SP-009
Investigator(s): J. Holmes E. Wilson	Section, Township, Range:	S019	T003 R007	
Landform (hillslope, terrace, etc.): Upland, Flat	Local relief (concave	convex, none):	None	
Slope (%): <u>1</u> Lat: <u>40.767770</u>	Long: -84.104351		Datum: WGS 8	34
Soil Map Unit Name:BSA		_ NWI classific	ation: PFO1A	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🔽 No (If	no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal C	ircumstances" p	present? Yes	✓ №
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, ex	olain any answe	rs in Remarks.)	

#### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	Is the Sampled Area within a Wetland?	Yes	No
Remarks:					

# Representative of maintained yard

#### **VEGETATION** – Use scientific names of plants.

20 ft -	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>3</u> (B)
4				
5.				Percent of Dominant Species That Are OBL_EACW_or_EAC: 33 (A/B)
		= Total Co	ver	
Sapling/Shrub Stratum (Plot size: 15 ft r )				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species 0 x 1 = 0
3.				FACW species 0 x 2 = 0
4				FAC species 40 x 3 = 120
5				FACU species 60 x 4 = 240
···		= Total Co	ver	UPL species $0 \times 5 = 0$
Herb Stratum (Plot size: 5 ft r)		- 101ai 00	401	Column Totals: $100$ (A) $360$ (B)
1. Poa pratensis	40	~	FAC	
2. Lolium perenne	35	~	FACU	Prevalence Index = B/A = <u>3.6</u>
3. Phleum pratense	25	~	FACU	Hydrophytic Vegetation Indicators:
4.				1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
0	·			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
9	·			
10				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft r	100 /₀	= Total Co	ver	be present, unless disturbed or problematic.
1				Hadaadada
2	·			Narophytic Vegetation
Z				Present? Yes No
Pomarke: (Include photo numbers here or on a concrete o	choot )		ver	
include proto numbers here of off a separate s	sileet.)			
A preponderance of hydrophytic ve	egetatio	on is no	ot pres	ent

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth	Matrix		Redox	x Features			
(inches)	Color (moist)	%	Color (moist)	<u>%</u> Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - <b>20</b>	10YR 4/3	100				Sandy Clay Loam	
-							
-							
-							
-							
<sup>1</sup> Type: C=Co	oncentration, D=Dep	pletion, RM=F	Reduced Matrix, MS	S=Masked Sand G	rains.	<sup>2</sup> Location: PL:	=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:					Indicators for F	Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy G	Bleyed Matrix (S4)		Coast Prairi	ie Redox (A16)
Histic Ep	pipedon (A2)		Sandy R	Redox (S5)		Dark Surfac	ce (S7)
Black Hi	stic (A3)		Stripped	Matrix (S6)		Iron-Manga	nese Masses (F12)
Hydroge	n Sulfide (A4)		Loamy M	Mucky Mineral (F1	)	Very Shallo	w Dark Surface (TF12)
Stratified	Layers (A5)		Loamy C	Gleyed Matrix (F2)		Other (Expl	ain in Remarks)
2 cm Mu	ick (A10)		Depleted	d Matrix (F3)			
Depleted	Below Dark Surfac	e (A11)	Redox D	ark Surface (F6)			
Thick Da	ark Surface (A12)		Depleted	d Dark Surface (F7	')	<sup>3</sup> Indicators of hy	ydrophytic vegetation and
Sandy M	lucky Mineral (S1)		Redox D	Depressions (F8)		wetland hyd	rology must be present,
5 cm Mu	icky Peat or Peat (S	3)				unless distu	irbed or problematic.
Restrictive L	_ayer (if observed)	:					
Туре:							
Depth (inc	ches):					Hydric Soil Pres	ent? Yes No
Remarks:							
The soil	profile doe	s not me	eet the crite	ria for any	hydric	soil indicato	ors
HYDROLO	GY						
Wetland Hyd	drology Indicators:	:					
Primary Indic	ators (minimum of o	one is require	d: check all that ap	ply)		Secondary In	dicators (minimum of two required)
Surface	Water (A1)		Water-Stai	ned Leaves (B9)		Surface S	Soil Cracks (B6)
High Wa	ter Table (A2)			una (B13)		Ourlace C	Patterns (B10)
	(A2)			tic Plants (P14)		Drainage	con Water Table (C2)
				Cultide Oder (C1)		Dry-Seas	
Valer IVI	arks (DT)				ving Deate	(C2) Crayiish	n Visible on Asriel Imageny (CO)
Sedimer				nizospheres on Li	Ving Roots	(C3) Saturatio	n Visible on Aerial Imagery (C9)
	DOSITS (B3)		Presence o	of Reduced Iron (C	4)	Stunted c	or Stressed Plants (D1)
	it or Crust (B4)		Recent Irol	n Reduction in Till	ed Solls (Ce	b) Geomorp	bhic Position (D2)
Iron Dep	osits (B5)		Thin Muck	Surface (C7)		FAC-Neu	itral Test (D5)
Inundatio	on Visible on Aerial	Imagery (B7)	Gauge or V	Well Data (D9)			
Sparsely	Vegetated Concav	e Surface (B	<li>B) Other (Exp</li>	lain in Remarks)			
Field Observ	vations:						
Surface Wate	er Present?	'es N	o Depth (inc	ches):			
Water Table	Present?	′es N	o 🗹 Depth (inc	ches):			
Saturation Pr	resent?	′es N	o 🗾 Depth (inc	ches):	Wetl	and Hydrology Pre	sent? Yes No
(includes cap	oillary fringe)						
Describe Red	corded Data (stream	n gauge, mon	ntoring well, aerial p	onotos, previous in	spections),	it available:	
No primary	and or seconda	ary wetlan	d hydrology ind	icators were p	resent at	the time of sam	pling
Remarks:							

#### WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: AEP North Delphos - Rockhill	City/County: Lima / Allen		Sampling Date:	2021-06-30		
Applicant/Owner: AEP		State: Ohio	Sampling Point:	1-SP-010		
Investigator(s): J. Holmes E. Wilson	Section, Township, Range: _	S013	3 T003 R006	6		
Landform (hillslope, terrace, etc.): Upland, Flat	Local relief (conca	ive, convex, none):	None			
Slope (%): <u>1</u> Lat: <u>40.778708</u>	Long: -84.113572		Datum: WGS 8	34		
Soil Map Unit Name:PmA		NWI classific	ation: N/A			
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🔽 No	(If no, explain in R	emarks.)			
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances" p	oresent? Yes	✓ №		
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	rs in Remarks.)			
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.						

Hydrophytic Vegetation Present?	Yes		Is the Sampled Area		
Wetland Hydrology Present?	Yes	No	within a Wetland?	Yes	No
Remarks:					

# Representative of existing ROW. Recently mowed. Veg disturbed

**VEGETATION** – Use scientific names of plants.

00 ()	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2.				
3				Total Number of Dominant Species Across All Strata:
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
15 ft r		= Total Cov	/er	
Sapling/Shrub Stratum (Plot size: 13 11 )				Prevalence Index worksheet:
1				Total % Cover of:Multiply by:
2				OBL species 0 x 1 = 0
3.				FACW species 0 x 2 = 0
4				FAC species $0$ x 3 = $0$
				EACLI species $100$ $x_{d} = 400$
5				$\frac{1}{100} \text{ species } \frac{1}{100}  species$
Herb Stratum (Plot size: 5 ft r		= Total Cov	ver	UPL species $\frac{0}{100}$ $x = \frac{0}{400}$
Bromus inermis	40	~	FACU	Column Totals: 100 (A) 400 (B)
1	20			Dravelance index $= P(A = 4.0)$
2. Thronum repens	30		FACU	
3. Solidago canadensis		<u> </u>	FACU	Hydrophytic Vegetation Indicators:
4. Lolium perenne	10		FACU	1 - Rapid Test for Hydrophytic Vegetation
5.				2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
<i>I</i>				data in Remarks or on a separate sheet)
8				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
9				
10				Indicators of hudric coll and wetland hudrals average
00 (1	100%	= Total Cov	/er	he present unless disturbed or problematic
Woody Vine Stratum (Plot size: 30 ft r )				
1				Hydrophytic
2				Vegetation
		= Total Cov	ver	Present? Yes No
Remarks: (Include photo numbers here or on a separate s	heet.)			
A preponderance of hydrophytic ve	egetation	on is no	ot pres	ent

Profile Desc	ription: (Describe	to the depth	needed to docur	nent the i	indicator	or confirn	n the absence of in	ndicators.)	
Depth	Matrix		Redo	x Feature	S				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks	
0-20	10YR 4/3	_ 100 _					Sandy Clay Loam		
-									
-									
					·				
					·				
-									
<sup>1</sup> Type: C=Co	oncentration, D=Dep	pletion, RM=F	Reduced Matrix, M	S=Masked	d Sand Gra	ains.	<sup>2</sup> Location: PL	-=Pore Lining, M=Mat	ix.
Hydric Soil I	ndicators:						Indicators for	Problematic Hydric S	Soils <sup>3</sup> :
Histosol	(A1)		Sandy (	Gleyed Ma	atrix (S4)		Coast Prai	rie Redox (A16)	
Histic Ep	pipedon (A2)		Sandy F	Redox (S5	5)		Dark Surfa	ice (S7)	
Black His	stic (A3)		Stripped	d Matrix (S	56)		Iron-Manga	anese Masses (F12)	
Hydroge	n Sulfide (A4)		Loamy I	Mucky Mi	neral (F1)		Very Shallo	ow Dark Surface (TF1:	2)
Stratified	Layers (A5)		Loamy	Gleyed Ma	atrix (F2)		Other (Exp	olain in Remarks)	
2 cm wu Depleter	ICK (ATU) I Below Dark Surfac	ο (Δ11)	Depiete	u Matrix ( Jark Surfs	F3) 200 (E6)				
Thick Da	ark Surface (A12)		Redox R	d Dark Suna	urface (F7)		<sup>3</sup> Indicators of h	vdrophytic vegetation	and
Sandy M	lucky Mineral (S1)		Redox [	Depressio	ns (F8)		wetland hyd	drology must be prese	nt,
5 cm Mu	cky Peat or Peat (S	3)	—		. ,		unless dist	urbed or problematic.	
Restrictive L	ayer (if observed)	:							
Туре:									
Depth (inc	ches):						Hydric Soil Pre	sent? Yes	No
Remarks:							1		
The soil	profile doe	s not me	et the crite	eria fo	r any ł	nydric	soil indicate	ors	
HYDROLO	GY								
Wetland Hyd	drology Indicators	:							
Primary Indic	ators (minimum of o	one is require	d; check all that ap	ply)			Secondary Ir	ndicators (minimum of	two required)
Surface	Water (A1)		Water-Sta	ined Leav	res (B9)		Surface	Soil Cracks (B6)	
High Wa	ter Table (A2)		Aquatic Fa	una (B13	5)		Drainage	e Patterns (B10)	
Saturatio	on (A3)		True Aqua	tic Plants	(B14)		Dry-Sea	son Water Table (C2)	
Water M	arks (B1)		Hydrogen	Sulfide O	dor (C1)		Crayfish	Burrows (C8)	
Sedimen	nt Deposits (B2)		Oxidized F	Rhizosphe	eres on Liv	ing Roots	(C3) Saturatio	on Visible on Aerial Im	agery (C9)
Drift Dep	oosits (B3)		Presence	of Reduce	ed Iron (C4	4)	Stunted	or Stressed Plants (D	1)
Algal Ma	t or Crust (B4)		Recent Iro	n Reducti	ion in Tille	d Soils (Ce	6) Geomor	phic Position (D2)	
Iron Dep	osits (B5)		Thin Muck	Surface	(C7)		FAC-Ne	utral Test (D5)	
Inundatio	on Visible on Aerial	Imagery (B7)	Gauge or	Well Data	(D9)				
Sparsely	Vegetated Concav	e Surface (B8	3) Other (Exp	plain in Re	emarks)				
Field Observ	vations:								
Surface Wate	er Present?	/es No	o Depth (in	ches):		_			
Water Table	Present?	es No	o Depth (in	ches):		_			
Saturation Pr (includes cap	esent? Noillary fringe)	/es No	o Depth (in	ches):		_ Wetl	and Hydrology Pro	esent? Yes	No
Describe Rec	corded Data (stream	n gauge, mon	itoring well, aerial	photos, pr	evious ins	pections),	if available:	nnling	
No primary and or secondary wetland hydrology indicators were present at the time of sampling									

Project/Site: Gomer Station &	Lima-Fort Wayne 138k	V Tie-in Project City/Co	unty: Gomer/Allen		Sampling Date: 2021-06-29
Applicant/Owner: AEP				<sub>State:</sub> Ohio	Sampling Point: 3-SP-001
Investigator(s): Josh Holme	es, Ethan Wilson	Section	, Township, Range: S	28 T2 R6	
Landform (hillslope, terrace, e	<sub>tc.):</sub> Upland, Flat	Local relie	f (concave, convex, no	<sub>ne):</sub> None	Slope (%): 1
Subregion (LRR or MLRA): L	.99 La	<sub>t:</sub> 40.845311	Lona: -84	1.177684	Datum: WGS 84
Soil Map Unit Name: CyA				NWI classific	ation: N/A
Are climatic / hydrologic condi	tions on the site typical	for this time of year? Ye	s 🖌 No	(If no explain in R	emarks)
Are Vegetation <b>V</b> Soil	<ul> <li>or Hydrology</li> </ul>	significantly disturbe	ed? Are "Norma	l Circumstances" n	resent? Yes 🗸 No
Are Vegetation, Soil	, or Hydrology	naturally problemati	ic? (If needed a	explain any answer	rs in Remarks )
SUMMARY OF FINDING	GS – Attach site r	map showing samp	oling point location	ons, transects,	, important features, etc.
Hydrophytic Vegetation Pres	sent? Yes		ls the Sampled Area within a Wetland?	Yes	No 🖌
Wetland Hydrology Present?	Yes	No	If ves ontional Wetland		
Remarks: (Explain alternativ	ve procedures here or in	a separate report.)	n yes, optional wetland		
Upland sample is I	not associated	with a wetland	. Sample point	is to show	upland
characteristics with	thin project are	22			
characteristics wi	tim project are	<i>.</i>			
<u>.</u>					
Site dominated by	agricultural ro	w crops (soy)			
HYDROLOGY					
Wetland Hydrology Indicat	ors:			Secondary Indicat	tors (minimum of two required)
Primary Indicators (minimum	i of one is required; che	ck all that apply)	(D0)	Surface Soil (	Cracks (B6)
High Water Table (A2)		_ Water-Stained Leaves	(B9)	Drainage Pat	terns (B10)
Saturation (A3)		Marl Deposits (B15)			Nater Table (C2)
Water Marks (B1)		Hvdrogen Sulfide Odor	· (C1)	Cravfish Burr	rows (C8)
Sediment Deposits (B2)		Oxidized Rhizospheres	on Living Roots (C3)	Saturation Vi	s ble on Aerial Imagery (C9)
Drift Deposits (B3)		Presence of Reduced I	ron (C4)	Stunted or St	ressed Plants (D1)
Algal Mat or Crust (B4)	_	Recent Iron Reduction	in Tilled Soils (C6)	Geomorphic	Position (D2)
Iron Deposits (B5)	_	_ Thin Muck Surface (C7	<i>'</i> )	Shallow Aqui	tard (D3)
Inundation Visible on Ae	rial Imagery (B7)	Other (Explain in Rema	arks)	Microtopogra	phic Relief (D4)
Sparsely Vegetated Cor	ncave Surface (B8)			FAC-Neutral	Test (D5)
Field Observations:					
Surface Water Present?	Yes No	_ Depth (inches):			
Water Table Present?	Yes No	_ Depth (inches):			
Saturation Present? (includes capillary fringe)	Yes No _	_ Depth (inches):	Wetland H	lydrology Presen	t? Yes No
Describe Recorded Data (str	ream gauge, monitoring	well, aerial photos, previ	ous inspections), if ava	ilable:	
Demortro					
Remarks:					
No hydrology pres	ent				

I

# Sampling Point: <u>3-SP-001</u>

Tree Stratum (Plat size: 30 ft r )	Absolute	Dominant	t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft 1</u> )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3			<u> </u>	Species Across All Strata: 0 (B)
4.				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
0			·	
0			·	Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Co	ver	OBL species $\frac{0}{1}$ x 1 = $\frac{0}{1}$
Sapling/Shrub Stratum (Plot size: 15 ft r )				FACW species $\frac{0}{x^2}$ $x^2 = \frac{0}{x^2}$
1.				FAC species $0   x 3 = 0$
2				FACU species 25 x 4 = 100
2			·	UPL species $0   x 5 = 0$
3			·	Column Totals: <u>25</u> (A) <u>100</u> (B)
4			<u> </u>	
5				Prevalence index = $B/A = -30$
6			. <u> </u>	Hydrophytic Vegetation Indicators:
7.				1 - Rapid Test for Hydrophytic Vegetation
		– Total Co	vor	2 - Dominance Test is >50%
but the contract of the state o			vei	3 - Prevalence Index is ≤3.0 <sup>1</sup>
Herb Stratum (Plot size: 3111)	<u></u>			4 - Morphological Adaptations <sup>1</sup> (Provide supporting
1. Glycine max	60	<u> </u>	·	data in Remarks or on a separate sheet)
2. Trifolium repens	15		FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3. Plantago major	10		FACU	
4.				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
5				
0			·	Definitions of Vegetation Strata:
0			·	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7		·	·	at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12			<u> </u>	Woody vines – All woody vines greater than 3 28 ft in
12	0.5%		·	height.
	83%	= Total Co	ver	
Woody Vine Stratum (Plot size: 30 ft r )				
1				
2.				
3				Hydrophytic
				Vegetation
4			·	Present? Yes No V
		= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			
No hydrophytic vegetation present.	15% ba	re grou	ind due	to agricultural activities
		•		<b>C</b>

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix		Redo	x Feature	S1	. 2	<b>-</b>	5
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	I ype'		Iexture	Kemarks
0 - 20	7.5YR 4/4	100					Loam	
-								
		·						
_								
							·	
-								
_								
·								
-						·		
_		<u> </u>						
-								
		·						
-								
<sup>1</sup> Type: C=Co	oncentration, D=Dep	pletion, RM=	Reduced Matrix, M	S=Maskec	Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:			. <i>.</i>	( <b>a</b> a) ( <b>i a i</b>		Indicators	or Problematic Hydric Soils":
Histosol	(A1) Ninodon (A2)	•	Polyvalue Belo	w Surface	(S8) (LRI	κR,	2 cm M	uck (A10) ( <b>LRR K, L, MLRA 149B</b> )
Black Hi	stic (A3)		Thin Dark Surfa	) ace (S9) (I		RA 1498	$\sim 5 \text{ cm M}$	$(\mathbf{R}\mathbf{R}\mathbf{K}, \mathbf{L}, \mathbf{R})$
Hydroge	n Sulfide (A4)		Loamy Mucky N	/lineral (F	I) (LRR K	, L)	Dark Su	urface (S7) ( <b>LRR K, L</b> )
Stratified	d Layers (A5)		Loamy Gleyed	Matrix (F2	)	. ,	Polyval	ue Below Surface (S8) (LRR K, L)
Depleted	d Below Dark Surfac	e (A11)	Depleted Matrix	(F3)			Thin Da	rk Surface (S9) (LRR K, L)
Thick Da	ark Surface (A12)		Redox Dark Su	rface (F6)			Iron-Ma	nganese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)		Depleted Dark	Surface (F	7)		Piedmo	nt Floodplain Soils (F19) ( <b>MLRA 149B</b> )
Sandy G	Bleyed Matrix (S4)		Redox Depress	ions (F8)			Mesic S	Spodic (1A6) (MLRA 144A, 145, 149B)
Sandy R	Matrix (S6)						Reu Pa	neni Malenai (F2T) nellow Dark Surface (TE12)
Dark Su	rface (S7) (LRR R. I	MLRA 149B	)				Other (I	Explain in Remarks)
			/				<u> </u>	
<sup>3</sup> Indicators of	f hydrophytic vegeta	tion and we	tland hydrology mus	st be prese	ent, unless	s disturbed	l or problematic.	
Restrictive I	_ayer (if observed)	:						
Type: <u>N/</u>	A							
Depth (ind	ches):						Hydric Soil I	Present? Yes No
Remarks:								
N								
No nyari	ic soli preser	nt						

#### WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 1730 AEP North Delphos - Rockhill Delineation	City/County: Lima/Allen	Sampling Date: 2021-12-	08
Applicant/Owner: AEP	State:	Ohio Sampling Point: 5-SP-006	6
Investigator(s): C. Kwolek, E. Wilson	Section, Township, Range: S034	T002 R006	
Landform (hillslope, terrace, etc.): Upland	Local relief (concave, con	nvex, none): Linear	
Slope (%): 0 Lat: 40.820015	Long: -84.160061	Datum: WGS 84	
Soil Map Unit Name: PmA		WI classification: N/A	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🔽 No (If no,	explain in Remarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Circu	mstances" present? Yes No	
Are Vegetation, Soil, or Hydrology naturally pro	oblematic? (If needed, explain	any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations,	transects, important features, e	tc.

Hydrophytic Vegetation Present?	Yes	No 🖌			
Hydric Soil Present?	Yes	No	is the Sampled Area		
Wetland Hydrology Present?	Yes I	No 🖌	within a Wetland?	Yes	No

Remarks:

Upland sample point to characterize upland conditions. Sample taken within tilled agriculture field. No wetland criteria present.

**VEGETATION** – Use scientific names of plants.

20 ft r	Absolute	Dominant Indic	ator Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>SUTE</u> ) 1.	<u>% Cover</u>	<u>Species?</u> Sta	Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
2.			
3			Total Number of Dominant
	·		Species Across All Strata: (B)
4	·		Percent of Dominant Species
5	·		That Are OBL, FACW, or FAC: 0 (A/B)
Sapling (Shrub Stratum (Plot size) 15 ft r		= Total Cover	Prevalence Index worksheet:
			Total % Cover of: Multiply by:
1	·		
2			
3	·		FACW species $0$ $x 2 = 0$
4			FAC species $0$ x 3 = $0$
5			FACU species 0 x 4 = 0
		= Total Cover	UPL species $0 \times 5 = 0$
Herb Stratum (Plot size: 5 ft r )			Column Totals: 0 (A) 0 (B)
1			
2			Prevalence Index = $B/A = 0.0$
3.			Hydrophytic Vegetation Indicators:
4.			1 - Rapid Test for Hydrophytic Vegetation
5			2 - Dominance Test is >50%
6			3 - Prevalence Index is ≤3.0 <sup>1</sup>
7	·		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
<i>I</i>	·		data in Remarks or on a separate sheet)
8	·		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
9	·		
10			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Westerfer Otestern (Distring 30 ft r		= Total Cover	be present, unless disturbed or problematic.
vvoody vine Stratum (Plot size:)			
1	·		Hydrophytic
2			Vegetation
		= Total Cover	
Remarks: (Include photo numbers here or on a separate s	sheet.)		

No hydrophytic vegetation present. No vegetation due to disturbance from tilled agriculture field.

Profile Desc	cription: (Describe to the depth n	eeded to document the indicator or confirm	the absence of indicators.)
Depth	Matrix	Redox Features	
(inches)	Color (moist)%	Color (moist)%Type <sup>1</sup> Loc <sup>2</sup>	Remarks
0 - 20	10YR 4/2 100		Clay Loam
-			
-			
-			
-			
<sup>1</sup> Type: C=C	oncentration, D=Depletion, RM=Re	duced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)	Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
Histic Ep	pipedon (A2)	Sandy Redox (S5)	Dark Surface (S7)
Black Hi	istic (A3)	Stripped Matrix (S6)	Iron-Manganese Masses (F12)
Hydroge	en Sulfide (A4)	Loamy Mucky Mineral (F1)	Very Shallow Dark Surface (TF12)
Stratified	d Layers (A5)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
2 cm Mu	ıck (A10)	Depleted Matrix (F3)	
Depleted	d Below Dark Surface (A11)	Redox Dark Surface (F6)	2
Thick Da	ark Surface (A12)	Depleted Dark Surface (F7)	Indicators of hydrophytic vegetation and
Sandy M	Aucky Mineral (S1)	Redox Depressions (F8)	wetland hydrology must be present,
5 cm Mu	ucky Peat or Peat (S3)		unless disturbed or problematic.
Restrictive	Layer (if observed):		
Туре:		-	Hydric Soil Present? Yes No V
Depth (in	ches):	_	
Remarks:			
	ria adil prodont		
NO NYU	ne son present		
	<u></u>		
	Gi		
Wetland Hy	drology Indicators:		
Primary India	cators (minimum of one is required;	check all that apply)	Secondary Indicators (minimum of two required)
Surface	Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
High Wa	ater Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)
Saturatio	on (A3)	Dry-Season Water Table (C2)	
Water M	larks (B1)	Crayfish Burrows (C8)	
Sedimer	nt Deposits (B2)	Oxidized Rhizospheres on Living Roots (	C3) Saturation Visible on Aerial Imagery (C9)
Drift Dep	posits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Ma	at or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	) Geomorphic Position (D2)
Iron Dep	oosits (B5)	Thin Muck Surface (C7)	FAC-Neutral Test (D5)
Inundati	on Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)	
Sparsel	Vegetated Concave Surface (B8)		

Sparsely Vegetated Cor	icave Surface	e (B8)	Other (Explain in Remarks	5)				
Field Observations:								
Surface Water Present?	Yes	_ No _	_ Depth (inches):					
Water Table Present?	Yes	_ No _	_ Depth (inches):					
Saturation Present? (includes capillary fringe)	Yes	_ No _	_ Depth (inches):		Wetland Hydrology Present?	Yes	No _	<u>~</u>
Describe Recorded Data (str	eam gauge,	monitoring	well, aerial photos, previous	3 inspec	tions), if available:			
Remarks:								
No wetland hydrology present								

Project/Site: 1732 Lima-Kalida 69kV Retirement	City/County: Lima	/Allen	Sampling Date: 2021-12-08			
Applicant/Owner: AEP		<sub>State:</sub> Ohio	Sampling Point: 5-SP-007			
Investigator(s): C. Kwolek, E. Wilson	Section, Township	Range: S011 T002 R005				
Landform (hillslope, terrace, etc.): Upland	Local relief (concave,	convex, none): Linear	Slope (%): 0			
Subregion (LRR or MLRA): M	40.879101	Long: -84.258463	Datum: WGS 84			
Soil Map Unit Name: HtA		NWI classific	ation: N/A			
Are climatic / hydrologic conditions on the site typical for	this time of year? Yes	lo (If no, explain in R	emarks.)			
Are Vegetation , Soil , or Hydrology	significantly disturbed?	Are "Normal Circumstances" p	oresent? Yes 🖌 No			
Are Vegetation , Soil , or Hydrology	naturally problematic? (	If needed, explain any answe	rs in Remarks.)			
SUMMARY OF FINDINGS – Attach site ma	p showing sampling poi	nt locations, transects	, important features, etc.			
Hydrophytic Vegetation Present?     Yes       Hydric Soil Present?     Yes       Wetland Hydrology Present?     Yes	No     ✓     Is the Sam within a We within	pled Area etland? Yes nal Wetland Site ID:	No			
Remarks: (Explain alternative procedures here or in a	separate report.)					
taken within planted agriculture fie	eld. No wetland criter	ia present.	a stream. Sample			
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)			
Primary Indicators (minimum of one is required; check a	all that apply)	Surface Soil	Surface Soil Cracks (B6)			
Surface Water (A1) V	Vater-Stained Leaves (B9)	Drainage Pat	Drainage Patterns (B10)			
A Seturation (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)			
Water Marks (B1)	ludrogen Sulfide Odor (C1)	Cravfish Bur	Dry-Season Water Table (C2) Cravifish Burrows (C8)			
Sediment Deposits (B2)	)xidized Rhizospheres on Living F	Claying Burlows (Co)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled So	ils (C6) Geomorphic	Position (D2)			
Iron Deposits (B5)	hin Muck Surface (C7)	Shallow Aqui	tard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopogra	phic Relief (D4)			
Sparsely Vegetated Concave Surface (B8)		FAC-Neutral	Test (D5)			
Field Observations:						
Surface Water Present? Yes No _	Depth (inches):					
Water Table Present? Yes No _	Depth (inches):					
Saturation Present? Yes No _	Depth (inches):	Wetland Hydrology Presen	t? Yes No 🖌			
Describe Recorded Data (stream gauge, monitoring we	ell, aerial photos, previous inspect	ions), if available:				
Remarks:						
No wetland hydrology present						

### Sampling Point: 5-SP-007

Tree Stratum (Plot size: 30 ft r )	Absolute % Cover	Dominant I	ndicator	Dominance Test worksheet:
1	<u>/// 00/01</u>		Otatus	Number of Dominant Species
2				That are OBL, FACW, of FAC: (A)
3			<u> </u>	Total Number of Dominant Species Across All Strata: 0 (B)
0			<u> </u>	
T			<u>.</u>	That Are OBL, FACW, or FAC: 0 (A/B)
		<u> </u>	<u> </u>	
8			<u> </u>	Prevalence Index worksheet:
<i>I</i>			<u> </u>	Total % Cover of: Multiply by:
15 ft #		= I otal Cove	r	OBL species $0$ $x_1 = 0$
Sapling/Shrub Stratum (Plot size: 15 ft r )				FACW species $0$ $x^2 = 0$
1				FAC species $0$ $x_3 = 0$
2				FACU species $0$ $x = 0$
3				Column Totals: $0$ (A) $0$ (B)
4				
5				Prevalence Index = $B/A = 0.0$
6	<u> </u>			Hydrophytic Vegetation Indicators:
7.				1 - Rapid Test for Hydrophytic Vegetation
		- Total Cove	r	2 - Dominance Test is >50%
Horth Stratum (Distainer 5 ft r		- 101010000		3 - Prevalence Index is $≤3.0^1$
A Zea mays	85			4 - Morphological Adaptations <sup>1</sup> (Provide supporting
1. <u>200 mays</u>				data in Remarks or on a separate sneet)
2				
3				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4			<u> </u>	be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6			<u> </u>	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				<b>Sapling/shrub</b> – Woody plants less than 3 in. DBH
9				
10				<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
12			<u> </u>	<b>Woody vines</b> – All woody vines greater than 3.28 ft in
12.	85%	- Total Cava		height.
Weady Vine Stratum (Plat size, 30 ft r			1	
<u>woody vine Stratum</u> (Plot size: <u>30 (C1</u> )				
1				
2				
3			<u> </u>	Hydrophytic
4				vegetation Present? Yes No
		= Total Cove	r	
Remarks: (Include photo numbers here or on a separate	sheet.)			
No hydrophytic vocatation procent	Novoa	atation a	duo to	disturbance from tilled earieulture

No hydrophytic vegetation present. No vegetation due to disturbance from tilled agriculture field.

Profile Desc	cription: (Describe	to the dept	h needed to docu	nent the i	ndicator	or confirm	the absence o	f indicators.)		
Depth	Matrix		Redo	x Feature	S					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0 - 20	10YR 4/2	100					Clay Loam			
							- <u></u>			
-										
							<u> </u>			
_										
							·			
-										
							<u> </u>			
_										
-										
-										
<sup>1</sup> Type: C=Co	oncentration, D=Dep	oletion, RM=	Reduced Matrix, M	S=Masked	Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.		
Hydric Soil	Indicators:						Indicators for	or Problematic Hydric Soils <sup>3</sup> :		
Histosol	(A1)	-	Polyvalue Belo	w Surface	(S8) (LRF	RR,	2 cm Mu	uck (A10) ( <b>LRR K, L, MLRA 149B</b> )		
Histic Ep	oipedon (A2)		MLRA 149B	)			Coast P	rairie Redox (A16) (LRR K, L, R)		
Black Hi	stic (A3)	-	Thin Dark Surfa	ace (S9) ( <b>I</b>	RR R, M	LRA 149B	) 5 cm Mu	ucky Peat or Peat (S3) (LRR K, L, R)		
Hydroge	en Sulfide (A4)	-	Loamy Mucky I	Mineral (F	1) ( <b>LRR K</b>	., L)	Dark Su	rface (S7) ( <b>LRR K, L</b> )		
Stratified	d Layers (A5) d Delew Derk Surfer	-	Loamy Gleyed	Matrix (F2	)		Polyvalu	le Below Sufface (S8) (LRR K, L)		
Depleted	u Delow Dark Sullat		Depleted Math	rface (E6)			Inin Da	nganese Masses (E12) (IPP K I P)		
Thick Da	Air Suilace (A12) Aucky Mineral (S1)	-	Redux Dark Su Depleted Dark	Surface (FO)	7)		Non-Mai	Interse masses ( $\Gamma(2)$ ( <b>LRR R, L, R</b> ) at Eloodalain Soils (E19) ( <b>MI RA 149B</b> )		
Sandy G	Sleved Matrix (S4)	-	Depleted Dark Redox Depress	sions (F8)	')		Mesic S	nodic (TA6) ( <b>MI RA 144A 145 149B</b> )		
Sandy R	Redox (S5)	-					Red Par	rent Material (F21)		
Stripped	Matrix (S6)						Verv Sh	allow Dark Surface (TF12)		
Dark Su	rface (S7) (LRR R, I	MLRA 149B	)				Other (Explain in Remarks)			
			,					. ,		
<sup>3</sup> Indicators of	f hydrophytic vegeta	tion and wet	land hydrology mus	st be prese	ent, unless	s disturbed	or problematic.			
Restrictive I	Layer (if observed)	:								
Type:										
Depth (inc	ches):						Hydric Soil F	Present? Yes No		
Remarks:	/									
Remarks.										
No hydri	ic soil preser	nt								

Project/Site: 1732 Lima-Kali	da 69kV Retirem	ent City/C	County: Lima/Allen	:	Sampling Date: 2021-12-08		
Applicant/Owner: AEP				State: Ohio	Sampling Point: 5-SP-008		
Investigator(s): C. Kwolek, E	. Wilson	Section	on, Township, Range: S	011 T002 R005			
Landform (hillslope, terrace, etc	.): Upland	Local rel	ief (concave, convex, no	<sub>ne):</sub> Linear	Slope (%): 0		
Subregion (LRR or MLRA): M	/	at: 40.889486	Long: -84	.285486	Datum: WGS 84		
Soil Map Unit Name: HtA				NWI classifica	tion N/A		
Are climatic / bydrologic conditio	ons on the site typic:	al for this time of year? Y	ies 🖌 No	(If no, explain in Re	marks )		
Are Vegetation Soil	or Hydrology	significantly distur	bed? Are "Norma	(in no, explain in ree	esent? Yes 🖌 No		
Are Vegetation V Soil	, or Hydrology _	<ul> <li>naturally problem:</li> </ul>	atic? (If needed a	avolain any answers	in Remarks )		
SUMMARY OF FINDING	S – Attach site	map showing sam	npling point location	ons, transects,	important features, etc.		
			Is the Sampled Area		. ,		
Hydrophytic Vegetation Prese	nt? Yes	No	within a Wetland?	Yes	No 🖌		
Wetland Hydrology Present?	Yes	No 🖌	If ves ontional Wetland	l Site ID			
Remarks: (Explain alternative	procedures here or	in a separate report.)	n yes, optional wetland				
I Inland sample poir	ot to charact	erize unland co	nditions along I	NHD-manne	d stream. Sample		
					a stream. Sample		
taken within plante	d agriculture	e field. No wetla	nd criteria pres	ent.			
HYDROLOGY							
Wetland Hydrology Indicato	rs:			Secondary Indicate	ors (minimum of two required)		
Primary Indicators (minimum of	of one is required; ch	neck all that apply)		Surface Soil Cracks (B6)			
Surface Water (A1)	-	Water-Stained Leave	s (B9)	Drainage Patterns (B10)			
High Water Table (A2)	-	Aquatic Fauna (B13)		Moss Trim Lines (B16)			
Saturation (A3)	-	Marl Deposits (B15)		Dry-Season Water Table (C2)			
Water Marks (B1)	-	Hydrogen Sulfide Od	or (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	-	Oxidized Rhizospher	es on Living Roots (C3)	Saturation Vis ble on Aerial Imagery (C9)			
Drift Deposits (B3)	-	Presence of Reduced	d Iron (C4)	Stunted or Str	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	-	Recent Iron Reductio		Geomorphic F	Aguitard (D3)		
Inundation Visible on Apri	al Imagony (B7)	Thin Muck Sunace (C	unarka)	Shallow Aquita	alu (D3) bio Poliof (D4)		
Sparsely Vegetated Conc	arimagery (B7)		nans)	EAC-Neutral T	Gest (D5)		
Field Observations:					esi (D3)		
Surface Water Present?	Yes No •	Depth (inches):					
Water Table Present?	Yes No	Depth (inches):					
Saturation Present?	Yes No 🕨	Depth (inches):	Wetland H	lydrology Present	? Yes No 🖌		
(includes capillary fringe)		a wall parial photon pro	vious increations), if our	ilabla:			
Describe Recorded Data (stre	am gauge, monitorir	ig well, aerial priotos, pre	vious inspections), il ava				
Remarks:							
No wetland hydrolo	av present						
	gy procent						

# Sampling Point: 5-SP-008

Tree Stratum (Plot size: 30 ft r )	Absolute % Cover	Dominant Indicator	Dominance Test worksheet:
	<u>/// Cover</u>		Number of Dominant Species
·			That Are OBL, FACW, or FAC: $\bigcirc$ (A)
2			Total Number of Dominant Species Across All Strata: 0 (B)
3			
4			Percent of Dominant Species That Are OBL_FACW_or FAC: 0 (A/B)
5			
6			Prevalence Index worksheet:
7			Total % Cover of:Multiply by:
		= Total Cover	OBL species $\frac{0}{2}$ x 1 = $\frac{0}{2}$
Sapling/Shrub Stratum (Plot size: 15 ft r )			FACW species $0$ $x 2 = 0$
1			FAC species $\frac{0}{2}$ x 3 = $\frac{0}{2}$
2			FACU species $0$ $x 4 = 0$
2			UPL species $0$ x 5 = $0$
3			Column Totals: <u>0</u> (A) <u>0</u> (B)
4			Prevalence Index = $B/A = 0.0$
5			Hudronkutia Vagatatian Indiastara
6			A Denid Test for Lludrenby tic Variation
7			A - Rapid Test for Hydrophytic Vegetation
		= Total Cover	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5 ft r )			$-3$ - Prevalence Index is $\leq 3.0^{\circ}$
1. Zea mays	85	~	data in Remarks or on a separate sheet)
2.			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3			
4			<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5			Definitions of Vegetation Strata:
6			Tree Weeds plants 2 in (7.0 cm) or more in diameter
7			at breast height (DBH), regardless of height.
8			Sapling/shrub – Woody plants less than 3 in. DBH
9	<u> </u>		and greater than or equal to 3.28 ft (1 m) tall.
10	<u> </u>		<b>Herb</b> – All herbaceous (non-woody) plants, regardless
11			
12			Woody vines – All woody vines greater than 3.28 ft in beight
	85%	= Total Cover	hoight.
Woody Vine Stratum (Plot size: 30 ft r )			
1.			
··			
2		·	
3			Hydrophytic
4			Present? Yes No
		= Total Cover	
Remarks: (Include photo numbers here or on a separate s	sheet.)		

No hydrophytic vegetation present. No vegetation due to disturbance from tilled agriculture field.

Profile Desc	ription: (Describe	to the dept	h needed to docu	ment the i	ndicator	or confirm	the absence	of indicators	5.)		
Depth	Matrix		Redo	x Features	<b>S</b>	1 - 2	Test		D		
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	I ype'		<u>I exture</u>		Remarks		
0 - 20	10YR 4/2	100					Clay Loam				
-											
-											
-											
-											
_											
-											
_											
-											
<u> </u>											
-											
<sup>1</sup> Type: C=Co	oncentration, D=Dep	oletion, RM=	Reduced Matrix, M	S=Masked	Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore Li	ning, M=Matr	<u>ix.</u>	
Hydric Soil	Indicators:			<i>. .</i>	( <b>a</b> a) ( <b>i a i</b>		Indicators	for Problema	atic Hydric S		
Histosol	(A1) Ninodon (A2)	-	Polyvalue Belo	w Surface	(S8) (LRI	<b>К</b> ,	2 cm M	luck (A10) (LI Proirie Redev		KA 149B)	
Black Hi	stic (A3)		Thin Dark Surf	) ace (S9) (I		RA 149B)	- 5  cm M	lucky Peat or	Peat (S3) (	RRKI.R	)
Hydroge	n Sulfide (A4)	-	Loamy Mucky	Mineral (F1	) (LRR K	, L)	Dark S	urface (S7) ( <b>I</b>	_RR K, L)	, _,	)
Stratified	Layers (A5)	-	Loamy Gleyed	Matrix (F2	)		Polyval	lue Below Su	rface (S8) (L	RR K, L)	
Depleted	d Below Dark Surfac	e (A11)	Depleted Matri	x (F3)			Thin Da	ark Surface (S	59) ( <b>LRR K,</b>	L)	
Thick Da	ark Surface (A12)	-	Redox Dark Su	Irface (F6)			Iron-Ma	anganese Ma	sses (F12) (I	_RR K, L, F	<b>R</b> )
Sandy M	lucky Mineral (S1)	-	Depleted Dark	Surface (F	7)		Piedmo	ont Floodplair	n Soils (F19)	(MLRA 149	9B)
Sandy G	Bieyed Matrix (54)	-	Redox Depress	sions (F8)			INIESIC 3	Spould (TA6) pront Matorial	(IVILKA 1447	1, 145, 149	в)
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)				
Dark Su	rface (S7) ( <b>LRR R. I</b>	MLRA 149B	)				Other (Explain in Remarks)				
		-	,						,		
<sup>3</sup> Indicators of	f hydrophytic vegeta	tion and wet	land hydrology mu	st be prese	ent, unless	s disturbed	or problematic				
Restrictive I	_ayer (if observed)	:									
Туре:											
Depth (ind	ches):						Hydric Soil	Present?	Yes	No 🖌	
Remarks:											
No bydri	io opil propor	.+									
No nyan	ic soli preser	π									



ORAM v. 5.0 Field Form Quantitative Rating



	of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality



End of Quantitative Rating. Complete Categorization Worksheets.





last revised 1 February 2001 jjm

1-B(PFO)

ORAM v. 5.0 Field Form Quantitative Rating



19

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality





1-C1,P55)



End of Quantitative Rating. Complete Categorization Worksheets.

2

3

of marginal quality

and of highest quality

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts




3) GRAND TOTAL(max 100 pts)

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories at the following address: http://www.epa.state.oh.us/dsw/401/401.html





#### GRAND TOTAL(max 100 pts)

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories at the following address: http://www.epa.state.oh.us/dsw/401/401.html





22 GRAND TOTAL(max 100 pts)

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories at the following address: http://www.epa.state.oh.us/dsw/401/401.html



**ORAM v. 5.0 Field Form Quantitative Rating** ML Site: Rater(s): 29 Date: tal this na U Metric 5. Special Wetlands. max 10 pts. subtotal Check all that apply and score as indicated. Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetland-unrestricted hydrology (10) Lake Erie coastal/tributary wetland-restricted hydrology (5) Lake Plain Sand Prairies (Oak Openings) (10) Relict Wet Praires (10) Known occurrence state/federal threatened or endangered species (10) Significant migratory songbird/water fowl habitat or usage (10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Metric 6. Plant communities, interspersion, microtopography. nax 20 pts subtotal 6a. Wetland Vegetation Communities. Vegetation Community Cover Scale Score all present using 0 to 3 scale. Absent or comprises <0.1ha (0.2471 acres) contiguous area 0 0 Aquatic bed Present and either comprises small part of wetland's 1 Emergent vegetation and is of moderate quality, or comprises a  $\mathcal{O}$ Shrub significant part but is of low quality Forest 2 Present and either comprises significant part of wetland's Mudflats 0 vegetation and is of moderate quality or comprises a small O Open water part and is of high quality 0 Other 3 Present and comprises significant part, or more, of wetland's 6b. horizontal (plan view) Interspersion. vegetation and is of high quality Select only one. High (5) Narrative Description of Vegetation Quality Moderately high(4) low Low spp diversity and/or predominance of nonnative or Moderate (3) disturbance tolerant native species Moderately low (2) mod Native spp are dominant component of the vegetation, 0 Low (1) although nonnative and/or disturbance tolerant native spp None (0) can also be present, and species diversity moderate to 6c. Coverage of invasive plants. Refer moderately high, but generallyw/o presence of rare to Table 1 ORAM long form for list. Add threatened or endangered spp or deduct points for coverage high A predominance of native species, with nonnative spp Extensive >75% cover (-5) and/or disturbance tolerant native spp absent or virtually Moderate 25-75% cover (-3) absent, and high spp diversity and often, but not always, Sparse 5-25% cover (-1) the presence of rare, threatened, or endangered spp Nearly absent <5% cover (0) Absent (1) Mudflat and Open Water Class Quality 6d. Microtopography. 0 Absent <0.1ha (0.247 acres) Score all present using 0 to 3 scale. 1 Low 0.1 to <1ha (0.247 to 2.47 acres) O Vegetated hummucks/tussucks 2 Moderate 1 to <4ha (2.47 to 9.88 acres) Coarse woody debris >15cm (6in) 3 High 4ha (9.88 acres) or more Standing dead >25cm (10in) dbh Amphibian breeding pools **Microtopography Cover Scale** 0 Absent 1 Present very small amounts or if more common

of marginal quality

and of highest quality

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts

#### 14 GRAND TOTAL(max 100 pts)

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories at the following address: http://www.epa.state.oh.us/dsw/401/401.html

2

3



Site:	WI-FA	Rater(s):	JMH	Date: 6/29 21
	_ ·			
l	4			
subtotal	this page			
6 10				
	Metric 5. Spe	cial Wetlands.		
max 10 pts. sub	total Check all that apply and score	e as indicated.		
	Fen (10)			
	Old growth forest (1	10)		
	Mature forested we	tland (5)		
	Lake Erie coastal/tr	ibutary wetland-unrestricted hydro	logy (10)	
	Lake Plain Sand Pr	airies (Oak Openings) (10)	39 (0)	
	Relict Wet Praires (	(10)		
	Known occurrence	state/federal threatened or endang	gered species (10)	
	Significant migrator	y songbird/water fowl habitat or us	sage (10)	
	Category 1 Wetland	1. See Question 1 Qualitative Rat	ing (-10)	
6 1	Metric 6. Plan	nt communities.	interspersion	, microtopography.
max 20 pts. sub	total 6a. Wetland Vegetation Com	munities. Vegetation Con	munity Cover Scale	
	Score all present using 0 to 3	scale. 0	Absent or comprises	<0.1ha (0.2471 acres) contiguous area
	Ø Aquatic bed	1	Present and either co	omprises small part of wetland's
	Emergent		vegetation and is o	is of low quality
	C Forest	- 2	Present and either co	omprises significant part of wetland's
	✓ Mudflats		vegetation and is o	f moderate quality or comprises a small
	O Open water		part and is of high	quality
	G Other	3	Present and compris	es significant part, or more, of wetland's
	6b. horizontal (plan view) Inte	erspersion.	vegetation and is o	i high quality
	High (5)	Narrative Descr	iption of Vegetation Quality	,
	Moderately high(4)	low	Low spp diversity and	d/or predominance of nonnative or
	Moderate (3)		disturbance tolerar	t native species
	Moderately low (2)	mod	Native spp are domin	hant component of the vegetation,
	Low (1)		aithough nonnative	and species diversity moderate to
	None (0)	nts Refer	moderately high, bi	ut generallyw/o presence of rare
	to Table 1 ORAM long form for	or list. Add	threatened or enda	ingered spp
	or deduct points for coverage	high	A predominance of n	ative species, with nonnative spp
	Extensive >75% co	ver (-5)	and/or disturbance	tolerant native spp absent or virtually
	Moderate 25-75% c	cover (-3)	the presence of rar	e, threatened, or endangered spp
	Sparse 5-25% cove	er (-1)	and procentee and	
	Absent (1)	Mudflat and Op	en Water Class Quality	
	6d. Microtopography.	0	Absent <0.1ha (0.24	17 acres)
	Score all present using 0 to 3	scale. <u>1</u>	Low 0.1 to <1ha (0.2	(2 47 to 2.47 acres)
	2 Vegetated hummud	cks/tussucks 2	High 4ha (9.88 acres	(2.47 to 9.00 acres)
	() Coarse woody deb	ris >15cm (6in) 3	Tright tha (0.00 doloc	, or more
	Amphibian breedin	a pools Microtopograp	hy Cover Scale	
		0	Absent	1
		1	Present very small a	mounts or if more common
			of marginal quality	amounts, but not of highest
		2	quality or in small	amounts of highest quality
		3	Present in moderate	e or greater amounts
			and of highest qua	ality

GRAND TOTAL(max 100 pts)

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories at the following address: http://www.epa.state.oh.us/dsw/401/401.html

14





25 GRAND TOTAL(max 100 pts)

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories at the following address: http://www.epa.state.oh.us/dsw/401/401.html

PEM 1-J

ORAM v. 5.0 Field Form Quantitative Rating



#### PEM 2-J

ORAM v. 5.0 Field Form Quantitative Rating



End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts





105

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts

PEM 1-L

ORAM v. 5.0 Field Form Quantitative Rating



7

PEM 2-L

ORAM v. 5.0 Field Form Quantitative Rating



2 Present in moderate amounts, but not of highest quality or in small amounts of highest quality 3 Present in moderate or greater amounts and of highest quality

9

End of Quantitative Rating. Complete Categorization Worksheets.



last revised 1 February 2001 jjm



### 155

End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts





15,5

End of Quantitative Rating. Complete Categorization Worksheets.

3

quality or in small amounts of highest quality

Present in moderate or greater amounts





1-O (PEM)

19

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

of marginal quality

and of highest quality

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts



1-P(PEM)

1-P(PEM)



10

End of Quantitative Rating. Complete Categorization Worksheets.

3

quality or in small amounts of highest quality

Present in moderate or greater amounts





16.5

End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts





## 24

End of Quantitative Rating. Complete Categorization Worksheets.

3

quality or in small amounts of highest quality

Present in moderate or greater amounts







End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts



1-T(Pem)



1-TLPEM)

# 27

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest

quality or in small amounts of highest quality

Present in moderate or greater amounts



7

Site: AFP NOA	n Delphos - Rockhill	Rater(s):	wilson	Date: 6/20/2021	
	1				
21					
subtotal first pa	ge				
0 21	Metric 5. Special	Wetlands.			
0 21		a indicated			
x 10 pts. subtotai	Bog (10)	is indicated.			
	Fen (10)				
	Old growth forest (10)	nd (5)			
	Lake Erie coastal/tribu	utary wetland-unrestricted	hydrology (10)		
	Lake Erie coastal/tribu	utary wetland-restricted hy	ydrology (5)		
	Lake Plain Sand Prair	ries (Oak Openings) (10)			
	Relict Wet Prairies (10	u) ate/federal threatened or (	endangered species (10)		
	Significant migratory s	songbird/water fowl habita	at or usage (10)		
	Category 1 Wetland.	See Question 1 Qualitativ	ve Rating (-10)		
	Metric 6. Plant c	ommunities, i	interspersion, m	nicrotopography.	
1 22					
max 20 pts. subtotal	6a. Wetland Vegetation Comm	unities. Vegetat	tion Community Cover Scal	e	
	Score all present using 0 to 3 sc	cale. 0	Absent or comprises <	0.1ha (0.24/1 acres) contiguous area	
	) Emergent		vegetation and is of	moderate quality, or comprises a	
	O Shrub		significant part but is	s of low quality	
	O Forest	2	Present and either cor	nprises significant part of wetland's	
	O Mudflats		vegetation and is of	moderate quality of comprises a small	
	Other	3	Present and comprise	s significant part, or more, of wetland's	
	6b. horizontal (plan view) Inters	spersion.	vegetation and is of	high quality	
	Select only one.	Narrativ	ve Description of Vegetatio	escription of Vegetation Quality	
	Moderately high(4)	lov	W Low spp diversity and		
	Moderate (3)		disturbance tolerant	native species	
	Moderately low (2)	mo	d Native spp are domina	ant component of the vegetation,	
	Low (1)		although nonnative a	and/or disturbance tolerant native spp	
	6c. Coverage of invasive plants	s. Refer	moderately high, bu	t generally w/o presence of rare	
	to Table 1 ORAM long form for	list. Add	threatened or endar	ngered spp	
	or deduct points for coverage	hig	h A predominance of na	tive species, with nonnative spp	
	Extensive >75% cove	er (-5)	and/or disturbance t	olerant native spp absent or virtually	
	Sparse 5-25% cover	(-1)	the presence of rare	threatened, or endangered spp	
	Nearly absent <5% c	over (0)	the presence of rare, threatened, or endangered spp		
	Absent (1)	Mudfla	Mudflat and Open Water Class Quality		
	6d. Microtopography.	0	Absent <0.1ha (0.247	7 acres)	
	Score all present using 0 to 3 s	s/tussucks	Low 0.1 to <1ha (0.24	2 47 to 9 88 acres)	
	Coarse woody debris	s >15cm (6in) 3	High 4ha (9.88 acres)	or more	
	Standing dead >25cr	m (10in) dbh			
	Amphibian breeding	pools Microte	opography Cover Scale		
		0	Absent		

0	Absent	
1	Present very small amounts or if more common of marginal quality	
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality	
3	Present in moderate or greater amounts and of highest quality	

1-U (PEM)

# 22

End of Quantitative Rating. Complete Categorization Worksheets.


1-V(PEM)



1-V(PEM)

### 21

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts



7



I-W (PEM)

# 20

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts





1-X (PFM)

## 20

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest

quality or in small amounts of highest quality

Present in moderate or greater amounts





1-Y (PEM)



End of Quantitative Rating. Complete Categorization Worksheets.

2

3

of marginal quality

and of highest quality

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts



1-2 (PEM)



1-Z (PEM)

17

End of Quantitative Rating. Complete Categorization Worksheets.

3

quality or in small amounts of highest quality

Present in moderate or greater amounts



ORAM v. 5.0 Field Form Quantitative Rating



4.5

End of Quantitative Rating. Complete Categorization Worksheets.

1-AB (PEM)







End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts



1- AC (PEM)

ORAM v. 5.0 Field Form Quantitative Rating



End of Quantitative Rating. Complete Categorization Worksheets.

3

quality or in small amounts of highest quality

Present in moderate or greater amounts

ORAM v. 5.0 Field Form Quantitative Rating



#### PEM 2-AD

ORAM v. 5.0 Field Form Quantitative Rating



13

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts



ORAM v. 5.0 Field Form Quantitative Rating





End of Quantitative Rating. Complete Categorization Worksheets.

3

quality or in small amounts of highest quality

Present in moderate or greater amounts

PEM 1-AF

ORAM v. 5.0 Field Form Quantitative Rating



PEM 1-AF

ORAM v. 5.0 Field Form Quantitative Rating



13

End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts

1-AG(PEM)



1-AG (PEM)



10

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

of marginal quality

and of highest quality

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts





0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

End of Quantitative Rating. Complete Categorization Worksheets.



1-AI (PEM)



19

End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts



1-AJ (PFO)



22

End of Quantitative Rating. Complete Categorization Worksheets.

3

quality or in small amounts of highest quality

Present in moderate or greater amounts



1-AK(PFO)

I-AK (PFO)

ORAM v. 5.0 Field Form Quantitative Rating



27

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts



1-AL (PEM)

1-ALLPEM)

#### ORAM v. 5.0 Field Form Quantitative Rating



18

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts



7-A ORAM v. 5.0 Field Form Quantitative Rating Site: Rater(s): Date: subtotal first page Metric 5. Special Wetlands. max 10 pts. subtotal Check all that apply and score as indicated. Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetland-unrestricted hydrology (10) Lake Erie coastal/tributary wetland-restricted hydrology (5) Lake Plain Sand Prairies (Oak Openings) (10) Relict Wet Prairies (10) Known occurrence state/federal threatened or endangered species (10) Significant migratory songbird/water fowl habitat or usage (10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Metric 6. Plant communities, interspersion, microtopography. 25 3 max 20 pts. subtotal 6a. Wetland Vegetation Communities. Vegetation Community Cover Scale Score all present using 0 to 3 scale. Absent or comprises <0.1ha (0.2471 acres) contiguous area Aquatic bed 1 Present and either comprises small part of wetland's Emergent vegetation and is of moderate quality, or comprises a Shrub significant part but is of low quality Forest 2 Present and either comprises significant part of wetland's Mudflats vegetation and is of moderate quality or comprises a small Open water part and is of high quality Other\_ 3 Present and comprises significant part, or more, of wetland's 6b. horizontal (plan view) Interspersion. vegetation and is of high quality Select only one. High (5) Narrative Description of Vegetation Quality Moderately high(4) Low spp diversity and/or predominance of nonnative or low Moderate (3) disturbance tolerant native species Moderately low (2) mod Native spp are dominant component of the vegetation, Low (1) although nonnative and/or disturbance tolerant native spp None (0) can also be present, and species diversity moderate to 6c. Coverage of invasive plants. Refer moderately high, but generally w/o presence of rare to Table 1 ORAM long form for list. Add threatened or endangered spp or deduct points for coverage high A predominance of native species, with nonnative spp Extensive >75% cover (-5) and/or disturbance tolerant native spp absent or virtually Moderate 25-75% cover (-3) absent, and high spp diversity and often, but not always, Sparse 5-25% cover (-1) the presence of rare, threatened, or endangered spp Nearly absent <5% cover (0) Absent (1) Mudflat and Open Water Class Quality 6d. Microtopography. Absent <0.1ha (0.247 acres) 0 Score all present using 0 to 3 scale. Low 0.1 to <1ha (0.247 to 2.47 acres) 1 Vegetated hummucks/tussucks 2 Moderate 1 to <4ha (2.47 to 9.88 acres) Coarse woody debris >15cm (6in) 3 High 4ha (9.88 acres) or more Standing dead >25cm (10in) dbh Microtopography Cover Scale Amphibian breeding pools

0	Absent	
1	Present very small amounts or if more common of marginal quality	
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality	-
3	Present in moderate or greater amounts and of highest quality	

25

End of Quantitative Rating. Complete Categorization Worksheets.




End of Quantitative Rating. Complete Categorization Worksheets.

1

2

3

of marginal quality

and of highest quality

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts





25

End of Quantitative Rating. Complete Categorization Worksheets.





2-DLPEM

# 25

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest

quality or in small amounts of highest quality Present in moderate or greater amounts



2-E (PEM)



2-E (DEM)

## 23

End of Quantitative Rating. Complete Categorization Worksheets.

3

quality or in small amounts of highest quality Present in moderate or greater amounts



7-F (PEM)



## Microtopography Cover Scale

0	Absent	
1	Present very small amounts or if more common of marginal quality	
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality	
3	Present in moderate or greater amounts and of highest quality	

End of Quantitative Rating. Complete Categorization Worksheets.

Amphibian breeding pools

3-A PEM





ite: 1750 No	ath Delphos - Rockhill Rater	(s): E.U	Date: 9/02/202				
	1		. 1				
11							
subtotal first	page						
0 11	Metric 5. Special Wetlan	ids.					
10 pts. subtotal	Check all that apply and score as indicated.						
	Bog (10)						
	Fen (10)						
	Mature forested wetland (5)						
	Lake Erie coastal/tributary wetland-u	inrestricted by	drology (10)				
	Lake Erie coastal/tributary wetland-r	restricted hydro	ploav (5)				
	Lake Plain Sand Prairies (Oak Oper	nings) (10)					
	Relict Wet Prairies (10)						
	Known occurrence state/federal thre	eatened or end	angered species (10)				
	Category 1 Wotland Soc Quanties	Towi habitat or	usage (10)				
	Category I Wettand. See Question	I Qualitative F	kating (-10)				
-1 10	Wetric 6. Plant commun	ities, int	erspersion, microtopography.				
20 pts subtatel							
c zo pis. Subiolai	6a. Wetland Vegetation Communities.	Vegetation	Community Cover Scale				
	Aquatic bed	1	Absent or comprises <0.1ha (0.2471 acres) contiguous area				
	Emergent		vegetation and is of moderate quality, or comprises a				
	Shrub		significant part but is of low quality				
	Forest	2	Present and either comprises significant part of wetland's				
	Mudflats		vegetation and is of moderate quality or comprises a small				
	Open water		part and is of high quality				
	6h horizontal (plan view) Internorgian	3	Present and comprises significant part, or more, of wetland's				
	Select only one		vegetation and is of high quality				
	High (5)	Narrative D	escription of Vegetation Quality				
	Moderately high(4)	low	Low spp diversity and/or predominance of nonnative or				
	Moderate (3)		disturbance tolerant native species				
	Moderately low (2)	mod	Native spp are dominant component of the vegetation,				
			although nonnative and/or disturbance tolerant native spp				
	6c. Coverage of invasive plants. Refer		can also be present, and species diversity moderate to				
	to Table 1 ORAM long form for list. Add		threatened or endangered spp				
	or deduct points for coverage	high	A predominance of native species, with nonnative spp				
	Extensive >75% cover (-5)		and/or disturbance tolerant native spp absent or virtually				
	Moderate 25-75% cover (-3)		absent, and high spp diversity and often, but not always,				
	Sparse 5-25% cover (-1)		the presence of rare, threatened, or endangered spp				
	Absent (1)	Mudflat and	d Open Water Class Quality				
	6d. Microtopography.	0	Absent <0 1ha (0 247 acres)				
	Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 acres)				
	Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.88 acres)				
	Coarse woody debris >15cm (6in)	3	High 4ha (9.88 acres) or more				
	Standing dead >25cm (10in) dbh						
		Absent					
		1	Present very small amounts or if more common				
			of marginal quality				
		2	Present in moderate amounts, but not of highest				
			quality or in small amounts of highest quality				

3-A PEM



End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts





12

End of Quantitative Rating. Complete Categorization Worksheets.





End of Quantitative Rating. Complete Categorization Worksheets.

and of highest quality

18





14

End of Quantitative Rating. Complete Categorization Worksheets.





21

End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts

PEM PFO 4-E







21

End of Quantitative Rating. Complete Categorization Worksheets.





17

End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts

M H-GI





35

End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts









End of Quantitative Rating. Complete Categorization Worksheets.

3

quality or in small amounts of highest quality

Present in moderate or greater amounts





25

End of Quantitative Rating. Complete Categorization Worksheets.

3

quality or in small amounts of highest quality

Present in moderate or greater amounts

PEM 5-A



7



# 1(

End of Quantitative Rating. Complete Categorization Worksheets.



M 5-B

te: 1732 F	1EP	Lin	na-kalida	Rater(s):	E.Wil:	in, C. Kwolek	Date: 7 Dec 2		
	٦								
29									
subtotal first	page								
		lotri	c 5 Special	Wetlands					
0 29	1	ieui	c J. Opeciai	Wettaniao.					
10 nts subtotal		ock all	that apply and score as	indicated					
10 pts. Subtotal	- Ch		Rog (10)	indicated.					
		-	Fen (10)						
			Old growth forest (10)						
			Mature forested wetland	1 (5)					
			Lake Erie coastal/tributa	ary wetland-unrest	ricted hydr	ology (10)			
			Lake Erie coastal/tributa	ary wetland-restrict	ted hydrold	ogy (5)			
	0		Lake Plain Sand Prairie	s (Oak Openings)	(10)				
			Relict Wet Prairies (10)						
			Known occurrence state	e/federal threatene	d or endar	ngered species (10)			
		-	Significant migratory so	ngbird/water fowl h	habitat or L	usage (10)			
	-1-		Category 1 Wetland. S	ee Question 1 Qua	alitative Ra	iting (-10)			
		letri	ic 6. Plant co	ommunitie	s, inte	erspersion, micro	otopography.		
0 29									
20 pts. subtota	1 6a	. Wetla	and Vegetation Commun	ities. Ve	getation C	Community Cover Scale			
	Sc	ore all	present using 0 to 3 sca	le.	0	Absent or comprises <0.1ha	(0.2471 acres) contiguous are		
		0	Aquatic bed		1	Present and either comprises	small part of wetland's		
		ſ	Emergent			vegetation and is of modera	ate quality, or comprises a		
		0	Shrub			significant part but is of low	quality		
	1	0	Forest		2	Present and either comprises	significant part of wetland's		
	1	6	Mudflats			vegetation and is of modera	ate quality or comprises a sma		
		Ø	Open water		2	part and is of high quality	cont part or more of watland		
	Gh	horiz	joiner	ersion	3	vegetation and is of high gu	ality		
	Se	elect on	llv one.			Vegetation and is of high qu	lanty		
			High (5)	Na	rrative De	scription of Vegetation Quali	ity		
			Moderately high(4)		low	Low spp diversity and/or pred	lominance of nonnative or		
	7		Moderate (3)			disturbance tolerant native	species		
	L	×	Moderately low (2)		mod	Native spp are dominant com	ponent of the vegetation,		
			Low (1)			although nonnative and/or of	disturbance tolerant native sp		
			None (0)			can also be present, and sp	becies diversity moderate to		
	60	. Cove	erage of invasive plants.	Refer		moderately high, but genera	ally w/o presence of rare		
	10	aladual	TORAW long form for its		high	Inreatened or endangered s	spp		
	O	leauci	Extensive >75% cover	(-5)	nign	and/or disturbance tolorant	notive and chaopt or virtually		
		V	Moderate 25-75% cover	(-3)		absent and high son diverse	sity and often, but not always		
		_	Sparse 5-25% cover (-	1)		the presence of rare, threat	ened or endangered spp		
	-	3	Nearly absent <5% cov	er (0)			and a sugargarad opp		
			Absent (1)	Mu	dflat and	<b>Open Water Class Quality</b>			
	60	. Micro	otopography.		0	Absent <0.1ha (0.247 acres)			
	Sc	ore all	present using 0 to 3 sca	le.	1	Low 0.1 to <1ha (0.247 to 2.4	7 acres)		
		0	Vegetated hummucks/t	ussucks	2	Moderate 1 to <4ha (2.47 to	9.88 acres)		
	de .	0	Coarse woody debris >	15cm (6in)	3	High 4ha (9.88 acres) or more	e		
	0	0	Standing dead >25cm (	(10in) dbh	Minneterer and Course Basels				
		0	Amphibian breeding po	ois <u>Mi</u>	crotopogr	apny Cover Scale			
					0	Absent			
					1	Present very small amounts	or if more common		
					1	Present very small amounts of marginal quality	or if more common		

29

End of Quantitative Rating. Complete Categorization Worksheets.

3

quality or in small amounts of highest quality

Present in moderate or greater amounts



5-0

e: 1732 AEP Lima - Kalida Rater	(s): E.W.)	Son, C. KWOLEK Date: 7 Dec 20		
29				
subtotal first page				
Metric 5 Special Wetlan	de			
29 129 Wether J. Opecial Wethan	us.			
Upts. subtotal Check all that apply and score as indicated.				
Bog (10)				
Old growth forest (10)				
Wature forested wetland (5)	prostricted by	drology (10)		
Lake Erie coastal/tributary wetland r	actricted hydro			
D Lake Elie Coastai/Hibdiary wetand-h	inge) (10)	10gy (3)		
Relict Wet Prairies (10)	ings) (10)			
Known occurrence state/federal three	atened or end	angered species (10)		
Significant migratory conchird/water	fowl habitat or			
Category 1 Wotland Sag Ouestion	1 Qualitative	Dating (10)		
Metric 6. Plant commun	ities, int	erspersion, microtopography.		
<sup>0 pts.</sup> subtotal 6a. Wetland Vegetation Communities.	Vegetation	Community Cover Scale		
Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.2471 acres) contiguous area		
Aquatic bed	1	Present and either comprises small part of wetland's		
<i>i</i> Emergent		vegetation and is of moderate quality, or comprises a		
o Shrub		significant part but is of low quality		
Forest	2	Present and either comprises significant part of wetland's		
1 Mudflats		vegetation and is of moderate quality or comprises a small		
© Open water	-	part and is of high quality		
L Other	3	Present and comprises significant part, or more, of wetland		
6b. horizontal (plan view) Interspersion.		vegetation and is of high quality		
Select only one.				
High (5)	Narrative D	escription of Vegetation Quality		
Moderately high(4)	low	Low spp diversity and/or predominance of nonnative or		
Moderately Joy (2)	mod	Notive and are deminent earnement of the verset of the		
	mou	although nonnetive and/or disturbance telerant active and		
		can also be present and species diversity moderate to		
6c. Coverage of invasive plants. Refer		moderately high, but generally w/o presence of rare		
to Table 1 ORAM long form for list. Add		threatened or endangered spp		
or deduct points for coverage	high	A predominance of native species with poppative spo		
Extensive >75% cover (-5)	ingit	and/or disturbance tolerant native species, with homative spp		
Moderate 25-75% cover (-3)		absent, and high spp diversity and often, but not always		
Sparse 5-25% cover (-1)		the presence of rare, threatened, or endangered spn		
Nearly absent <5% cover (0)	-	ended of the of t		
Absent (1)	Mudflat and	d Open Water Class Quality		
6d. Microtopography.	0	Absent <0.1ha (0.247 acres)		
Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 acres)		
Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.88 acres)		
<ul> <li>Coarse woody debris &gt;15cm (6in)</li> </ul>	3	High 4ha (9.88 acres) or more		
Standing dead >25cm (10in) dbh				
Amphibian breeding pools	Microtopography Cover Scale			
	0	Absent		
	1	Present very small amounts or if more common		
		of marginal quality		
	2	Present in moderate amounts, but not of highest		

PSS 5-C

29

End of Quantitative Rating. Complete Categorization Worksheets.

3

quality or in small amounts of highest quality

Present in moderate or greater amounts
hio Drug for spectrum Protect to April	Headwater Habitat Evaluation Index Field Form HHEI Score (sum of metrics 1+2+3) 5 こ
SITE NAME/LOCATION	S       O O O O O
1. SUBSTRATE (Esti (Max of 32). Add tol TYPE BLDR SLABS [ BOULDER (>25 BEDROCK [16] COBBLE (65-25 GRAVEL (2-64) SAND (<2 mm) Total of Percent Bidr Slabs, Boulder, C SCORE OF TWO MOST PRI	mate percent of every type present). Check ONL Y two predominant substrate TYPE boxes.       HHEI         tal number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B       HHEI         16 pts]       SILT [3 pt]       PERCENT         16 pts]       EAF PACK/WOODY DEBRIS [3 pts]       Substrate         16 mm) [16 pts]       CLAY or HARDPAN [0 pt]       Its         16 mm) [9 pts]       MUCK [0 pts]       Its         16 pts]       ARTIFICIAL [3 pts]       Its         ages of       CAY       TOTAL NUMBER OF SUBSTRATE TYPEs:       A + B
2. Maximum Pool De time of evaluation. A 30 centimeters [20 22.5 - 30 cm [30 p 2 > 10 - 22.5 cm [25 p COMMENTS	pth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the       Pool Depth         Avoid plunge pools from road culverts or storm water pipes)       (Check ONLY one box):       Max = 30         pts]       S cm - 10 cm [15 pts]       S cm [5pts]         ts]       NO WATER OR MOIST CHANNEL [0pts]       AS         MAXIMUM POOL DEPTH (centimeters)       NO
3. BANK FULL WIDT → 4.0 meters (> 13) → 3.0 m - 4.0 m (> 9' → 1.5 m - 3.0 m (> 4' COMMENTS	H (Measured as the average of 3 - 4 measurements) (Check $ONL$ Y one box): [30 pts] $\rightarrow 1.0 \text{ m} - 1.5 \text{ m} (> 3 \text{ 3}^{\circ} - 4 \text{ 8}^{\circ})$ [15 pts] $7^{\circ} - 13$ ) [25 pts] $\rightarrow 1.0 \text{ m} (\leq 3 \text{ 3}^{\circ})$ [5 pts] $8^{\circ} - 9^{\circ} 7^{\circ}$ ) [20 pts] $\qquad \qquad
RIPARIAN Z RIPARIAN Z RIPARIAN L R (Per Ba Wide >10 Moderate Narrow < COMMENTS FLOW REGI Stream Flow Subsurface flow Subsurface flow SINUO SITY None 0.5 STREAM GRADIEJ	This information must also be completed         CONE AND FLOODPLAIN QUALITY * NOTE: River Left (L) and Right (R) as looking downstream*         WIDTH       FLOODPLAIN QUALITY (Most Predominant per Bank)         nk)       L R         m       Immature Forest, Wetland         immature Forest, Shrub or Old Field       Urban or Industrial         S=10m       Immature Forest, Shrub or Old Field         Sm       Residential, Park, New Field         Fenced Pasture       Mining or Construction         ME (At Time of Evaluation)       (Check ONLY one box):         ing       Moist Channel, isolated pools, no flow (Intermittent)         Dry channel, no water (ephemeral)       Urban er low (Intermittent)         INW with isolated pools (interstitial)       Check ONLY one box):         1.0       2.0       3.0         1.5       2.5       >3
Flat: 0.5 % (20.5	Flat to Moderate I Moderate 200000 Moderate to Severe Severe Severe Severe Page 1

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	ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):
QHEI	PERFORMED? 🗌 Yes 💋 No. QHEI Score (If Yes, Attach Completed QHEI form)
DOWN DOWN Name: CWH Name: EWH Name:	ISTREAM DESIGNATED USE(S)  Distance fromEvaluated Stream Distance fromEvaluated Stream Distance fromEvaluated Stream Distance fromEvaluated Stream
MAPF	PING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATER SHED AREA. CLEARLY MARK THE SITE LOCATION.
USGS Quadran	gle Name: $07407117$ NRCS Soil Map Page: NRCS Soil Map Stream Order:
County:	Putnar Township/City: fort Jenning
MISC Base Flow Cond Photo-document Elevated Turbidi Were samples of Field Measures:	ELLANEOUS         ditions? (Y/N):
Additional comm	reach representative of the stream (Y/N) If not, explain:
	BIOLOGICAL OBSERVATIONS
Fish Observed?	? (?/N) Species observed (if known):
Frogs or Tadpol	es Observed? (Y/N) <u>Y</u> Species observed (if known):
Salamanders Ob Aquatic Macroin	oserved? (Y/N) Species observed (if known): Ivertebrates Observed? (Y/N) Species observed (if known):
Comments Rega	arding Biology:
	AWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This <u>must</u> be completed) ude important landmarks and other features of interest for site evaluation and a narrative description of the stream's location
-μοψν	Lineat Evelig

Protection April	Headwater Habitat Evaluation Index Field Form HHEI Score (sum of metrics 1+2+3) 59	Ī
SITE NAME/LOCATION SITE NUMBER <u>1</u> LENGTH OF STREAM DATE $(2 \ll 12.1)$ NOTE: Complete All 1	RIVER BASIN RIVER CODE DRAINAGE AREA (mF) REACH (ft) LAT (0.8778 LONG DONG RIVER MILE SCORER COMMENTS COMMENTS ems On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Instruction	= 
STREAM CHANNEL		VERY
SUBSTRATE ( (Max of 32). Ac           TYPE           BLDR SLAI           BOULDER           BEDROCK           COBBLE (6)           GRAVEL (2)           SAND (<2)	Stimate percent of every type present). Check ONLY two predominant substrate TYPE boxes.       HHI         Stotal number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B       HHI         S [16 pts]       Image: SiLT [3 pt]       Image: SiLT [3 pt]         >256 mm) [16 pts]       Image: SiLT [3 pt]       Image: SiLT [3 pt]       Image: SiLT [3 pt]         >256 mm) [16 pts]       Image: SiLT [3 pt]       Image: SiLT [3 pt]       Image: SiLT [3 pt]       Image: SiLT [3 pt]         >256 mm) [12 pts]       Image: SiLT [3 pt]       Imag	El ric its trate = 40
SCORE OF TWO MOST         2.       Maximum Poot time of evaluat         > 30 centimeter         > 22.5 - 30 cm         > 10 - 22.5 cm         COMMENTS	PREDOMINATE SUBSTRATE TYPES:       TOTAL NUMBER OF SUBSTRATE TYPES:       Pool D         IDepth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the in. Avoid plunge pools from road culverts or storm water pipes)       (Check ONLY one box):       Pool D         [20 pts]       S cm - 10 cm [15 pts]       S cm [5pts]       [20 pts]       [20 pts	epth : 30
3. BANK FULL W > 4.0 meters (> 2 > 3.0 m - 4.0 m > 1.5 m - 3.0 m	DTH (Measured as the average of 3 - 4 measurements)       (Check ONLY one box);       Bank         3') [30 pts]       > 1.0 m - 1.5 m (≥ 3'3' - 4'8')[15 pts]       Widt         > 9' 7' - 13') [25 pts]       ≤ 1.0 m (≤ 3'3')[5 pts]       Max=         > 4' 8'' - 9' 7'') [20 pts]       7' < 10 m (≤ 3'3')[5 pts]	full th :30
COMMENTS	AVERAGE BANKFULL WIDTH (meters) 3.1	
RIPARI L R (Pe L R (Pe D Wide Mode Narro K Ø None	This information mustalso be completed         N ZONE AND FLOODPLAIN QUALITY       * NOTE: River Left (L) and Right (R) as looking downstream*         AN_WETH       FLOODPLAIN_QUALITY       (Most Predominant_per Bank)         Bank)       L_R       L_R         >10m       Mature Forest, Wetland       Conservation Tillage         rate 5-10m       Immature Forest, Shrub or Old Field       Urban or Industrial         w <5m	
COMME FLOW F Stream F Subsurfa COMME SINUOS None 0.5	TS EGIME (4t Time of Evaluation) (Check ONLY one box): owing Moist Channel, isolated pools, no flow (intermittent) ce flow with isolated pools (interstitial) Dry channel, no water (ephemeral) ITS TY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): 1.0 2.0 3.0 1.5 2.5 >3	
STREAM GRA	NENT ESTIMATE	
Mar 2020 Rev son	Page 1	

QHEI PERFORMED? TYPES FTND QHEI Score (If Yes, Attach Completed QHEI form)
DOWNSTREAM DESIGNATED USE(S) WWH Name: Distance from Evaluated Stream CWH Name: Distance from Evaluated Stream
EWH Name: Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.
USGS Quadrangle Name: Ottoville NRCS Soil Map Page:NRCS Soil Map Stream Order:
County: Fart Jennings Township/City: Fort Jennings
MISCELLANEOUS
Base Flow Conditions? (Y/N): Y Date of last precipitation:/ D Quantity: Quantity:
Photo-documentation Notes: See Pepers
Elevated Turbidity?(Y/N): Canopy (% open):
Were samples collected for water chemistry $2(\sqrt{N})$ ; $\sqrt{2}$ Lab Sample # or ID (attach results);
Field Measures:Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (umhos/cm)
is the sempling reach representative of the stream $(\sqrt{24})$
is the sampling reach representative of the site and (7/4) If not, explain
BIOLOGICAL OBSERVATIONS (Record all observations below)
Fish Observed? (Y/N) Species observed (if known):
Frogs or Tadpoles Observed? (Y/N) Species observed (if known):
Salamanders Observed? (Y/N) Species observed (if known);
Aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):
Comments Regarding Biology:
DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This <u>must</u> be completed) Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location
Bearfield K-GHE
LOW TITLE ROALING ROALING
Com Kield
Mar 2020 Revision 2

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Province April	Headwater Habitat Evaluation Index Field Form HHEI Score (sum of metrics 1+2+3) 5년	
SITE NAME/LOCATION SITE NUMBER LENGTH OF STREAM REA DATE <u>とていして</u> SCI NOTE: Complete All Item STREAM CHANNEL MOD	S-00 RIVER BASIN <u>CH46~6</u> RIVER CODE <u>DRAINAGE AREA (mP)</u> <u>0.01</u> ACH (ft) <u>136</u> LAT <u>ATO &amp; 76</u> LONG <u>89</u> , <u>2295</u> RIVER MILE <u>COMMENTS</u> ORER <u>Smath</u> <u>COMMENTS</u> Ins On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Instructions DIFICATIONS: <u>NONE</u> NATURAL CHANNEL RECOVERED <u>RECOVERING</u> RECENT OR NO RECOVE	ERY
1. SUBSTRATE (Esti (Max of 32), Add to TYPE BLDR SLABS [ BOULDER (>25 BEDROCK [16 COBBLE (65-2) GRAVEL (2-64 SAND (<2 mm) Total of Percen Bkdr Slabs, Boulder, ( SCORE OF TWO MOST PR	imate percent of every type present). Check ONL Y two predominant substrate TYPE boxes.       HHEI         ital number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B       HHEI         YERCENT       TYPE         SE mm [16 pts]       SILT [3 pt]         Yets]       EAF PACK/WOODY DEBRIS [3 pts]         Se mm [12 pts]       CLAY or HARDPAN [0 pt]         mm) [9 pts]       MUCK [0 pts]         If 6 pts]       ARTIFICIAL [3 pts]         tages of       Cobble. Bedrock         Cobble. Bedrock       (A)         Yets       TOTAL NUMBER OF SUBSTRATE TYPES:	C 5 -0 ]
2. Maximum Pool De time of evaluation. → 30 centimeters [20 → 22 5 - 30 cm [30 p → 10 - 22.5 cm [25 p COMMENTS	epth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the       Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the       Pool Depth (Max = 3         Avoid plunge pools from road culverts or storm water pipes)       (Check ONLY one box):       Max = 3         0 pts]       5 cm - 10 cm [15 pts]       [15 pts]         ots]       NO WATER OR MOIST CHANNEL [0pts]       [25         MAXIMUM POOL DEPTH (centimeters);       [25	oth 0
3. BANK FULL WIDT > 4.0 meters (> 13') > 3.0 m - 4.0 m (> 9 > 1.5 m - 3.0 m (> 4	TH (Measured as the average of 3 - 4 measurements)(Check ONLY one box):Bankfu[30 pts] $2 \times 1.0 \text{ m} - 1.5 \text{ m} (> 3.3^{\circ} - 4.8^{\circ})[15 \text{ pts}]$ Width $(7^{\circ} - 13)[25 \text{ pts}]$ $2 \times 1.0 \text{ m} (\le 3.3^{\circ})[5 \text{ pts}]$ Max=30 $(8^{\circ} - 9^{\circ} 7^{\circ})[20 \text{ pts}]$ $7^{\circ} - 3^{\circ} 7^{\circ} = 10 \text{ m} (\le 3.3^{\circ})[5 \text{ pts}]$ To the second sec	)
COMMENTS		All .
RIPARIAN A <u>RIPARIAN</u>	This information mustalso be completed           ZONE AND FLOODPLAIN QUALITY • NOTE: River Left (L) and Right (R) as looking downstream•           ELOODPLAIN QUALITY (Most Predominant per Bank)	
L R (Per Ba	anki L. R. L. R. Cm Ature Forest, Wetland Conservation Tillage e 5-10m Immature Forest, Shrub or Old Field Urban or Industrial <sm corp="" crop<br="" field="" new="" none="" park,="" pasture,="" residential,="" row="">Fenced Pasture Mining or Construction</sm>	
FLOW REG Stream Flow Subsurface COMMENTS	IME (At Time of Evaluation) (Check ONLY one box): ing Moist Channel, isolated pools, no flow (intermittent) flow with isolated pools (interstitial) Dry channel, no water (ephemeral) S	
SINUO SITY	1.0         2.0         3.0           1.5         2.5         >3           NT ESTIMATE         Flat to Moderate         Moderate         Severe 10.5100 %	

Max	2520	Rec	50 <b>3</b>

	ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):
QHEI PE	RFORMED? TYes And AHEI Score (If Yes, Attach Completed AHEI form)
DOWNS WWH Name: CWH Name: EWH Name:	TREAM DESIGNATED USE(S)       Distance from Evaluated Stream       1 m 1 m         Distance from Evaluated Stream       Distance from Evaluated Stream         Distance from Evaluated Stream       1 m
MAPPIN	G: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.
USGS Quadrangle	Name: <u>61, 1 A</u> NRCS Soil Map Page:NRCS Soil Map Stream Order:
County: Pul	AAn Township/City: ford Jenney
MISCEL	LANEOUS
Base Flow Conditio	ons? (Y/N): Date of last precipitation: Quantity:
Photo-documentat	ion Notes: See Report
Elevated Turbidity?	2(Y/N): Canopy (% open):
Were samples coll	ected for waterichemistry?(Y/N): Lab Sample # or ID (attach results):
Field Measures:Te	mp (°C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (umhos/cm)
is the sampling rea	ach representative of the stream (Y/N) If not, explain:
Fish Observed? ()	BioLogical observations         (Report all observations below)         //N)       Species observed (if known);
Frogs or Tadpoles	Observed? (Y/N) N_ Species observed (if known):
Salamanders Obse	erved? (Y/N) N Species observed (if known):
Aquatic Macroinve	rtebrates Observed? (Y/N) Species observed (if known):
Comments Regard	ling Biology: fire species not identified to species
DRA	WING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)
Include	+ important landmarks and other features of interest for site evaluation and a narrative description of the stream's location
	Oberland relative Can
t.	Suithern kield
LOW -	
	Kund
0.000	i Conchiell
May 2020 Revision	Page 2

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Intermittent 1-008

Che Environmental Protection Agency Headw	ater Habitat Evaluation Index Field Form HHEI Score (sum of metrics 1+2+3)	45
SITE NAME/LOCATION 1730 AC SITE NUMBER 1-00% RIVER BAS LENGTH OF STREAM REACH (ft) 2000 DATE 0/20/201 SCORER CW NOTE: Complete All Items On This Fo STREAM CHANNEL MODIFICATIONS:	P North Delphos - Pockhill IN Ottawa ENER RIVER CODE DRAINAGE AREA (MP) ( LAT 40.80302 LONG -84.21033 RIVER MILE DISON COMMENTS Datch perform Ag Grebs Datch perform Ag Grebs DTM - Refer to "Headwater Habitat Evaluation Index Field Manual" for Ins NONE/NATURAL CHANNEL RECOVERED RECOVERING RECENT OR I	tructions
SUBSTRATE (Estimate percent of (Max of 32). Add total number of signed BLDR SLABS [16 pts] BOULDER (>256 mm) [16 pts] BEDROCK [16 pts] COBBLE (65-256 mm) [12 pts] GRAVEL (2-64 mm) [9 pts] SAND (<2 mm) [6 pts] Total of Percentages of Bidr Slabs, Boulder, Cobble, Bedrock SCORE OF TWO MOST PREDOMINATE SU	of every type present). Check ONLY two predominant substrate TYPE boxes.         gnificant substrate types found (Max of 8). Final metric score is sum of boxes A & B         PERCENT       TYPE         Image: Sill T [3 pt]       PERCENT         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill	HHEI Metric Points Substrate Max = 40
2. Maximum Pool Depth (Measure ti time of evaluation. Avoid plunge pool > 30 centimeters [20 pts] > 22.5 - 30 cm [30 pts] > 10 - 22.5 cm [25 pts] COMMENTS/A 3. BANK FULL WIDTH (Measuredas > 4.0 meters (> 13') [30 pts]	the maximum pool depth within the 61 meter (200 feet) evaluation reach at the ols from road culverts or storm water pipes) (Check ONLY one box):	Pool Depth Max = 30
> 3.0 m - 4.0 m (> 9'7'-13') [25 pts] > 1.5 m - 3.0 m (> 4'8' - 9'7') [20 ptr COMMENTS/A	s] AVERAGE BANKFULL WIDTH (meters)	Width Max=30 20
	This information mustalso be completed	
RIPARIAN ZONE AND FLOC <u>RIPARIAN WIDTH</u> L R (Per Bank)	DOPLAIN QUALITY * NOTE: River Left (L) and Right (R) as looking downstream* FLOODPLAIN QUALITY (Most Predominant per Bank) L R L R	
□ Moderate 5-10m □ Moderate 5-10m □ Narrow <5m □ None COMMENTS	Mature Porest, Wetland     Conservation Tillage     Immature Forest, Shrub or Old Field     Urban or Industrial     Residential, Park, New Field     Residential, Park, New Field     Open Pasture, Row Cro     Fenced Pasture     Mining or Construction     Mining or Construction	Þ
FLOW REGIME (At Time of E Stream Flowing Subsurface flow with isolated p COMMENTS	Evaluation)       (Check ONLY one box):         Image: State of the s	D
None	Sperior in (200 π) or channel)         (Check ONLY one box):           1.0         2.0         3.0           1.5         2.5         >3	
Flat (0.5 M100 M) Flat to Moderate	Moderate (2 @100 %) Moderate to Severe Severe (10 @100	40
May 2020 Remision	Page 1	

	TING OHEL Score (If Yes, Attach Completed QHEL form)
DOWNSTREAM DESIGNATEL	Distance fromEvaluated Stream
CWH Name:	Distance from Evaluated Stream
] EWH Name:	Distance from Evaluated Stream
MAPPING: ATTACH COPIES O	F MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.
ISGS Quadrangle Name: Elic	NRCS Soil Map Page: NRCS Soil Map Stream Order:
P. togoo	Township/City: Sugar creek / Rimer
.ounty	
MISCELLANEOUS	- 0
Base Flow Conditions? (Y/N):	Date of last precipitation: Quantity:
Photo-documentation Notes:	ream downstream + substrate
Elevated Turbidity?(Y/N):	Canopy (% open):
Were samples collected for water cher	mistry?(Y/N): Lab Sample # or ID (attach results):
	Dispected Oxygen (mo/l) pH (S.U.) Conductivity (umhos/cm)
Field Measures:Temp (*C) L	
is the sampling reach representative o	f the stream (Y/N) If not, explain:/A
505 555 00 m 0 1 2 M 0 1 M 0 1 M 0 1 M 0 1 M 0 1 M 0 1 M 0 1 M 0 1 M 0 1 M 0 1 M 0 1 M 0 1 M 0 1 M 0 1 M 0 1 M	1.400 Automatication Automatication Automatication
Additional comments/description of po	llution impacts: N/A
	- Netter and a second
	BIOLOGICAL OBSERVATIONS
	BIOLOGICAL OBSERVATIONS (Record all observations below)
Fish Observed? (Y/N) <u>N</u> Spec	BIOLOGICAL OBSERVATIONS (Report all observations below) ies observed (if known):
Fish Observed? (Y/N) <u>N</u> Spec Frogs or Tadpoles Observed? (Y/N)	BIOLOGICAL OBSERVATIONS (Report all observations below) ies observed (if known):
Fish Observed? (Y/N) <u>N</u> Spec Frogs or Tadpoles Observed? (Y/N) Salamanders Observed? (Y/N) <u>N</u>	BIOLOGICAL OBSERVATIONS (Record all observations below) ies observed (if known):
Fish Observed? (Y/N) <u>N</u> Spec Frogs or Tadpoles Observed? (Y/N) Salamanders Observed? (Y/N) <u>N</u> Aquatic Macroinvertebrates Observed	BIOLOGICAL OBSERVATIONS (Report all observations below) ies observed (if known): Species observed (if known): Species observed (if known): d? (V/N) Species observed (if known):
Fish Observed? (Y/N) N Spec Frogs or Tadpoles Observed? (Y/N) Salamanders Observed? (Y/N) Aquatic Macroinvertebrates Observed Comments Regarding Biology:	BIOLOGICAL OBSERVATIONS (Report all observations below) ies observed (if known):
Fish Observed? (Y/N) <u>N</u> Spec Frogs or Tadpoles Observed? (Y/N) Salamanders Observed? (Y/N) <u>N</u> Aquatic Macroinvertebrates Observed Comments Regarding Biology:	BIOLOGICAL OBSERVATIONS (Report all observations below) ies observed (if known):
Fish Observed? (Y/N) N Spec Frogs or Tadpoles Observed? (Y/N)_ Salamanders Observed? (Y/N) N Aquatic Macroinvertebrates Observed Comments Regarding Biology:	BIOLOGICAL OBSERVATIONS (Report all observations below) ies observed (if known):
Fish Observed? (Y/N) <u>N</u> Spec Frogs or Tadpoles Observed? (Y/N) Salamanders Observed? (Y/N) <u>N</u> Aquatic Macroinvertebrates Observed Comments Regarding Biology: DRAWING AND NA	BIOLOGICAL OBSERVATIONS (Report all observations below) ies observed (if known):
Fish Observed? (Y/N) N Spec Frogs or Tadpoles Observed? (Y/N) Salamanders Observed? (Y/N) Aquatic Macroinvertebrates Observed Comments Regarding Biology: DRAWING AND NA Include important landmark	BIOLOGICAL OBSERVATIONS (Report all observations below) ies observed (if known):
Fish Observed? (Y/N) N Spec Frogs or Tadpoles Observed? (Y/N) Salamanders Observed? (Y/N) N Aquatic Macroinvertebrates Observed Comments Regarding Biology: DRAWING AND NA Include important landmark	BIOLOGICAL OBSERVATIONS (Report all observations below) ies observed (if known):
Fish Observed? (Y/N) N Spec Frogs or Tadpoles Observed? (Y/N) Salamanders Observed? (Y/N) Aquatic Macroinvertebrates Observed Comments Regarding Biology: DRAWING AND NA Include important landmark	BIOLOGICAL OBSERVATIONS (Report all observations below)         ies observed (if known):
Fish Observed? (Y/N) N Spec Frogs or Tadpoles Observed? (Y/N) Salamanders Observed? (Y/N) N Aquatic Macroinvertebrates Observed Comments Regarding Biology: DRAWING AND NA Include important landmark	BIOLOGICAL OBSERVATIONS (Report all observations below)         ies observed (if known):
Fish Observed? (Y/N) N Spec Frogs or Tadpoles Observed? (Y/N) Salamanders Observed? (Y/N) Aquatic Macroinvertebrates Observed Comments Regarding Biology: DRAWING AND NA Include important landmark	BIOLOGICAL OBSERVATIONS (Report all observations below)         ies observed (if known):
Fish Observed? (Y/N) N Spec Frogs or Tadpoles Observed? (Y/N) Salamanders Observed? (Y/N) Aquatic Macroinvertebrates Observed Comments Regarding Biology: DRAWING AND NA Include important landmark	BIOL OGICAL OBSERVATIONS (Report all observations below)         ies observed (if known):         N         Species observed (if known):
Fish Observed? (Y/N) N Spec Frogs or Tadpoles Observed? (Y/N) Salamanders Observed? (Y/N) N Aquatic Macroinvertebrates Observed Comments Regarding Biology: DRAWING AND NA Include important landmark	BIOLOGICAL OBSERVATIONS (Report all observations below)         ies observed (if known):
Fish Observed? (Y/N) N Spec Frogs or Tadpoles Observed? (Y/N) Salamanders Observed? (Y/N) Aquatic Macroinvertebrates Observed Comments Regarding Biology: DRAWING AND NA Include important landmark	BIOLOGICAL OBSERVATIONS (Report all observations below)         ies observed (if known):         N
Fish Observed? (Y/N) N Spec Frogs or Tadpoles Observed? (Y/N) Salamanders Observed? (Y/N) N Aquatic Macroinvertebrates Observed Comments Regarding Biology: DRAWING AND NA Include important landmark	BIOLOGICAL OBSERVATIONS (Report all observations below)         ies observed (if known):

Phio Brach romana Protect of Agent	Headwater Habitat Evaluation Index Field Form HHEI Score (sum of metrics 1+2+3)
SITE NAME/LOCATION SITE NUMBER <u>1</u> LENGTH OF STREAM DATE <u>Classica</u> NOTE: Complete All I STREAM CHANNEL M	River Basin Ottom       River CODE       DRAINAGE AREA (mF)       Orold         REACH (ft)       LAT       YO       YO       YO       YO         SCORER       LAT       YO       YO       YO       YO       YO         SCORER       LAT       YO       YO       YO       YO       YO       YO         tems On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Instructions       Recovered       Recovering       Recent or NO Recovery
1. SUBSTRATE ( (Max of 32). Ad TYPE BLDR SLAE BOULDER BEDROCK COBBLE (6 GRAVEL (2 SAND (<2 n Total of Per Bidr Siabs, Bould SCORE OF TWO MOST	Estimate percent of every type present). Check ONLY two predominant substrate TYPE boxes. d total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B PERCENT TYPE SILT [3 pt] SILT [3 pt] SILT [3 pt] SILT [3 pt] S-256 mm) [16 pts] S-256 mm) [12 pts] S-256 mm) [12 pts] S-256 mm) [12 pts] CLAY or HARDPAN [0 pt] S-256 mm) [12 pts] S-256 mm) [12 pts] CLAY or HARDPAN [0 pt] S-256 mm] [12 pts] S-256 mm] [1
2. Maximum Poo time of evaluati ⇒ 30 centimeters ⇒ 22.5 - 30 cm [ ⇒ 10 - 22.5 cm [ COMMENTS	Al Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the on. Avoid plunge pools from road culverts or storm water pipes)       (Check ONLY one box):       Pool Depth Max = 30         [20 pts]       S cm - 10 cm [15 pts]       (S cm [5 pts])       S cm [5 pts]         [30 pts]       < 5 cm [5 pts]
3.         BANK FULL W           > 4.0 meters (>         >           > 3.0 m - 4.0 m d         >           > 1.5 m - 3.0 m d         >	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$
COMMENTS_	AVERAGE BANKFULL WIDTH (meters)
RIPARIA <u>RIPAR</u> L R (Pe Wide Mode Narro None	This information mustalso be completed         AN ZONE AND FLOODPLAIN QUALITY + NOTE: River Left (L) and Right (R) as looking downstream.         IAN       FLOODPLAIN QUALITY       (Most Predominant per Bank)         r Bank)       L       R       L         >10m       Immature Forest, Wetland       Conservation Tillage         rate 5-10m       Immature Forest, Shrub or Old Field       Urban or Industrial         w <5m
COMMEI FLOW R Stream F Subsurfa COMMEI SINUOS	ITS
0.5 STREAM GRAI	✓ 1.5
☐ Flat (0.5 € 100 €	Flat to Moderate Moderate (2.5.00.5) Moderate to Severe Severe Severe Severe Severe 10.5.00.5
Mar 2020 Revision	Page

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ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):
QHEI PERFORMED? 🔲 Yes 💭 No. QHEI Score (If Yes, Attach Completed QHEI, form)
DOWNSTREAM DESIGNATED USE(S)         WWH Name:       Distance from Evaluated Stream         CWH Name:       Distance from Evaluated Stream         EWH Name:       Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.
USGS Quadrangle Name: <u>6/, 16</u> NRCS Soil Map Page: NRCS Soil Map Stream Order:
County: Alka Township/City: 6
MISCELLANEOUS
Base Flow Conditions? (Y/N): Date of last precipitation: Quantity:
Photo-documentation Notes: <u>Sec. 2000</u>
Elevated Turbidity?(Y/N): Canopy (% open):
Were samples collected for water chemistry? (Y/N): Lab Sample # or ID (attach results):
Field Measures:Temp (*C)       Dissolved Oxygen (mg/l)       pH (S.U.)       Conductivity (umhos/cm)
Is the sampling-reach representative of the stream (Y/N) If not, explain:
Additional comments/description of pollution impacts:
BIOLOGICAL OBSERVATIONS
Fish Observed? (Y/N) Species observed (if known):
Frogs or Tadpoles Observed? (Y/N) Species observed (if known):
Salamanders Observed? (Y/N) Species observed (if known);
Aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):
Comments Regarding Biology:
DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This <u>must</u> be completed) Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

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			6
FLOW	. 4	$\lambda < \infty$	0
V	e,Ĵ	2-010	5
		and the second	

STR HAUPLOCATION	Headwater Habitat Evaluation Index Field Form HHEI Score (sum of metrics 1+2+3)	) Torrents
NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Instructions         STREAM CHANNEL MODIFICATIONS:       INDEX - NATURAL CHANNEL [accovere] accovering [accovering]       Instructions         1       SUBSTRATE (faitimate percent of every type present). Check ONLY two predomment substrate TYPE/baxes.	SITE NAME/LOCATION	<u> </u>
1.       SUBSTRATE (Estimate percent of every type present). Check ONLY type predominant aubstrate T/YEE baxes. (Max e132): Additatial number of substrate types found. (Max e132): Final metric score is sum of toxes A & B PRCENT (Max e132): Additatial number of substrate types found. (Max e13): Final metric score is sum of toxes A & B PRCENT (B) = BLOR SLABS (16 pts) (B) = COBLE (65:256 mm) (12 pts) (B) = COBLE (65:256 mm) (12 pts) (CAY or HARDAPA (19 pt) (B) = COBLE (65:256 mm) (12 pts) (CAY or HARDAPA (19 pt) (B) = COBLE (65:256 mm) (12 pts) (CAY or HARDAPA (19 pt) (B) = COBLE (65:256 mm) (12 pts) (CAY or HARDAPA (19 pt) (B) = COBLE (65:256 mm) (12 pts) (CAY or HARDAPA (19 pt) (B) = COBLE (65:256 mm) (12 pts) (CAY or HARDAPA (19 pt) (CAY or HARDAPA (15 pts)) (CAY OR HARDAPA (15 pts)	NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Instruction STREAM CHANNEL MODIFICATIONS: NONE (NATURAL CHANNEL RECOVERED RECOVERING RECOVERING RECENT OF NO REC	ONS COVERY
2.       Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation. Avoid putings pools from road culvers or storm water pipes)       COOM Evaluation. Avoid putings pools from road culvers or storm water pipes)       COOM Evaluation. Avoid putings pools from road culvers or storm water pipes)       COOM Evaluation. Avoid putings pools from road culvers or storm water pipes)       Cook points the 20 pts]       Som. 10 cm (15 pts]       Som. 10 cm (15 pts]         > 22 5 - 30 cm (26 pts]       Som (26 pts]       MAXIMUM POOL DEPTH (centimeters);       Som. 10 cm (15 pts]         COMMENTS       MAXIMUM POOL DEPTH (centimeters);       MAXIMUM POOL DEPTH (centimeters);       Bankfull         > 40 meters (> 13) (30 pts]       > 1.0 m - 1.5 m (> 3 3' - 4 8'; (15 pts]       Som. 10 cm (15 star);       Max=30         > 10 m - 2.0 m (> 4 8' - 9 T; 12) (26 pts]       > 1.0 m - 1.5 m (> 3 3' - 4 8'; (15 pts]       Som. 10 m (x 3 3'; (15 pts));       Som. 10 m (x 3 3'; (15 pts));       Som. 10 m (x 3 3'; (15 pts));         > 10 m - 2.0 m (> 4 8' - 9 T; 12) (20 pts)       AVERAGE BANKFULL WIDTH (meters));       Max=30       Som. 10 m (x 3 3'; (15 pts));       Som. 10 m (x 3 3'; (15 pts));       Som. 10 m (x 3 m (x	1.       SUBSTRATE (Estimate percent of every type present). Check OWL Y two predominant substrate TYPE boxes. (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B       Hi         TYPE       PERCENT       TYPE       PERCENT       PERCENT       PERCENT       PERCENT       PERCENT       PO         BLDR SLABS [16 pts]       Image: score is sum of boxes A & B       PERCENT       TYPE       PERCENT       PERCENT       PO         BOULDER (>256 mm) [16 pts]       Image: score is score	HEI etric ints estrate x = 40
3.       BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check ONLY one box):       Bankfull         > 4.0 meters (> 13) [30 pts]       > 1.0 m - 1.5 m (> 3 3' - 4 8' [15 pts]       Bankfull         > 3.0 m - 4.0 m (> 9 7' - 13) [25 pts]       > 1.0 m (< 3 3') [5 pts]	2.       Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes)       (Check ONLY one box):       Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes)       (Check ONLY one box):       Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes)       (Check ONLY one box):       Maximum Pool Depth (Check ONLY one box):	.Depth x = 30
AVERAGE BANKFULL WIDTH (meters)       Langemeter         This information mustals o be completed         RIPARIAN ZONE AND FLOODPLAIN QUALITY + NOTE: RiverLeft (L) and Right (R) as looking downstream+         RIPARIAN_WIDTH       FLOODPLAIN_QUALITY       + NOTE: RiverLeft (L) and Right (R) as looking downstream+         RIPARIAN_WIDTH       FLOODPLAIN_QUALITY       (Most Predominant per Bank)         L_R       (Per Bank)       L_R       L_R         Wide >10m       Mature Forest, Wetland       Conservation Tillage         Moderate 5-10m       Minmature Forest, Shrub or Old Field       Urban or Industrial         Moderate 5-10m       Minmature Forest, Shrub or Old Field       Urban or Industrial         None       Fenced Pasture       Mining or Construction         COMMENTS	3.       BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check ONLY one box):       Bar         > 4.0 meters (> 13') [30 pts]       □       > 1.0 m - 1.5 m (> 3 3' - 4 8')[15 pts]       Wi         > 3.0 m - 4.0 m (> 9' 7' - 13') [25 pts]       □       ≤ 1.0 m (≤ 3 3'')[5 pts]       Ma         □       > 1.5 m - 3.0 m (> 4' 8' - 9' 7'') [20 pts]       □       ≤ 1.0 m (≤ 3 3'')[5 pts]       □	ıkfull dth x=30
RIPARIAN ZONE AND FLOODPLAIN QUALITY IN NOTE: River Left (L) and Right (R) as looking downstream.         RIPARIAN WIDTH       FLOODPLAIN QUALITY (Most Predominant per Bank)         R       (Per Bank)       L R         Wide \$10m       Immature Forest, Wetland       Conservation Tillage         Moderate 5-10m       Immature Forest, Shrub or Old Field       Urban or Industrial         Narrow <5m	This information mustalso be completed	
FLOW REGIME (At Time of Evaluation)       (Check ONLY one box):         Stream Flowing       Moist Channel, isolated pools, no flow (Intermittent)         Subsurface flow with isolated pools (Interstitial)       Dry channel, no water (ephemeral)         COMMENTS       SINUO SITY (Number of bends per 61 m (200 ft) of channel). (Check ONLY one box):         None       1.0       2.0         0.5       1.5       2.5         STREAM GRADIENT ESTIMATE       Moderate (2 5100 ft)         Stream Gradient       Moderate (2 5100 ft)	RIPARIAN ZONE AND FLOODPLAIN QUALITY * NOTE: River Left (L) and Right (R) as looking downstream*         RIPARIAN WIDTH       FLOODPLAIN QUALITY (Most Predominant per Bank)         L R       (Per Bank)       L R         Wide > 10m       Mature Forest, Wetland       Conservation Tillage         Moderate 5-10m       Immature Forest, Shrub or Old Field       Urban or Industrial         Narrow <5m	
C 0.5 C 1.5 C 2.5 C >3 STREAM GRADIENT ESTIMATE ∑ Flat (3.5 \mmodels) \mmodels Flat to Moderate C 100 \mmodels) \mmodels (2 \mmodels) \mmodels (2 \mmodels) \mmodels) \mmodels (2		
	STREAM GRADIENT ESTIMATE	_

ADDITIONAL STREAM INFORMATION (This Information Mus	st Also be Completed):
QHEI PERFORMED? 🔲 Yes 🗹 No QHEI Score (If Yes. At	tach Completed QHEI form)
DOWNSTREAM DESIGNATED USE(S)	Distance from Evaluated Stream Distance from Evaluated Stream Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATER SHED A	REA. CLEARLY MARK THE SITE LOCATION.
USGS Quadrangle Name: El J - NRCS Soil Map Page:	NRCS Soil Map Stream Order:
County: <u>All-</u> Township/City: <u>6</u> c.	~20
MISCELLANEOUS	
Base Flow Conditions? (Y/N): Date_of last precipitation:	Quantity:
Elevated Turbidity?(Y/N): Canopy (% open):	
Were samples collected for water chemistry? (Y/N): Lab Sample # or ID	(attach results):
$\label{eq:Field_Measures} \mbox{Field_Measures}(\mbox{Femp}\ (\mbox{$^{\circ}C$}) \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	Conductivity (umhos/cm)
is the sampling reach representative of the stream $\langle \forall \partial N \rangle$ if not, explain:	
Additional comments/description of pollution impacts:	
BIOLOGICAL OBSERVATIONS (Report all observations below)	- 6 - (20-4-1)0 - (2001-14)1 - State-See Advances - Marked Bit 14-04 (81-1)
Fish Observed? (Y/N) Species observed (if known);	
Frogs or Tadpoles Observed? (Y/N) Species observed (if known);	
Salamanders Observed? (Y/N) Species observed (if known);	
Aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):	
Comments Regarding Biology:	
DRAWING AND NARRATIVE DESCRIPTION OF STREAM Include important landmarks and other features of interest for site evaluation a	I REACH (This <u>must</u> be completed) nd a narrative description of the stream's location

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FLOW 0

Philo	Headwater Habitat Eval	uation Index Field For HHEI Score (sum of metric	m s 1+2+3) [] GP()
SITE NAME/LOCATION SITE NUMBER LENGTH OF STREAM REA DATE 6120101 SC	<u>SI-DIA</u> RIVER BASIN <u>Rive Run</u> RI ACH (tt) <u>130</u> LAT <u>YOVE099</u> ORER <u>JUNIE</u> COMMENTS	VER CODE DRAINAGE 。 タ LONG <u>- そり、19 58</u> RP	AREA (mP) VER MILE
NOTE: Complete All Iter	as On This Form - Refer to "Headwater	Habitat Evaluation Index Field Ma	nual" for Instructions
STREAM CHANNEL MO	DIFICATIONS: NONE / NATURAL CHANN		RECENT OR NO RECOVERY
1. SUBSTRATE (Est (Max of 32). Add to TYPE BLDR SLABS BOULDER (>2 BEDROCK [16 COBBLE (65-2 GRAVEL (2-64 SAND (<2 mm) Total of Percer Bldr Slabe Boulder	imate percent of every type present). Check         tal number of significant substrate types found         '16 pts]	CONLY two predominant substrate TYPE         d (Max of 8). Final metric score is sum of to the sum of the su	boxes.     HHEI       boxes A & B     Metric       S     Bubstrate       S     Substrate       S     Substrate       S     Substrate       S     Substrate       S     Substrate       S     Substrate       S     Substrate
SCORE OF TWO MOST PE	EDOMINATE SUBSTRATE TYPES: 3	TOTAL NUMBER OF SUBSTRATE TY	PES:
2. Maximum Pool D time of evaluation. > 30 centimeters [2 > 22.5 - 30 cm [30] > 10 - 22.5 cm [25] COMMENTS	epth (Measure the <u>maximum</u> pool depth wit Avoid plunge pools from road culverts or storn 0 pts] pts]	thin the 61 meter (200 feet) evaluation re n water pipes) (Check ONLY one box 5 cm - 10 cm [15 pts] < 5 cm [5pts] NO WATER OR MOIST CHANNEL [0pt: MAXIMUM POOL DEPTH (centime	ach at the Pool Depth Max = 30
3. BANK FULL WIDT	H (Measured as the average of 3 - 4 measu	rements) (Check ONLY one box):	Bankfull
> 4.0 meters (> 13') > 3.0 m - 4.0 m (> 9 > 1.5 m - 3.0 m (> 4	[30 pts] (7'- 13') [25 pts] 8' - 9' 7') [20 pts]	> 1.0 m - 1.5 m (> 3′ 3′ - 4′ 8″) <b>[15 pts]</b> ≤ 1.0 m (≤ 3′ 3′) <b>[5 pts]</b>	Width Max=30
COMMENTS		AVERAGE BANKFULL WIDTH (mg	
RIPARIAN	This information m	ustalso be completed T: Divert eff (1) and Dicht (D) as looking	downatream.
RIPARIAN L R (Per B ☐ Wide > 1 ☐ Moderat Moderat Narrow None COMMENTS	WIDTH     FLOODPLAIN       ank)     L R       Im     Im       ank)     Immature Forest,       e 5-10m     Immature Forest,       x5m     Residential, Parente       Immature     Fenced Pasture	QUALITY       (Most Predominant per Bank)         L       R         , Wetland       Conser         est, Shrub or Old Field       Quality         ark, New Field       Quality         re       Mining of	vation Tillage r Industrial asture, Row Crop pr Construction
FLOW REG Stream Flow Subsurface COMMENTS	IME (At Time of Evaluation) (Check ONLY o ing flow with isolated pools (Interstitial)	ne box): Moist Channel, isolated pools, no Dry channel, no water (ephemera	flow (intermittent) I)
SINUOSITY	INUMBER OT DENDS PER 61 m (200 m) of chann M 1.0 1.5 NT ESTIMATE	ei) (Lineck UNLY one box): 2.0 3.0 2.5 >3	
Flat 05 % 100 %	Flat to Moderate Moderate 2 6 800 %	Moderate to Severe	Severe 19 5100 %
	<b>D</b> 10		

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):
QHEI PERFORMED? DYes ZNo QHEI Score (If Yes, Attach Completed QHEI form)
DOWNSTREAM DESIGNATED USE(S)         WWH Name:       0         CWH Name:       0         Distance from Evaluated Stream       10         Distance from Evaluated Stream       0         Distance from Evaluated S
MAPPING: ATTACH COPIES.OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.
USGS Quadrangle Name: <u>Elid</u> <u>NRCS Soil Map Page:</u> <u>NRCS Soil Map Stream Order:</u> County: <u>Allen</u> <u>Township/City:</u> <u>Game</u>
MISCELLANEOUS
Base Flow Conditions? (Y/N): Y Date of last precipitation: <u>NA</u> Quantity: <u>NA</u> Photo-documentation Notes: <u>See Report</u>
Elevated Turbidity?(Y/N): Canopy (% open):
Were samples collected for water chemistry? (Y/N): 👥 Lab Sample # or ID (attach results):
Field Measures:Temp (*C)       Dissolved Oxygen (mg/l)       pH_(S.U.)       Conductivity (umbos/cm)
Is the sampling reach representative of the stream (Y/N) If not, explain:
Additional comments/description of pollution impacts:
BIOLOGICAL OBSERVATIONS (Record all observations below)
Fish Observed? (Y/N) Species observed (if known):
Frogs or Tadpoles Observed? (Y/N) Species observed (if known):
Salamanders Observed? (Y/N) Species observed (if known):
Aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):
Comments Regarding Biology:

## DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

Graine Riter 51-15 FLOW

Ches Environments Protection Agency Head	adwater Habitat Evaluation Index Field Form HHEI Score (sum of metrics 1+2+3)	41
SITE NAME/LOCATION 1720 SITE NUMBER 1-015 RIVER LENGTH OF STREAM REACH (ft) DATE 10/20/2021 SCORER 1 NOTE: Complete All Items On TH STREAM CHANNEL MODIFICATION	AEP Noch Pelphos - Rocknill R BASIN CHTOWN RIVER CODE DRAINAGE AREA (MP) C 200 LAT 40.80009 LONG -84.13981 RIVER MILE E.Wilson COMMENTSN/A his Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Ins ONS:NONE/NATURAL CHANNEL RECOVERED RECOVERING & RECENT OR I	D. 04
1. SUBSTRATE (Estimate per (Max of 32). Add total numbe TYPE BLDR SLABS [16 pts] BOULDER (>256 mm) [16 BEDROCK [16 pts] COBBLE (65-256 mm) [17 GRAVEL (2-64 mm) [9 pt SAND (<2 mm) [6 pts] Total of Percentages of Bidr Siabs, Boulder, Cobble, Be SCORE OF TWO MOST PREDOMINA	PERCENT       TYPE         6 pts]       Image: Sile of Significant Sile of Significant Substrate Types found (Max of 8). Final metric score is sum of boxes A & B         6 pts]       Image: Sile of Si	HHEI Metric Points Substrate Max = 40
Maximum Pool Depth (Measure of evaluation. Avoid plum)     > 30 centimeters [20 pts]     > 22.5 - 30 cm [30 pts]     > 10 - 22.5 cm [25 pts]     COMMENTS/A      BANK FULL WIDTH (Measure)	sure the <u>maximum</u> pool depth within the 61 meter (200 feet) evaluation reach at the ige pools from road culverts or storm water pipes) (Check ONLY one box): 5 cm - 10 cm [15 pts] < 5 cm [5 pts] NO WATER OR MOIST CHANNEL [0pts] MAXIMUM POOL DEPTH (centimeters): 10 iredas the average of 3 - 4 measurements) (Check ONLY one box):	Pool Depth Max = 30
→ 4.0 meters (>13') [30 pts] > 3.0 m - 4.0 m (> 9' 7'-13') [2! > 1.5 m - 3.0 m (> 4' 8' - 9' 7') COMMENTS/A	5 pts]       > 1.0 m - 1.5 m (> 3' 3" - 4' 8")[15 pts]         [20 pts]       ≤ 1.0 m (≤ 3' 3")[5 pts]         AVERAGE BANKFULL WIDTH (meters)	Width Max=30
RIPARIAN ZONE AND  RIPARIAN WIDTH  RIPARIAN WIDTH  RIPARIAN WIDTH  RIPARIAN WIDTH  RIPARIAN WIDTH  RIPARIAN WIDTH  Wide >10m  Noderate 5-10m  Nore  COMMENTS  FLOW REGIME (At Time  SUBSURFACE flow with iso COMMENTS SINUOSITY (Number of None 0.5	This information mustalso be completed         FLOODPLAIN QUALITY * NOTE: River Left (L) and Right (R) as looking downstream*         FLOODPLAIN QUALITY (Most Predominant per Bank)         L R         L R         Mature Forest, Wetland         Immature Forest, Shrub or Old Field         Urban or Industrial         Residential, Park, New Field         Open Pasture, Row Crop         Fenced Pasture         Moist Channel, isolated pools, no flow (intermitten Dry channel, no water (ephemeral)         NA         If bends per 61 m (200 ft) of channel)       (Check ONLY one box):         1.0       2.0       3.0         1.5       2.5       >3	2p - nt)
STREAM GRADIENT ESTIMA	ATE erate Moderate (2 4100 % Moderate to Severe Severe (10 410 Page 1	0 %)

QH	
	I PERFORMED? Yes No QHEI Score (If Yes, Attach Completed QHEI form)
DO	VNSTREAM DESIGNATED USE(S) Distance from Evaluated Stream 0.4
WWH Na	ie: UNT to FIRES FUN Distance from Evaluated Stream
	e: Distance from Evaluated Stream
	APPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.
ISOS Quar	angle Name: Elida NRCS Soil Map Page: NRCS Soil Map Stream Order:
Countre	Allen Township/City: American / Elida
ounty	RCELLANEOUS
191	Quantity:
Base Flow (	undriverse libertream daystream t substrate
Photo-docu	
Elevated Tu	bidity?(Y/N): Canopy (% open):
Were samp	es collected for water chemistry? (Y/N): Lab Sample # or ID (attach results):
Field Meas	res:Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (umhos/cm)
is the samp	ing reach representative of the stream (Y/N) 📈 If not, explain: 📈 📈
Additional	amments/description of pollution impacts: V/A
Auditorian	
	BIOLOGICAL OBSERVATIONS (Report all observations below)
Fish Obse	red? (Y/N) N Species observed (if known):
Frogs or T	dpoles Observed? (Y/N) N Species observed (if known):
Salamande	s Observed? (Y/N) Species observed (if known);
Salamande Aquatic Ma	s Observed? (Y/N) Species observed (if known): croinvertebrates Observed? (Y/N) Species observed (if known):
Salamando Aquatic Mi Comments	rs Observed? (Y/N) Species observed (if known); croinvertebrates Observed? (Y/N) Species observed (if known); Regarding Biology;/A
Salamande Aquatic Me Comments	rs Observed? (Y/N) Species observed (if known); croinvertebrates Observed? (Y/N) Species observed (if known); Regarding Biology;/A
Salamande Aquatic Mi Comments	Species observed (if known):
Salamande Aquatic Me Comments	The second served? (Y/N) Species observed (if known):  The second served? (Y/N) Species observed (if known):  Regarding Biology:/A  DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed) Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location
Salamande Aquatic Ma Comments	Species observed (if known): Croinvertebrates Observed? (Y/N) Species observed (if known): Regarding Biology:A  DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed) Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location
Salamande Aquatic Me Comments	The source of the stream's location  The str
Salamande Aquatic Mi Comments	Species observed (if known): Croinvertebrates Observed? (Y/N) Species observed (if known): Regarding Biology:A  DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed) Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location
Salamande Aquatic Mi Comments	Species observed (if known):  Croinvertebrates Observed? (Y/N) Species observed (if known):  Regarding Biology:/A  DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed) Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location
Salamande Aquatic Mi Comments	The Species observed (if known):  Croinvertebrates Observed? (Y/N) Species observed (if known):  Regarding Biology:  A  DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed) Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location  A  A  A  A  A  A  A  A  A  A  A  A  A
Salamande Aquatic Mi Comments	The second of the stream's location  The str
Salamande Aquatic Mi Comments	The second served (Y/N) Species observed (if known):  Croinvertebrates Observed? (Y/N) Species observed (if known):  Regarding Biology:/A  DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed) Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location  SHELL, SH
Salamande Aquatic Mi Comments	The subserved? (Y/N) Species observed (if known):  Croinvertebrates Observed? (Y/N) Species observed (if known):  Regarding Biology:/A  DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed) Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location  Stream S
Salamande Aquatic Mi Comments	The second served? (Y/N)
Salamande Aquatic Mi Comments	The served? (Y/N) Species observed (if known):  Croinvertebrates Observed? (Y/N) Species observed (if known):  Regarding Biology:/A   DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed) Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location  SHEAR STREAM REACH (This must be completed)  Note: The stream's location  SHEAR STREAM REACH (This must be completed)  Note: The stream's location  SHEAR STREAM REACH (This must be completed)  Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location  SHEAR STREAM STREAM REACH (This must be completed)  Hear Stream's location  SHEAR STREAM STREAM REACH (This must be completed)  Hear Stream's location  SHEAR STREAM STREAM REACH (This must be completed)  Hear Stream's location  SHEAR STREAM STRE
Salamande Aquatic Mi Comments	son baserved? (Y/N) Species observed (if known): croinvertebrates Observed? (Y/N) Species observed (if known): Regarding Biology:A DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed) Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location Stream Stream

Protection Agency Headwater Ha	bitat Evaluation Index Field Form HHEI Score (sum of metrics 1+2+3)	18
SITE NAME/LOCATION 1720 AEP North SITE NUMBER 1077 RIVER BASIN OTHER LENGTH OF STREAM REACH (ft) 200 LAT 40 DATE 0/20/201 SCORER E.WILSON CO NOTE: Complete All Items On This Form - Refer to STREAM CHANNEL MODIFICATIONS: NONE/ N	Image: Second structure       Image: Second structure         Image: Second structure       Image: Second structure <td>tructions</td>	tructions
1.       SUBSTRATE (Estimate percent of every type (Max of 32). Add total number of significant substring of the substrate of the substr	present). Check ONL Y two predominant substrate TYPE boxes.         trate types found (Max of 8). Final metric score is sum of boxes A & B         TYPE       PERCENT         SILT [3 pt]       20         LEAF PACK/WOODY DEBRIS [3 pts]       15         FINE DETRITUS [3 pts]       15         CLAY or HARDPAN [0 pt]       40         MUCK [0 pts]       40         ARTIFICIAL [3 pts]       5         TOTAL NUMBER OF SUBSTRATE TYPES:       5	HHEI Metric Points Substrate Max = 40 B A + B
Maximum Pool Depth (Measure the <u>maximum</u> , time of evaluation. Avoid plunge pools from road of > 30 centimeters [20 pts] > 22.5 - 30 cm [30 pts] > 10 - 22.5 cm [25 pts] COMMENTS <u>N/A</u>	pool depth within the 61 meter (200 feet) evaluation reach at the culverts or storm water pipes)       (Check ONLY one box):         5 cm - 10 cm [15 pts]	Pool Depth Max = 30
3.       DANK FULL WIDTH (Measured as the average:         > 4.0 meters (> 13') [30 pts]         > 3.0 m - 4.0 m (> 9' 7"-13') [25 pts]         > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]         COMMENTS	of 3 - 4 measurements) (Check ONLY one box):	Bankfull Width Max=30
This is	nformation mustalso be completed	
RIPARIAN ZONE AND FLOODPLAIN QUA         RIPARIAN WIDTH         L       R         (Per Bank)       L         Wide >10m       X         Moderate 5-10m       X         Narrow <5m	ALITY * NOTE: River Left (L) and Right (R) as looking downstream*         FLOODPLAIN QUALITY (Most Predominant per Bank)         L R         Mature Forest, Wetland       Conservation Tillage         Immature Forest, Shrub or Old Field       Urban or Industrial         Residential, Park, New Field       Open Pasture, Row Cro.         Fenced Pasture       Mining or Construction         Check ONLY one box):       Moist Channel, isolated pools, no flow (intermitten al)         Dry channel, no water (ephemeral)       Dry channel, no box):	p ()
None 1.0 0.5 1.5 STREAM GRADIENT ESTIMATE Flat (0.5 \$100 ft) Flat to Moderate Moder	2.0 3.0 2.5 >3 rate (2 4/100 fg) ☐ Moderate to Severe ☐ Severe (10 fg/100	<b>A</b> 1

ADDITIONAL STREAM INFORMATION (This Information N	Nust Also be Completed):
QHEI PERFORMED? Yes No QHEI Score (If Yes	, Attach Completed QHEI form)
DOWNSTREAM DESIGNATED USE(S) WWH Name: UNT to Pikes Run CWH Name:	Distance from Evaluated Stream 0,35 mi Distance from Evaluated Stream
	DAREA CLEARLY MARK THE SITE LOCATION.
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATER SHE	NDCC Soil Man Stream Order
USGS Quadrangle Name: Cairo NRCS Soil Map Pa	
County: Township/City:	Findicing Eng
MISCELLANEOUS	~
Base Flow Conditions? (Y/N): Date of last precipitation:	Quantity:
Photo-documentation Notes: Upstream downstream	+ substate
Elevated Turbidity?(Y/N): Canopy (% open):	
Were samples collected for water chemistry? (Y/N): Lab Sample #	or ID (attach results):
Field Measures:Temp (*C) Dissolved Oxygen (mg/l) pH (S	S.U.) Conductivity (umhos/cm)
Is the sampling reach representative of the stream (Y/N) If not, explain: _	U/A
Additional comments/description of pollution impacts:/A	
BIOLOGICAL OBSERVATIONS	
Fish Observed? (V/N) N Species observed (if known):	
Froos or Tadpoles Observed? (Y/N) V Species observed (if known):	
Salamanders Observed? (Y/N) Species observed (if known);	
Aquatic Macroinvertebrates Observed? (Y/N) N Species observed (if know	/n):
Comments Regarding Biology:	
DRAWING AND NARRATIVE DESCRIPTION OF STR	REAM REACH (This must be completed)
Include important landmarks and other features of interest for site evaluation	ation and a narrative description of the stream's location
1. Ht was w	E
1 tet	(1-om)e
The total w	
FLOW	V V
The test	N N
1111 a tol	
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Chie Environment Protection Agency Headwa	ater Habitat Evaluation Index Field Form HHEI Score (sum of metrics 1+24	31 33
SITE NAME/LOCATION 1730 ACP SITE NUMBER 1-018 RIVER BASIN LENGTH OF STREAM REACH (ft) 200 DATE 6/20/2021 SCORER 6.101 NOTE: Complete All Items On This For	North Delphos - Rockhill Nortawa River RIVER CODE DRAINAGE AREA (M LAT 40,76313 LONG -84,1001 RIVER MILL 1501 COMMENTS/A	P) <u>0.08</u>
STREAM CHANNEL MODIFICATIONS:	NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT	r Instructions
SUBSTRATE (Estimate percent of (Max of 32). Add total number of sign <u>TYPE</u> BLDR SLABS [16 pts]     BOULDER (>256 mm) [16 pts]     BEDROCK [16 pts]     COBBLE (65-256 mm) [12 pts]     GRAVEL (2-64 mm) [9 pts]     GRAVEL (2-64 mm) [9 pts]     Total of Percentages of Bidr Slabs, Boulder, Cobble, Bedrock     SCORE OF TWO MOST DEFORMMENTS on mo	Inificant substrate types found (Max of 8). Final metric score is sum of boxes A &         PERCENT       TYPE         Inificant substrate types found (Max of 8). Final metric score is sum of boxes A &         PERCENT       TYPE         Image: Sill T [3 pt]       PERCENT         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]         Image: Sill T [3 pt]       Image: Sill T [3 pt]	B HHEI Metric Points Substrate Max = 40
2. Maximum Pool Depth (Measure the time of evaluation. Avoid plunge pools > 30 centimeters [20 pts] > 22.5 - 30 cm [30 pts] > 10 - 22.5 cm [25 pts] COMMENTSA 3. BANK FULL WIDTH (Measuredas the > 4.0 meters (> 13') [30 pts]	TOTAL NUMBER OF SUBSTRATE TYPES: TOTAL NUMBER OF SUBSTRATE TYPES:  maximum pool depth within the 61 meter (200 feet) evaluation reach at the s from road culverts or storm water pipes) (Check ONLY one box): S cm - 10 cm [15 pts] S cm - 10 cm [15 pts] S cm - 10 cm [15 pts] NO WATER OR MOIST CHANNEL [0pts] MAXIMUM POOL DEPTH (centimeters):	Pool Depth Max = 30
> 3.0 m - 4.0 m (> 9' 7"-13') [25 pts] > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts] COMMENTS/A	AVERAGE BANKFULL WIDTH (meters) •7	Max=30
RIPARIAN ZONE AND FLOOD <u>RIPARIAN WIDTH</u> L R (Per Bank) U Ukde >10m Wide >10m	This information mustalso be completed         OPLAIN QUALITY * NOTE: River Left (L) and Right (R) as looking downstreat         FLOODPLAIN QUALITY (Most Predominant per Bank)         L R         L R         Mature Forest, Wetland	am.
Moderate 5-10m Moderate 5-10m Narrow <5m None COMMENTS FLOW REGIME (At Time of Eve Stream Enviro	Immature Forest, Shrub or Old Field     Urban or Industrial     Residential, Park, New Field     Open Pasture, Row     Fenced Pasture     Mining or Construct  aluation) (Check ONLY one box):	v Crop tion
Subsurface flow with isolated po COMMENTS	Moist Channel, isolated pools, no flow (intern         pools (interstitial)         Dry channel, no water (ephemeral)         per 61 m (200 ft) of channel)         1.0       2.0         1.5       2.5	nittent)
STREAM GRADIENT ESTIMATE	Moderate (2 4100 %) Moderate to Severe Severe (1	0 % 100 %)
May 2020 Revision	Page 1	

	atives wheth Completed OHEL form)	
	QHEI PERFORMED? Yes No QHEI Score (If Yes, Attach Completed and Honny	
-	DOWNSTREAM DESIGNATED USE(S) Distance from Evaluated Stream O.O2.m.	
. 🖂	WWH Name: Distance from Evaluated Stream	
	EWH Name: Distance from Evaluated Stream	
	MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.	
US	GS Quadrangle Name: Cairo NRCS Soil Map Page: NRCS Soil Map Stream Order:	
Co	unty: Allen Township/City: Bath / Lima	
	MISCELLANEOUS	
Ba	Rea Flow Conditions? (V/N): Date of last precipitation: Quantity:	
Da	the desumentation Notes: Upstream, desunstream + substrate	
Ph		
Ele	avated Turblany/(YN).	
W	ere samples collected for water chemisury ((1)), Carbon control (CH) Carbon control (umbes/cm)	
Fi	eld Measures:Temp (°C) Dissolved Oxygen (mg/l) pri (S.U.) Conductivity (unitosicity)	
ls	the sampling reach representative of the stream (Y/N) If not, explain: \/A	
_		
А	dditional comments/description of pollution impacts:/A	
_		
	BIOLOGICAL OBSERVATIONS	
	(Denset all phone balant)	
	(Record all observations below)	
F	(Record all observations below) ish Observed? (Y/N) Species observed (if known): roos or Tadpoles Observed? (Y/N) Species observed (if known):	
F	(Report all observations below) ish Observed? (Y/N) _ / _ Species observed (if known); rogs or Tadpoles Observed? (Y/N) _ // _ Species observed (if known); elemenders Observed? (Y/N) _ // _ Species observed (if known);	
Fi Fi S	(Record all observations below)         ish Observed? (Y/N) Species observed (if known);         rogs or Tadpoles Observed? (Y/N) Species observed (if known);         alamanders Observed? (Y/N) Species observed (if known);         outsic Macroinvertebrates Observed? (Y/N) Species observed (if known);	
Fi S A	(Record all observations below)         ish Observed? (Y/N) Species observed (if known):         rogs or Tadpoles Observed? (Y/N) Species observed (if known):         alamanders Observed? (Y/N) Species observed (if known):         squatic Macroinvertebrates Observed? (Y/N) Species observed (if known):         comments Recarding Biology:	
F F S A C	(Record all observations below)         ish Observed? (Y/N) Species observed (if known);         rogs or Tadpoles Observed? (Y/N) Species observed (if known);         alamanders Observed? (Y/N) Species observed (if known);         aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known);         comments Regarding Biology;      /A	
F F S A C	(Record all observations below)         ish Observed? (Y/N) Species observed (if known):         rogs or Tadpoles Observed? (Y/N) Species observed (if known):         alamanders Observed? (Y/N) Species observed (if known):         aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):         comments Regarding Biology:      /A	
Fine of	(Record all observations below)         ish Observed? (Y/N) Species observed (if known):         rogs or Tadpoles Observed? (Y/N) Species observed (if known):         alamanders Observed? (Y/N) Species observed (if known):         alamanders Observed? (Y/N) Species observed (if known):         aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):         accomments Regarding Biology:      /A         DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)	
Fine of	(Record all observations below)         ish Observed? (Y/N) Species observed (if known):         rogs or Tadpoles Observed? (Y/N) Species observed (if known):         alamanders Observed? (Y/N) Species observed (if known):         aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):         acquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):         comments Regarding Biology:/A         DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)         Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location	
Fine of	(Record all observations below) ish Observed? (Y/N) Species observed (if known): rogs or Tadpoles Observed? (Y/N) Species observed (if known): alamanders Observed? (Y/N) Species observed (if known): aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known): comments Regarding Biology:/A DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed) Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location RED	T
Fine of	(Record all observations below)         ish Observed? (Y/N) Species observed (if known):         rogs or Tadpoles Observed? (Y/N) Species observed (if known):         alamanders Observed? (Y/N) Species observed (if known):         alamanders Observed? (Y/N) Species observed (if known):         aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):         comments Regarding Biology:/A         DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)         Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location         RED TRACE         RED TRACE	T
Fi S A C Time of XVey R	(Record all observations below) ish Observed? (Y/N) Species observed (if known): rogs or Tadpoles Observed? (Y/N) Species observed (if known): alamanders Observed? (Y/N) Species observed (if known): vquatic Macroinvertebrates Observed? (Y/N) Species observed (if known): acomments Regarding Biology:/A  DRAWING AND NARRATIVE DE SCRIPTION OF STREAM REACH (This must be completed) Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location  RED TRAC  RE PROFE (NO ACCES)	T III (S)
Fine of	(Record all observations below)         ish Observed? (Y/N) Species observed (if known):	T RT (S)
Fine of	(Record all observed? (Y/N) Species observed (if known):	T RT W
Fine of	(Record all observed? (Y/N) Species observed (if known):	T RT (Start)
Fine of	(Record all observations below)         ish Observed? (Y/N) Species observed (if known):	T RT (K)
Fine of	(Record all observed? (Y/N)	T RT (Star)

Headwater Habitat Evaluation Index Field Form HHEI Score (sum of metrics 1+2+3)	16
SITE NAME/LOCATION 1720 AEP North Pelphos - Pockhill SITE NUMBER 1-010 RIVER BASIN Officiary RIVER CODE DRAINAGE AREA (m <sup>p</sup> ) O LENGTH OF STREAM REACH (ft) 200 LAT 40, 76848 LONG -94, 10575 RIVER MILE DATE 6/20/021 SCORER RIVER MILE NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Inst STREAM CHANNEL MODIFICATIONS: [NONE/ NATURAL CHANNEL ] RECOVERED ] RECOVERING RECENT OR N	. COOH
1.       SUBSTRATE (Estimate percent of every type present). Check ONL Y two predominant substrate TYPE boxes. (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B         TYPE       PERCENT       TYPE         BLDR SLABS [16 pts]       Image: Silt [3 pt]       PERCENT         BOULDER (>256 mm) [16 pts]       Image: Silt [3 pt]       Image: Silt [3 pt]         BEDROCK [16 pts]       Image: Silt [3 pt]       Image: Silt [3 pt]         BEDROCK [16 pts]       Image: Silt [3 pt]       Image: Silt [3 pt]         BEDROCK [16 pts]       Image: Silt [3 pt]       Image: Silt [3 pt]         BEDROCK [16 pts]       Image: Silt [3 pt]       Image: Silt [3 pt]         BEDROCK [16 pts]       Image: Silt [3 pt]       Image: Silt [3 pt]         BEDROCK [16 pts]       Image: Silt [3 pt]       Image: Silt [3 pt]         BEDROCK [16 pts]       Image: Silt [3 pt]       Image: Silt [3 pt]         BEDROCK [2-64 mm] [9 pts]       Image: Silt [3 pts]       Image: Silt [3 pts]         BEDROCK [2 pt]       Image: Silt [3 pts]       Image: Silt [3 pts]         Stand (<2 mm) [6 pts]       Image: Silt [3 pts]       Image: Silt [3 pts]         BEDROCK [0 pt]       Image: Silt [3 pts]       Image: Silt [3 pts]         BEDROCK [0 pt]       Image: Silt [3 pts]       Image: Silt [3 pts]	HHEI Metric Points Substrate Max = 40
Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box):     > 30 centimeters [20 pts] 5 cm - 10 cm [15 pts]     > 22.5 - 30 cm [30 pts] 5 cm - 10 cm [15 pts]     > 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0pts]     COMMENTS	Pool Depth Max = 30
> 4.0 meters (> 13') [30 pts]       > 1.0 m - 1.5 m (> 3' 3" - 4' 8")[15 pts]         > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]       > 1.0 m (> 3' 3" - 4' 8")[15 pts]         > 1.5 m - 3.0 m (> 4' 8" - 9' 7")[20 pts]       ⊠ ≤ 1.0 m (≤ 3' 3")[5 pts]         COMMENTS         > /A       AVERAGE BANKFULL WIDTH (meters) * 0	Width Max=30
This information must also be completed         RIPARIAN ZONE AND FLOODPLAIN QUALITY * NOTE: River Left (L) and Right (R) as looking downstream*         RIPARIAN WIDTH       FLOODPLAIN QUALITY       * NOTE: River Left (L) and Right (R) as looking downstream*         L R       (Per Bank)       L R       L R         Wide >10m       Imature Forest, Wetland       Imature Conservation Tillage         Moderate 5-10m       Immature Forest, Shrub or Old Field       Urban or Industrial         Narrow <5m	P t)
May 2020 Revision Page 1	1 13

ADDITIONAL STREAM	M INFORMATION (This	Information Must Also b	e Completed):	
QHEI PERFORMED? Ves	No QHEI Score	(If Yes, Attach Cor	npleted QHEI form)	
DOMINICTERAM DECIONATED IN	SE(S)			
DUWNSTREAM DESIGNATED US	T	Distanc	e from Evaluated Stream	0.0
CMH Name	1	Distanc	e from Evaluated Stream	
EWH Name:		Distanc	e from Evaluated Stream	
	PS INCLUDING THE ENT	IRE WATERSHED AREA. CL	EARLY MARK THE SITE LO	CATION.
	NRCS	Soil Map Page:	NRCS Soil Map Stream	n Order:
SGS Quadrangie Name:CCATC		billion Bath	1 1:000	
county:	10WR8	ship/City: <u>FAATT</u>	1	
MISCELLANEOUS				
Base Flow Conditions? (Y/N): Dat	te of last precipitation:	(	Juantity:	
Photo-documentation Notes: Upste	ream, dawne	stream +	substrate	
Elevated Turbidity?(Y/N): <u>N</u> Ca	nopy (% open):			
Were samples collected for water chemistr	y?(Y/N): N_ L	ab Sample # or ID (attact	results):	
Field Measures:Temp (°C) Disso	olved Oxygen (mg/l)	pH (S.U.)	Conductivity (umhos/	/cm)
	atreem (VIN) N If a		4	
is the sampling reach representative of the	sueam (1714) II II	or, explain	A series at the series and the series of the	and the second se
Additional comments/description of pollution	n impacts: <u>N/A</u>			
	BIOLOGICAL OBS	ERVATIONS		
	(Record all observa	ations below)		
Fish Observed? (Y/N) 🚫 Species of	bserved (if known):			
Frogs or Tadpoles Observed? (Y/N)	Species observed (if k	nown):		
	ecies observed (if known	n):		
Salamanders Observed? (FNV)		1 <u>).</u>		
Aquatic Macroinvertebrates Observed? (Y	VN) Species obse	rved (if known):		
Comments Regarding Biology:	14			
,				
	THE DESCRIPTIO		CU (This must be	a malata di
Include important landmarks and	d other features of interest	for site evaluation and a na	rrative description of the st	completed)
١.		ST 2-FLPENS	2	
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Gen I		L-E(PETI)		
				) [.
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May 2020 Revision	Page	2		

Chio Environmental Protection Agenta	Headwater Hat	bitat Evaluation Index Field Form HHEI Score (sum of metrics 1+2+3)	30
SITE NAME/LOCATION	AEP NORTH 1 1_ RIVER BASIN_OTTAV	DELPHOS - KOCKHILL NARWERNER CODE - DRAINAGE ADEA (	4.20
LENGTH OF STREAM RI DATE 10/30/21 S	CORER T. Russell CO	0.78344 LONG <u>-84.11935</u> RIVER MILE _	
IOTE: Complete All Ite	ms On This Form - Refer to	o "Headwater Habitat Evaluation Index Field Manual" for Ins	
1. SUBSTRATE (Es	timate percent of every type p	present). Check ONLY two predominant substrate TYPE boxes.	
	otal number of significant substr <u>PERCENT</u>	rate types found (Max of 8). Final metric score is sum of boxes A & B TYPE PERCENT	HHEI Metric
	256 mm) [16 pts]	LI SILT [3 pt]     LEAF PACKWOODY DEBRIS [3 pts]	Points
	256 mm) [12 pts]	FINE DETRITUS [3 pts]	Max = 40
GRAVEL (2-64	4 mm) [9 pts] ) 16 pts]	MUCK [0 pts]	E
Total of Percel	ntages of		0
Bidr Slabs, Boulder, CORE OF TWO MOST PI	Cobble, Bedrock REDOMINATE SUBSTRATE TY	(A) (B) (B) (B) (A) (B) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	A÷B
Maximum Pool D time of evaluation	epth (Measure the <u>maximum</u> p Avoid plunce pools from road o	pool depth within the 61 meter (200 feet) evaluation reach at the	Pool Dept
> 30 centimeters [2	0 pts]	5 cm - 10 cm [15 pts]	Max = 30
> 10 - 22.5 cm [25	pts]	NO WATER OR MOIST CHANNEL [Opts]	5
COMMENTS	- formation and	MAXIMUM POOL DEPTH (centimeters): 5	
3. BANK FULL WIDT	FH (Measured as the average [30 pts] <sup>37</sup> 7-13') [25 pts] <sup>47</sup> 8" - 9"7"/ [20 pts]	of3-4 measurements) (Check ONLY one box): > 1.0 m - 1.5 m (> 3' 3" - 4' 8")[15 pts] ≤ 1.0 m (≤ 3' 3")[5 pts]	Bankfull Width Max=30
COMMENTS		AVERAGE BANKFULL WIDTH (meters) 2	20
RIPARIAN	This in ZONE AND FLOODPLAIN QUA	nformation <u>must</u> also be completed ALITY * NOTE: River Left (L) and Right (R) as looking downstream.	
<u>RIPARIAN</u> L R (Per Bi	<u>IWIDTH F</u> ank) IP	FLOODPLAIN QUALITY (Most Predominant per Bank)	
Wide >10	Om 🔲	Mature Forest, Wetland Conservation Tillage	
Moderate	⊧5-10m □□ <5m ⊠⊡	Immature Forest, Shrub or Old Field Urban or Industrial Residential, Park, New Field Open Pasture, Prov Cr	0.0
None None		Fenced Pasture Mining or Construction	οŀ
COMMENTS	CIRAVEL D	RIVE WAY	-
Stream Flow Subsurface COMMENTS	ing flow with isolated pools (interstiti	ial) Dry channel, no water (ephemeral)	nt)
SINUOSITY	(Number of bends per 61 m (20	00 ft) of channel) (Check ONLY one box):	
None 0.5	1.0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
1181 (0.5 m100 m)	riat to Moderate   Moder	Tate (2 million in)   Moderate to Severe   Severe (10 Million	00 10

2-001 INTERMETTENT (UNT)

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WILL FLIG OTHILDT LIGS MINT OTHIL	(If Yes, Attach Completed QHEI form)
DOWNSTREAM DESIGNATED USE(S)	
T WWH Name:	Distance from Evaluated Stream
CWH Name:	Distance from Evaluated Stream
EWH Name:	Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE	EENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.
USGS Quadrangle Name: <u>CAIRO</u>	NRCS Soil Map Page: NRCS Soil Map Stream Order:
Country AILEN TO	ownship/City:
MISCELLANEOUS Base Flow Conditions? (Y/N): Date of last precipitatio Photo-documentation Notes:	IS CULVERT REMOVEL FILL
DOE TO LANDSUMER DISTU. Additional comments/description of pollution impacts:	
DOE TO LANDOWNER DISTU Additional comments/description of pollution impacts:	OBSERVATIONS
Additional comments/description of pollution impacts:	OBSERVATIONS servations balow)
Additional comments/description of pollution impacts:	OBSERVATIONS prevations below
Additional comments/description of pollution impacts:	OBSERVATIONS Servations below) d (if known):
Additional comments/description of pollution impacts:	OBSERVATIONS Dervations below) d (if known):

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This <u>must</u> be completed) Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

ZOKEN FLOW 2-001 CULVERT FLOW 100-2 POWERS AVE Somet BUE 2-00, E 100 Page 2 May 2020 Revision

Headwater Habitat Evaluation Index Field Form HHEI Score (sum of metrics 1+24	3) 29
SITE NAME/LOCATION 1730 AEP North Delphos - Rockhill SITE NUMBER 4-001 RIVER BASIN Official RIVER RIVER CODE DRAINAGE AREA (M LENGTH OF STREAM REACH (ft) 200 LAT 40.745343 LONG 84.088314 RIVER MILL DATE 12/9/2021 SCORER E. WILLSON COMMENTSN/A NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for STREAM CHANNEL MODIFICATIONS	(2) <u>0.06</u> E
STREAM CHANNEL MODIFICATIONS:       NONE / NATURAL CHANNEL       RECOVERED       RECOVERING       RECENT       RECOVERING       RECENT       RECENT       RECOVERING       RECOVERING       RECENT       RECOVERING       RECENT       RECOVERING       RECOVERING       RECENT       RECOVERING       RECOVERING       RECOVERING       RECOVERING       RECENT       RECOVERING       RECOVERING<	B HHEI Metric Points Substrate Max = 40
Total of Percentages of Bidr Slabs, Boulder, Cobble, Bedrock       0%       (A)       (B)         SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES:       0       TOTAL NUMBER OF SUBSTRATE TYPES:       30         2.       Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes)       (Check ONLY one box):         > 30 centimeters [20 pts]       S cm - 10 cm [15 pts]         > 22.5 - 30 cm [30 pts]       < 5 cm [5pts]	A + B Pool Depth Max = 30
	Bankfull Width Max=30
COMMENTS NA AVERAGE BANKFULL WIDTH (meters)	9 5
Intermetion mustalso be completed         RIPARIAN ZONE AND FLOODPLAIN QUALITY * NOTE: River Left (L) and Right (R) as looking downstre         RIPARIAN WIDTH         E       FLOODPLAIN QUALITY         (Per Bank)       L R         Wide >10m       Mature Forest, Wetland         Moderate 5-10m       Immature Forest, Shrub or Old Field         Narrow <5m	eam* ge il w Crop ction mittent)
May 2021 Banking Bana 1	

				completed OHEL form)
QH	EI PERFORMED? [	Yes KNo QHEI Score	(IT Yes, Aπach C	ompleted when formy
	WNSTREAM DESIGN	NATED USE(S)	Dista	ince fromEvaluated Stream
	ne:		Dista	ince fromEvaluated Stream
EWH Na	ne:		Dista	ince fromEvaluated Stream
B	APPING: ATTACH COR	PIES OF MAPS, INCLUDING THE	NTIRE WATERSHED AREA.	CLEARLY MARK THE SITE LOCAT
USGS Quar	rangle Name:	Cairo NR	CS Soil Map Page:	NRCS Soil Map Stream Or
County	Allen	Tow	nship/City:Bart	h/Lima
	SCELLANEOUS			'
	SCLEERALOUS	Date of least precipitation:	-	Quantity:
BaseFlow		Local concern Openion	ctroppin t	S. hstrate
Photo-docu	mentation Notes:	upsician , Dun	DURAM .	SUPPOR
Elevated Tu	rbidity?(Y/N):	Canopy (% open):		
Were samp	es collected for wate	archemistry?(Y/N): <u>N</u>	Lab Sample # or ID (atta	ich results):
Field Meas	ures:Temp (°C)	Dissolved Oxygen (mg/l)	pH (S.U.)	Conductivity (umhos/cm)
In the name	ling reach represent	ative of the stream (V/N) N	f not. exclain:	_
is the samp	ing reach represente			
Additional	comments/description	of pollution impacts:		
		BIOLOGICAL OF	BSERVATIONS ervations below)	10,211-00-00,000,000,000,000,000,000,000,000
Fish Obser	ved? (Y/N) N	Species observed (if known):		
Frogs or Tr	idpoles Observed? ()	Y/N) <u>N</u> Species observed (	if known):	
Salamande	rs Observed? (Y/N)_	N Species observed (if kno	wn):	
Aquatic Ma	croinvertebrates Obs	served? (Y/N) N Species of	served (if known):	-
Comments	Regarding Biology:			
1				
1	DRAWING AND	NARRATIVE DESCRIPT	ION OF STREAM RI	EACH (This must be con
1	include important lan	iomarks and other teatures of intere	ist for site evaluation and a	narrative description of the stream
	60	600	6	2
5	alles.	Cer	(Os	D) (
5	Utox	-9-	1-001	~ ~
NOI	16	2 3	1.001	100
	11 les	av Oo	5	Leaver .
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1	A			
2	1 L	Jern		
1	1 mg	PEM WETLD	and the second	

May 2020 Revision

Headwater Habitat Evaluation Index Field Form HHEI Score (sum of metrics 1+2+3)	52
SITE NAME/LOCATION 1750 AEP NICH OUPPOS - ROCKNILL SITE NUMBER 4-002 RIVER BASIN OTTOM ENEC RIVER CODE DRAINAGE AREA (MP) O LENGTH OF STREAM REACH (II) 200 LAT 40.765436 LONG 84.087461 RIVER MILE DATE 12/4/2021 SCORER E. WILSON COMMENTS/A NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Instr STREAM CHANNEL MODIFICATIONS:NONE/ NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO	TUCTIONS
1.       SUBSTRATE (Estimate percent of every type present). Check ONL Y two predominant substrate TYPE boxes. (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B         TYPE       PERCENT       TYPE         BLDR SLABS [16 pts]       SILT [3 pt]         BOULDER (>256 mm) [16 pts]       LEAF PACKWOODY DEBRIS [3 pts]         BEDROCK [16 pts]       Image: Fine detruits [3 pts]         BEDROCK [16 pts]       Image: Fine detruits [3 pts]         COBBLE (65-256 mm) [12 pts]       Image: Fine detruits [3 pts]         COBBLE (65-256 mm) [12 pts]       Image: Fine detruits [3 pts]         COBBLE (65-256 mm) [12 pts]       Image: Fine detruits [3 pts]         COBBLE (65-256 mm) [12 pts]       Image: Fine detruits [3 pts]         COBBLE (65-256 mm) [12 pts]       Image: Fine detruits [3 pts]         COBBLE (65-256 mm) [12 pts]       Image: Fine detruits [3 pts]         CLAY or HARDPAN [0 pt]       Image: Fine detruits [3 pts]         Fine detruits [3 pts]       Image: Fine detruits [3 pts]         Fine detruits [3 pts]       Image: Fine detruits [3 pts]         Fine detruits [3 pts]       Image: Fine detruits [3 pts]         Fine detruits [3 pts]       Image: Fine detruits [3 pts]         Fine detruits [3 pts]       Image: Fine detruits [3 pts]         Find of Percentages of       Fine de	HHEI Metric Points Substrate Max = 40 7 A + B
<ol> <li>Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): <ul> <li>&gt; 30 centimeters [20 pts]</li> <li>&gt; 22.5 - 30 cm [30 pts]</li> <li>&gt; 22.5 - 30 cm [30 pts]</li> <li>&gt; 10 - 22.5 cm [25 pts]</li> <li>NO WATER OR MOIST CHANNEL [0pts]</li> </ul> </li> <li>COMMENTS N/A</li> <li>MAXIMUM POOL DEPTH (centimeters): 15.2</li> <li>BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box):</li> <li>&gt; 4.0 meters (&gt;13') [30 pts]</li> </ol>	Pool Depth Max = 30 25 Bankfull
□ > 3.0 m - 4.0 m (> 9'7"-13) [25 pts]         □ > 1.0 m (> 3' 3") [5 pts]         □ > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]         COMMENTS       □ < 1.0 m (< 3' 3") [5 pts]	Max=30
This information must also be completed         RIPARIAN ZONE AND FLOODPLAIN QUALITY * NOTE: River Left (L) and Right (R) as looking downstream*         RIPARIAN WIDTH       FLOODPLAIN QUALITY (Most Predominant per Bank)         L R       (Per Bank)       L R         Wide >10m       Mature Forest, Wetland       Conservation Tillage         Moderate 5-10m       Immature Forest, Shrub or Old Field       Urban or Industrial         Narrow <5m	
Stream Flowing       Image: Stream Flowing       Moist Channel, isolated pools, no flow (intermittent)         Subsurface flow with isolated pools (interstitial)       Dry channel, no water (ephemeral)         COMMENTS       None         SINUOSITY (Number of bends per 61 m (200 ft) of channel)       (Check ONLY one box):         None       1.0       2.0       3.0         0.5       1.5       2.5       >3	)
STREAM GRADIENT ESTIMATE Stream GRADIENT ESTIMATE Fist (0.5 %100 %) Fist to Moderate Severe (10 %100 %) May 2020 Revision Page 1	10

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OUT DEDEODMED2	Ter Da No. OHEL Score	(If Yes, Attach Completed QHEI form)	
WWH Name:		Distance from Evaluated S	tream
CWH Name:	Tangang ang ang ang ang ang ang ang ang a	Distance from Evaluated S	tream
EWH Name:	And a second sec		
MAPPING: ATTACH COPIE	OF MAPS, INCLUDING THE ENTIRE WA	TERSHED AREA. CLEARLY MARK THE	THE LOCATION.
USGS Quadrangle Name:CC	NRCS Soil	Map Page: NRCS Soil Map	Stream Order:
County: Allen	Township/Ci	ty: Bath/Lima	
MISCELLANEOUS			
Base Flow Conditions? (Y/N): N	Date of last precipitation:	Quantity:	
Photo-documentation Notes: Up	stream, Downstreo	m + Substrate	
Flevated Turbidity?(Y/N):	Canopy (% open):		
Were samples collected for watero	nemistry?(Y/N): N Lab Sa	mple # or ID (attach results):	-
Field Mageurae Tame (*C)	Dissolved Oxygen (mg/l)	pH (S.U.) Conductivity (	umhos/cm)
rigiu incosulico, reinip ( 0/	Alle dame Alle M. Hard and	rlain.	
is the sampling reach representativ	e of the su cam ( FM) in not, an	Presitive	
	BIOLOGICAL OBSERVA (Record all observations	tions below)	
Fish Observed? (Y/N) N Sp	ecies observed (if known):		
Frogs or Tadpoles Observed? (Y/N	Species observed (if knowl		
Frogs or Tadpoles Observed? (Y/N Salamanders Observed? (Y/N)	Species observed (if known):     Species observed (if known):	//	
Frogs or Tadpoles Observed? (Y/N Salamanders Observed? (Y/N) Aquatic Macroinvertebrates Obser	) N Species observed (if known): Ved? (Y/N) N Species observed	(if known):	
Frogs or Tadpoles Observed? (Y/N Salamanders Observed? (Y/N) Aquatic Macroinvertebrates Obser Comments Regarding Biology:	) Species observed (if known); Species observed (if known); ved? (Y/N) Species observed 	(if known):	
Frogs or Tadpoles Observed? (Y/N Salamanders Observed? (Y/N) Aquatic Macroinvertebrates Obser Comments Regarding Biology:	) Species observed (if known); Species observed (if known); ved? (Y/N) _ / _ Species observed 	(if known):	
Frogs or Tadpoles Observed? (Y/N Salamanders Observed? (Y/N) Aquatic Macroinvertebrates Obser Comments Regarding Biology: DRAWING AND M	) Species observed (if known): Species observed (if known): ved? (Y/N) _ 거 Species observed  ARRATIVE DESCRIPTION O	(if known): OF STREAM REACH (This mus	t be completed)
Frogs or Tadpoles Observed? (Y/N Salamanders Observed? (Y/N) Aquatic Macroinvertebrates Obser Comments Regarding Biology: DRAWING AND N Include important landm	> Species observed (if known):         > Species observed (if known):         ved? (Y/N) Species observed            IARRATIVE DESCRIPTION Of arks and other features of interest for site	(If known): OF STREAM REACH (This must be evaluation and a narrative description of the evaluation of a narrative description of the evaluation of a narrative description of the evaluation of a narrative description of the evaluation o	t be completed)
Frogs or Tadpoles Observed? (Y/N Salamanders Observed? (Y/N) Aquatic Macroinvertebrates Obser Comments Regarding Biology: DRAWING AND N Include important landm	Species observed (if known):         Species observed (if known):         ved? (Y/N)       Species observed         IARRATIVE DESCRIPTION Of arks and other features of interest for site	(if known): OF STREAM REACH (This must te evaluation and a narrative description of PFO	t be completed)
Frogs or Tadpoles Observed? (Y/N Salamanders Observed? (Y/N) Aquatic Macroinvertebrates Obser Comments Regarding Biology: DRAWING AND M Include important landm	Species observed (if known): yed? (Y/N) Species observed ARRATIVE DESCRIPTION O arks and other features of interest for site	(if known): F STREAM REACH (This must te evaluation and a narrative description PFO	t be completed)
Frogs or Tadpoles Observed? (Y/N Salamanders Observed? (Y/N) Aquatic Macroinvertebrates Obser Comments Regarding Biology: DRAWING AND N Include important landm	Species observed (if known): yed? (Y/N) Species observed ARRATIVE DESCRIPTION Of arks and other features of interest for site	(if known):	t be completed) of the stream's location
Frogs or Tadpoles Observed? (Y/N Salamanders Observed? (Y/N) Aquatic Macroinvertebrates Obser Comments Regarding Biology: DRAWING AND N Include important landm	Species observed (if known): yed? (Y/N) Species observed ARRATIVE DESCRIPTION C arks and other features of interest for site	(if known):	t be completed) of the stream's location
FLOW	Species observed (if known): ved? (Y/N) Species observed ARRATIVE DESCRIPTION C arks and other features of interest for site of the section of t	(if known):	t be completed) of the stream's location
Frogs or Tadpoles Observed? (Y/N Salamanders Observed? (Y/N) Aquatic Macroinvertebrates Obser Comments Regarding Biology: DRAWING AND N Include important landm	Species observed (if known): ved? (Y/N) Species observed	(if known):	t be completed) with stream's location
Frogs or Tadpoles Observed? (Y/N Salamanders Observed? (Y/N) Aquatic Macroinvertebrates Obser Comments Regarding Biology: DRAWING AND N Include important landm	Species observed (if known): ved? (Y/N) Species observed	(if known):	t be completed)

Perennial 4-002

Field Methods for Evaluating Primary Headwater Streams in Ohio Ohio EPA, Division of Surface Water

Ephemeral 5-001 Version 4.0

October 2018

Phio President Agency	Primary Headv	water Habitat Field Evaluation Form HHEI Score (sum of metrics 1+2+3)	27
SITE NAME/LOCATIN SITE NUMBER <u>5</u> LENGTH OF STREA DATE <u>12/7/202</u> NOTE: Complete A STREAM CHANNEL	DN 1732 AEP LIMI 2001 RIVER BASIN MOLDO M REACH (ft) 200 LAT L 1 SCORER E. WILSON II Items On This Form - Refe MODIFICATIONS: MINORE	A - Kalida Mee. River River CODE DRAINAGE AREA (mit) O 40.841020 LONG -84.170043 RIVER MILE COMMENTS/A er to "Field Evaluation Manual for Ohio's PHWH Streams" for In	structions
1. SUBSTRATI (Max of 32). TYPE BLDR SL BOULDEI BEDROC COBBLE GRAVEL GRAVEL SAND (< Total of F Bldr Slabs, Bou	E (Estimate percent of every typ Add total number of significant sul PERCENT ABS [16 pts] R (>256 mm) [16 pts] (65-256 mm) [12 pts] (2-64 mm) [9 pts] 2 mm) [6 pts] Sercentages of Jder, Cobble, Bedrock	Prepresent). Check ONLY Ytwo predominant substrate TYPE boxes.         ubstrate types found (Max of 8). Final metric score is sum of boxes A & B         T       TYPE         B       SILT [3 pt]         B       E         CLAY or HARDPAN [0 pt]         MUCK [0 pts]         ARTIFICIAL [3 pts]	HHEI Metric Points Substrate Max = 40
SCORE OF TWO MO           2.         Maximum P           time of evalu         > 30 centimet           > 22.5 - 30 cr         > 10 - 22.5 cr           COMMENTS         COMMENTS	ST PREDOMINATE SUBSTRATE ool Depth (Measure the <u>maximu</u> ation. Avoid plunge pools from roa ers [20 pts] n [30 pts] n [25 pts]	E TYPES: 3 TOTAL NUMBER OF SUBSTRATE TYPES: 4 turn pool depth within the 61 meter (200 feet) evaluation reach at the bad culverts or storm water pipes) (Check ONLY one box): 5 cm - 10 cm [15 pts] < 5 cm [5pts] NO WATER OR MOIST CHANNEL [0pts] MAXIMUM POOL DEPTH (centimeters); 5.1	Pool Depth Max = 30
3. BANK FULL > 4.0 meters > 3.0 m - 4.0 meters > 1.5 m - 3.0 meters COMMENTS	WIDTH (Measured as the avera > 13') [30 pts] m (> 9'7"-13') [25 pts] m (> 4'8"-9'7") [20 pts]	age of 3 - 4 measurements) (Check ONLY one box): 1.0  m - 1.5  m (> 3' 3'' - 4' 8'') [15  pts] $1.0 \text{ m} (\leq 3' 3'') [5 \text{ pts}]$ AVERAGE BANKFULL WIDTH (meters) .98	Bankfull Width Max=30
		his information mustalso be completed	
	RIAN ZONE AND FLOODPLAIN (           ARIAN WIDTH           Per Bank)         L R           de >10m         □           derate 5-10m         □           rrow <5m	QUALITY       * NOTE: River Left (L) and Right (R) as looking downstream*         FLOODPLAIN_QUALITY       (Most Predominant per Bank)         L       R         Mature Forest, Wetland       Conservation Tillage         Immature Forest, Shrub or Old Field       Urban or Industrial         Residential, Park, New Field       Open Pasture. Row Cr         Fenced Pasture       Mining or Construction	op
COMI Subsu COMI SINU( None STREAM GF	n Flowing rface flow with isolated pools (inte IENTS	m (200 ft) of channel) (Check ONLY one box): 2.0 3.0 2.5 3.0 3.0	ent) —
Fiat (0.5 \$100 \$)	Flat to Moderate	Moderate (2 m100 m) Moderate to Severe Severe (10 m	100 11)
Conner 1015 Engls		Page 1	

Ephemeral 5-001

Q	DHEI PERFORMED? TYes No QH	El Score (If Yes, Attach Completed QHEI form)
D	DOWNSTREAM DESIGNATED USE(S)	
WWH N	lame: <u>fike kun</u>	Distance from Evaluated Stream Distance from Evaluated Stream
EWH N	ame:	Distance fromEvaluated Stream
	MAPPING: ATTACH COPIES OF MAPS, INC	LUDING THE ENTIRE WATER SHED AREA. CLEARLY MARK THE SITE LOCATION.
JSGS Qua	adranole Name: Flida	NRCS Soil Map Page:NRCS Soil Map Stream Order:
County:	Allen	Township/City: Sugar Creek / Gamer
N	MISCELLANEOUS	
Base Flow	Conditions? (V/N): N Date of las	torecipitation: Quantity:
Photo-doci	umentation Notes: UPSTREAM	Pownstream + Substrate
Flevated To	urbidity20//N): N Canony (%	ADRED)
Mara sam	inles collected for water chemistry 20/M	N N I sh Samole # or ID (attach resulte)
were sam	pies collected for water chemistry? (174)	
Field Meas	sures: Temp ("C) Dissolved Ox)	ygen (mg/l) pH (S.U.) Conductivity (umnos/cm)
Additional	comments/description of pollution impact	s:N/A
	BIC	DLOGICAL OBSERVATIONS
5 Ol		Record all observations below)
FISH UDSEI	rved ((Y/N) N Species observed	(ifknown): MA
Frogs of H	adpoles Ubserved / (V/N) P Speck	
Salamande	ars Ubserved ( Y/N) N Species ob	Species observed //fknown/r ==== / /A
	Decarding Biology:      1/4	_ Species observed (it known)
Commenta	Regarding biology. N/A	
	DRAWING AND NARRATIVE I	DESCRIPTION OF STREAM REACH (This must be completed)
	Include important landmarks and other fea	atures of interest for site evaluation and a narrative description of the stream's location
	117/	
	2 1	NETLAND
	3 - 0	
LOW	MH P	(S-B)
LOW	MH Z	(S-B) X02
LOW	MH NTOO	(S-B) NOJ 2

## **Background Information**

Name:
Date:
6/28/2021
Affiliation:
Address:
4300 Lynn Road, Suite 205 Ravenna, OH 44266
Phone Number:
e-mail address:
ewilson@envsi.com
Name of Wetland:
Vegetation Communit(ies):
Forested
HGM Class(es): PFO
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
CEE ADDIN A
SEE APPENDIX A.
Lat/Long or LITM Coordinate
40,89479, -84.3051
USGS Quad Name
County
Putnam
Jenning
Section and Subsection
SOOS Hydrologic Unit Code
041000070903
Site Visit
National Wetland Inventory Map
PFOIC
Unio vvetiand inventory Map
Soil Survey
Delineation report/map
Attached

Name of Wetland: 1-A Wetland Size (acres, hectares): 0,017 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NA Final score : 20 Category: Category 1

## **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	~	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

## **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substantial area and areas an	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its guality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	


ORAM v. 5.0 Field Form Quantitative Rating



1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality



End of Quantitative Rating. Complete Categorization Worksheets.

# **ORAM Summary Worksheet**

		circle answer or insert sc <u>or</u> e	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES (NO)	If yes, evaluate for Category 3; may also b 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also b 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also b 1 or 2.
Quantitative	Metric 1. Size	1	
Δ	Metric 2. Buffers and surrounding land use	4	
[- n	Metric 3. Hydrology	9	
	Metric 4. Habitat	10	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion,	2	
	TOTAL SCORE	26	Category based on sco breakpoints

Complete Wetland Categorization Worksheet.

# Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

# **Background Information**

Name: Ethan talilson
Date:
Affiliation:
Fourconmental Solutions and Inconstitutes Inc
Address:
4300 Lynn Road, Suite 205 Ravenna, OH 44266
Phone Number:
e-mail address:
ewilson & enusi com
Name of Wetland: 1-B
Vegetation Communit(ies):
Forested
HGM Class(es): PFO
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
SEE APPENDIX A.
40, 89253, -84, 2953
ottovine
County
Township
Jennings
Section and Subsection
Hydrologic Unit Code
041000070204 Site Visit
6/28/2021
Vational Wetland Inventory Map
Dhio Wetland Inventory Map
soil Survey
So
elineation report/map

Name of Wetland: 1-B Wetland Size (acres, hectares): 0.446 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NA Final score : 18 Category: Category 1

### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

## **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	





last revised 1 February 2001 jjm

1-B(PFO)

ORAM v. 5.0 Field Form Quantitative Rating





End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality

# **ORAM Summary Worksheet**

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES (NO)	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be
	Question 9b. Lake Erie Wetlands - Restricted	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	2	
R	Metric 2. Buffers and surrounding land use	4	
1-0	Metric 3. Hydrology	8	
- " ·	Metric 4. Habitat	ч	S.A.
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion,	1	
	TOTAL SCORE	19	Category based on scor breakpoints

Complete Wetland Categorization Worksheet.

# Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

# **Background Information**

Name:	
Date:	
6/29/2021	
Affiliation:	
Address:	
4300 Juno Road Suite 705 Rayland AH IMA	
Phone Number:	20
(724) 591-0686	
e-mail address:	
Name of Wetland	
Secub (Ghaub	
HGM Class(es):	
PSS	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
Lat/Long or UTM Coordinate	
40.80867, -84.22819	
Elida	
County	
ownship	
Jennings	
SOIS	
lydrologic Unit Code	
041000070904	
6/29/2021	
lational Wetland Inventory Map	
hio Wetland Inventory Map	
N/A	
H+A	
elineation report/map	
HTTached	

Name of Wetland: 1-C Wetland Size (acres, hectares): Wetland Size (acres, hectares): 1,079 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Category: Final score : 20 Category 1

### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	~	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

## **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	





1-C1P55)

	of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

End of Quantitative Rating. Complete Categorization Worksheets.

# **ORAM Summary Worksheet**

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES (NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES (NO)	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also b 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES (NO)	If yes, evaluate for Category 3; may also b 1 or 2.
	Question 9d. Lake Erie Wetlands Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also b 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	2	
- C	Metric 2. Buffers and surrounding land use	4	
	Metric 3. Hydrology	9	
	Metric 4. Habitat	3	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	2	
	TOTAL SCORE	20	Category based on scor breakpoints

Complete Wetland Categorization Worksheet.

# Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

# **Background Information**

Name:	
Date:	
4/29/2021	
Affiliation:	
Address:	
4300 Lynn Road Swite 205 Rovena AH 1412	1.1.1.
Phone Number:	.00
(724) 591-0686	
CINILSON & EDUS: COM	
Name of Wetland:	
Vegetation Communit/ies):	
Scuptshub	
HGM Class(es):	
VSS	
SEE APPENDIX A.	
at/Long or UTM Coordinate	
40.85574, -84.1981	
Elida	
Dunty Olleg	
MITCH Winship	
Sugar Creek	
ection and Subsection	
drologic Unit Code	
041000070904	
U/29/2021	
tional Wetland Inventory Map	
io Wetland Inventory Man	
N/A	
Il Survey	
lineation report/map	
Attached	

Name of Wetland: 1-0 Wetland Size (acres, hectares): 0.130 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. Wetland Size (acres, hectares): See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NA Category: Final score : 31 Category Z

### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

## **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	





## 3) GRAND TOTAL(max 100 pts)

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories at the following address: http://www.epa.state.oh.us/dsw/401/401.html

and of highest quality

# **ORAM Summary Worksheet**

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES (NO)	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size		
	Metric 2. Buffers and surrounding land use	8	
	Metric 3. Hydrology	8	
	Metric 4. Habitat	10	
·* .	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion,	ч	
	TOTAL SCORE	31	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

# Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

Background Information			
Name: Ethan Wilson			
Date: (0/20/202)			
Affiliation: Environmental Solutions and Innovations. Inc.			
Address:			
Phone Number:			
(419) <u>351 - 9050</u> e-mail address:			
Sdenham @ envsi.com			
Vegetation Communit(ies):			
Forested			
PFO			
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.			
ALL ADDE LOUN O			
SEE APPENDIX H,			
Lat/Long or UTM Coordinate			
USGS Quad Name Flida			
County Allen			
Township Support Crepty:			
Section and Subsection			
Hydrologic Unit Code			
Site Visit I la a la ray			
National Wetland Inventory Map			
0hio Wetland Inventory Map			
Soil Survey			
50			

Delineation report/map Attached

Name of Wetland: - -Wetland Size (acres, hectares): 0, 262 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NA Category: Category 1 Final score : 21

### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

## **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis</i> , or	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	A
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	




GRAND TOTAL(max 100 pts)

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories at the following address: http://www.epa.state.oh.us/dsw/401/401.html

# **ORAM Summary Worksheet**

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	i	
rading	Metric 2. Buffers and surrounding land use	4	
1-E	Metric 3. Hydrology	5	
	Metric 4. Habitat	6	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion,	5	
	TOTAL SCORE	21	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

Name:	
Ethon Withow	
Date:	
6/29/2021	
Environmental Solutions and Innovations. Inc	
Address:	
Phone Number:	
(419) 351-9050	
Sdenham @ envsi.com	
Name of Wetland:	
Vegetation Communit(ies):	
HGM Class(es):	
PEM	
Location of wedand: include map, address, north arrow, landmarks, distances, roads, etc.	
SEE APPENDIX A,	
Lat/Long or UTM Coordinate	
Lat/Long or UTM Coordinate 40.81469, -84.1543 USGS Quad Name Flido	
Lat/Long or UTM Coordinate <u>40.81469, -84.1543</u> USGS Quad Name Elida County	
Lat/Long or UTM Coordinate <u>40.81469, -84.1543</u> USGS Quad Name Elida County Allen Township	
Lat/Long or UTM Coordinate 40.81469, -84.1543 USGS Quad Name Elida County Allen Township Sugar Creek: Section and Subsection	
Lat/Long or UTM Coordinate <u>40.81469</u> , -84.1543 USGS Quad Name Elida County Allen Township Sugar Creek: Section and Subsection <u>5003</u>	
Lat/Long or UTM Coordinate <u>40.81469, -84.1543</u> USGS Quad Name Elida County Allen Township Sugar Creek: Section and Subsection S 003 Hydrologic Unit Code 041000070404	
Lat/Long or UTM Coordinate <u>40.81469, -84.1543</u> USGS Quad Name Elida County Allen Township Sugar Creek: Section and Subsection <u>5003</u> Hydrologic Unit Code 041000070404 Site Visit <u>6/29/2021</u>	
Lat/Long or UTM Coordinate <u>40.81469</u> , -84.1543 USGS Quad Name Elida County Allen Township Sugar Creek: Section and Subsection <u>5003</u> Hydrologic Unit Code <u>041000070404</u> Site Visit <u>0/29/2021</u> Vational Wetland Inventory Map	
Lat/Long or UTM Coordinate <u>HO.81469, -84.1543</u> USGS Quad Name Elida County Allen Township Sugar Creek: Section and Subsection <u>S 003</u> Hydrologic Unit Code <u>OH1000070404</u> Site Visit <u>U/29/2021</u> National Wetland Inventory Map NA	
Lat/Long or UTM Coordinate <u>HO.81469, -84.1543</u> USGS Quad Name Elida County Allen Township Sugar Creek: Section and Subsection <u>S 003</u> Hydrologic Unit Code <u>OH1000070404</u> Site Visit <u>U/29/2021</u> NA Shio Wetland Inventory Map NA	
Lat/Long or UTM Coordinate <u>40.81469, -84.1543</u> USGS Quad Name Elida County Allen Township Sugar Creek: Section and Subsection S 003 Hydrologic Unit Code 041000070404 Site Visit U/29/2021 Vational Wetland Inventory Map NA Shio Wetland Inventory Map NA Shio Wetland Inventory Map	

#### **Background Information**

Name of Wetland: 1-F Wetland Size (acres, hectares): 0.377 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NIA Category: Category 1 Final score : 22

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	~	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	





22 GRAND TOTAL(max 100 pts)

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories at the following address: http://www.epa.state.oh.us/dsw/401/401.html

## **ORAM Summary Worksheet**

States and	and the second	circle	
		answer or	
		insert	Result
		score	
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	2	
, taking	Metric 2. Buffers and surrounding land use	1	
1-F	Metric 3. Hydrology	7	
	Metric 4. Habitat	10	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	2	
	TOTAL SCORE	22	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

### **Background Information**

Name: Ethon Wilson	
Date: 10/20/2021	
Affiliation:	
Environmental Solutions and Innovations, Inc.	
4300 Lynn Road, Suite 205 Ravenna, OH 44266	
(419) 351 - 9050	
e-mail address:	-
Name of Wetland:	
Vegetation Communit(ies):	
Emergent	
PEM	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
SEE APPENDIX A.	
SEL	
Lat/Long or UTM Coordinate	
40.0111 - 84.1505	
Elida	
Allen	
Township Sugar Creek	
Section and Subsection	
Hydrologic Unit Code	
Site Visit la la su	
VI29/202 National Wetland Inventory Map	
N/A Obio Watland Investory Man	
	4
Soil Survey PmA	
Delineation report/map Attrached	

Name of Wetland: 1-G Wetland Size (acres, hectares): 0.024 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Category: Category 1 Final score : 14

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	~	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	



**ORAM v. 5.0 Field Form Quantitative Rating** ML Site: Rater(s): 29 Date: tal this na U Metric 5. Special Wetlands. max 10 pts. subtotal Check all that apply and score as indicated. Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetland-unrestricted hydrology (10) Lake Erie coastal/tributary wetland-restricted hydrology (5) Lake Plain Sand Prairies (Oak Openings) (10) Relict Wet Praires (10) Known occurrence state/federal threatened or endangered species (10) Significant migratory songbird/water fowl habitat or usage (10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Metric 6. Plant communities, interspersion, microtopography. nax 20 pts subtotal 6a. Wetland Vegetation Communities. Vegetation Community Cover Scale Score all present using 0 to 3 scale. Absent or comprises <0.1ha (0.2471 acres) contiguous area 0 0 Aquatic bed Present and either comprises small part of wetland's 1 Emergent vegetation and is of moderate quality, or comprises a  $\mathcal{O}$ Shrub significant part but is of low quality Forest 2 Present and either comprises significant part of wetland's Mudflats 0 vegetation and is of moderate quality or comprises a small O Open water part and is of high quality 0 Other 3 Present and comprises significant part, or more, of wetland's 6b. horizontal (plan view) Interspersion. vegetation and is of high quality Select only one. High (5) Narrative Description of Vegetation Quality Moderately high(4) low Low spp diversity and/or predominance of nonnative or Moderate (3) disturbance tolerant native species Moderately low (2) mod Native spp are dominant component of the vegetation, 0 Low (1) although nonnative and/or disturbance tolerant native spp None (0) can also be present, and species diversity moderate to 6c. Coverage of invasive plants. Refer moderately high, but generallyw/o presence of rare to Table 1 ORAM long form for list. Add threatened or endangered spp or deduct points for coverage high A predominance of native species, with nonnative spp Extensive >75% cover (-5) and/or disturbance tolerant native spp absent or virtually Moderate 25-75% cover (-3) absent, and high spp diversity and often, but not always, Sparse 5-25% cover (-1) the presence of rare, threatened, or endangered spp Nearly absent <5% cover (0) Absent (1) Mudflat and Open Water Class Quality 6d. Microtopography. 0 Absent <0.1ha (0.247 acres) Score all present using 0 to 3 scale. 1 Low 0.1 to <1ha (0.247 to 2.47 acres) O Vegetated hummucks/tussucks 2 Moderate 1 to <4ha (2.47 to 9.88 acres) Coarse woody debris >15cm (6in) 3 High 4ha (9.88 acres) or more Standing dead >25cm (10in) dbh Amphibian breeding pools **Microtopography Cover Scale** 0 Absent 1 Present very small amounts or if more common of marginal quality 2 Present in moderate amounts, but not of highest

#### 14 GRAND TOTAL(max 100 pts)

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories at the following address: http://www.epa.state.oh.us/dsw/401/401.html

3

quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality

## **ORAM Summary Worksheet**

The second second		circle	
		answer or	
		insert	Result
		score	and the second sec
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands Unrestricted with native plants-	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
	Metric <sup>x</sup> 2. Buffers and surrounding land use	3	
1-6	Metric 3. Hydrology	6	
	Metric 4. Habitat	5	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	0	
	TOTAL SCORE	14	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

# **Background Information**

Name: Ethan Wilbon
Date: (0/29/2.02)
Affiliation:
Address:
4300 Lynn Road, Suite 205 Ravenna, OH 44266
(419) 351 - 9050
e-mail address: Sdenham @ Envsi.com
Name of Wetland:
Vegetation Communit(ies):
HGM Class(es):
PEM
SEE APPENDIX A,
011
Lat/Long or UTM Coordinate 40.81047. ~ 84.1498
USGS Quad Name Elida
County Allen
Township SUDGE CREAK
Section and Subsection
Hydrologic Unit Code
Site Visit unlog 12021
National Wetland Inventory Map
Ohio Wetland Inventory Map
Soil Survey
Delineation report/map
HTTached

Name of Wetland: - H Wetland Size (acres, hectares): 0.067 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NIA Final score : Category: 14 Category 1

2.

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	~	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	



Site:	l	NI-F	4)	Rater(s):	MH	Date: 6/29/21
l	4					
subtotal t	his page					
a ld	1					
0 10		<b>Netric</b>	5. Special W	etlands.		
ax 10 pts. subt	otal C	heck all that	apply and score as indicate	d.		
		Bog	(10)			
		Fen	(10)			
		Mat	growth forest (10)			
		Lak	e Erie coastal/tributary wetla	nd-unrestricted hydrology (1	0)	
		Lak	e Erie coastal/tributary wetla	and-restricted hydrology (5)		
		Lak	e Plain Sand Prairies (Oak C	Openings) (10)		
		Reli	ict Wet Praires (10)		(10)	
		Kno	own occurrence state/federal	threatened or endangered s	o)	
		Cat	egory 1 Wetland See Ques	tion 1 Qualitative Rating (-1)	0)	
	11					
6 1		<b>Netric</b>	6. Plant com	munities, inte	erspersion, mic	rotopography.
nax 20 pts. subt	otal 6a	a. Wetland	Vegetation Communities.	Vegetation Communit	y Cover Scale	
	S	core all pres	ent using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.	2471 acres) contiguous area
		Ø Aqu	atic bed	1	Present and either comprises s	mail part of wetland's
		, Eme	ergent		significant part but is of low g	e quality, or comprises a
		O Shr	ub	2	Present and either comprises s	ignificant part of wetland's
		@ Mu	flats	-	vegetation and is of moderate	quality or comprises a small
		O Ope	en water		part and is of high quality	
		6 Oth	er	3	Present and comprises significa-	ant part, or more, of wetland's
	68	b. horizonta	I (plan view) Interspersion.		vegetation and is of high qual	ity
	S	elect only or	10.	Neurative Description	of Vegetation Quality	
		Hig	n (5) toratoly high(4)	Iow	Low spp diversity and/or predor	minance of nonnative or
		Mod	terate (3)	1011	disturbance tolerant native sp	ecies
		Mod	derately low (2)	mod	Native spp are dominant compo	onent of the vegetation,
		Low	/ (1)		although nonnative and/or dis	turbance tolerant native spp
		XNor	ne (0)		can also be present, and spec	cies diversity moderate to
	60	c. Coverage	of invasive plants. Refer		threatened or endangered sp	n
	to	Table 1 OF	AM long form for list. Add	high	A predominance of native spec	ies, with nonnative spp
	Of	Faeduct point	ensive >75% cover (-5)		and/or disturbance tolerant na	ative spp absent or virtually
		Mod	derate 25-75% cover (-3)		absent, and high spp diversity	and often, but not always,
	1	Spa	arse 5-25% cover (-1)		the presence of rare, threater	ned, or endangered spp
	-	Nea	arly absent <5% cover (0)		ton Class Quality	
		Abs	sent (1)	Mudilat and Open Wa	Absent <0.1ha (0.247 acres)	
	6	d. Microtopo	ography.	1	Low 0.1 to <1ha (0.247 to 2.47	acres)
	5		tetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.	88 acres)
		U Cos	arse woody debris >15cm (6	in) 3	High 4ha (9.88 acres) or more	
		✓ Sta	nding dead >25cm (10in) db	h		
		( Am	phibian breeding pools	Microtopography Cov	ver Scale	
		-		0	Present very small amounts or	if more common
					of marginal quality	
				2	Present in moderate amounts,	but not of highest
					quality or in small amounts o	f highest quality
				3	Present in moderate or greater	amounts
					and of highest quality	

GRAND TOTAL(max 100 pts)

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories at the following address: http://www.epa.state.oh.us/dsw/401/401.html

# **ORAM Summary Worksheet**

		circle	
		answer or	
		insert	Result
		score	
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
. 1	Metric 2. Buffers and surrounding land use	3	
1-H	Metric 3. Hydrology	6	
	Metric 4. Habitat	5	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	0	
	TOTAL SCORE	14	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

## **Background Information**

Name:	
Date:	
6/29/2021	
Environmental Solutions and Innovations, Inc.	
Address: 11200 Lun Road Suite 205 Rovenna OH 4471010	
Phone Number:	
(419) 351-9050	
e-mail address: Sdenburn @ envsi.com	
Name of Wetland:	
Vegetation Communit(ies):	
HGM Class(es):	
PEM	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
CEE ADDENIDIN A	
SEE AFFLISUIA II,	
Lat/Long or UTM Coordinate	
Lat/Long or UTM Coordinate 40.80922 - 84.1485	
Lat/Long or UTM Coordinate 40.80922, -84.1485 USGS Quad Name Elida	
Lat/Long or UTM Coordinate 40.80922, -84.1485 USGS Quad Name Etida County Allen	
Lat/Long or UTM Coordinate 40.80922, -84.1485 USGS Quad Name Elida County Allen Township Sugar Creek	
Lat/Long or UTM Coordinate 40.80922, -84.1485 USGS Quad Name Elida County Allen Township Sugar Creek. Section and Subsection	
Lat/Long or UTM Coordinate 40.80922, -84.1485 USGS Quad Name Elida County Allen Township Sugar Creek Section and Subsection SOC3 Hydrologic Unit Code	
Lat/Long or UTM Coordinate 40.80922, -84.1485 USGS Quad Name Erida County Allen Township Sugar Creek Section and Subsection Soco Hydrologic Unit Code 041000070404	
Lat/Long or UTM Coordinate 40.80922, -84.1485 USGS Quad Name Elida County Allen Township Sugar Creek: Section and Subsection SO23 Hydrologic Unit Code OHIOCOOTOHOH Site Visit U[29/2021	
Lat/Long or UTM Coordinate 40.80922, -84.1485 USGS Quad Name Elida County Allen Township Sugar Creek: Section and Subsection S 003 Hydrologic Unit Code 041000070404 Site Visit USGS Quad Name 041000070404 Site Visit USGS Quad Name NA	
Lat/Long or UTM Coordinate H0.80922, -84.1485 USGS Quad Name Elida County Allen Township Sugar Creek Section and Subsection SOC3 Hydrologic Unit Code OHICOCOTOHOH Site Visit U29/2021 National Welland Inventory Map NA	
Lat/Long or UTM Coordinate 40.80922, -84.1485 USGS Quad Name Elida County Allen Township Sugar Creek. Section and Subsection SOCS Hydrologic Unit Code 041000070404 Site Visit 0/29/2021 National Wetland Inventory Map NA Ohio Wetland Inventory Map NA	
Lat/Long or UTM Coordinate 40.80922, -84.1485 USGS Quad Name Elida County Allen Township Sugar Creek: Section and Subsection SO03 Hydrologic Unit Code 041000070404 Site Visit U/29/2021 National Wetland Inventory Map NA Ohio Wetland Inventory Map NA Delineation report/map	

Name of Wetland: -I Wetland Size (acres, hectares): 0.338 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NA Category: Category Final score : 1 25

2 .

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its guality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	


**ORAM v. 5.0 Field Form Quantitative Rating** 



#### 25 GRAND TOTAL(max 100 pts)

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories at the following address: http://www.epa.state.oh.us/dsw/401/401.html

and of highest quality

# **ORAM Summary Worksheet**

		circle	
		answer or	
		insert	Result
and and have		score	and the second
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	2	
J	Metric 2. Buffers and surrounding land use	5	
1-I	Metric 3. Hydrology	10	
	Metric 4. Habitat	7	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	- 1	
	TOTAL SCORE	25	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

# Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

Background Info	rmation
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Name: Fthan Wilson
Date: (0/29/202)
Affiliation:
Address:
4300 Lynn Road, Suite 205 Ravenna, OH 44266
(419) 351 - 9050
e-mail address: Sdenham @ envsi.com
Name of Wetland:
Vegetation Communit(ies):
HGM Class(es):
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
SEE APPENDIX A.
JEL MITO STATIS
The second se
Lat/Long or UTM Coordinate
USGS Quad Name Flida
County Alleo
Township Support Creaters
Section and Subsection
SOLO Hydrologic Unit Code
041000070404 Site Visit
V/29/2021 National Wetland Inventory Man
Onio Wetland Inventory Map
Soil Survey PmA
Delineation report/map Attached

Name of Wetland: 1-5 Wetland Size (acres, hectares): 0.068 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Final score : Category: Category 1 4

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	

PEM 1-J

ORAM v. 5.0 Field Form Quantitative Rating



#### PEM 2-J

ORAM v. 5.0 Field Form Quantitative Rating



11

End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts

and of highest quality

# **ORAM Summary Worksheet**

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
3	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	0	
Raung	Metric 2. Buffers and surrounding land use	t.	
	Metric 3. Hydrology	5	
1- 5	Metric 4. Habitat	8	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion,	-3	
	TOTAL SCORE	11	Category based on score breakpoints CAT

Complete Wetland Categorization Worksheet.

# Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

Name: Ethan Wilson	
Ethan Wilson	
Date:	
6/29/2021	
Affiliation:	
Address:	
4300 Lynn Road, Suite 205 Ravenna, OH 44261	U
Phone Number:	
e-mail address:	
Sdenham @ envsi.com	
Name of Wetland:	
Vegetation Communit(ies):	
Scrub/Shrub	
HGM Class(es):	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
SEE APPENDIX H,	
077	
Lat/Long or UTM Coordinate	
Lat/Long or UTM Coordinate 40,79863 - 84,1374	
Lat/Long or UTM Coordinate 40.79863 - 84.1374 USGS Quad Name Elida	
Lat/Long or UTM Coordinate 40,79863 - 84,1374 USGS Quad Name Elida County Alleo	
Lat/Long or UTM Coordinate 40.79863 - 84.1374 USGS Quad Name Elida County Allen	
Lat/Long or UTM Coordinate 40.79863 - 84.1374 USGS Quad Name Elida County Allen Township American	
Lat/Long or UTM Coordinate 40.79863 - 84.1374 USGS Quad Name Elida County Allen Township American Section and Subsection	
Lat/Long or UTM Coordinate 40.79863 - 84.1374 USGS Quad Name Elida County Allen Township American Section and Subsection SOII Hydrologic Unit Code	
Lat/Long or UTM Coordinate 40.79863 - 84.1374 USGS Quad Name Elida County Allen Township American Section and Subsection Soll Hydrologic Unit Code OHI 600076404	
Lat/Long or UTM Coordinate 40.79863 - 84.1374 USGS Quad Name Elida County Allen Township American Section and Subsection Soll Hydrologic Unit Code 041000070404 Site Visit $u/2g/2021$	
Lat/Long or UTM Coordinate <u>40,79863</u> - 84,1374 USGS Quad Name Elida County Allen Township American Section and Subsection Soll Hydrologic Unit Code OHI COODTOHOH Site Visit U/29/2021 National Wetland Inventory Map	
Lat/Long or UTM Coordinate <u>40.79863</u> - 84, 1374 USGS Quad Name Elida County Allen Township American Section and Subsection Soll Hydrologic Unit Code OHI 600076404 Site Visit U/29/2021 National Wetland Inventory Map N/A Ohio Wetland Inventory Map	
Lat/Long or UTM Coordinate <u>40.74863 - 84.1374</u> USGS Quad Name Elida County Allen Township American Section and Subsection Soll Hydrologic Unit Code OH 00070404 Site Visit U/2a/2021 National Wetland Inventory Map N/A Ohio Wetland Inventory Map	
Lat/Long or UTM Coordinate 40.74863 ~ 84.1374 USGS Quad Name Elida County Allen Township American Section and Subsection Soll Hydrologic Unit Code 041000076404 Site Visit 0/29/2021 National Wetland Inventory Map N/A Ohio Wetland Inventory Map N/A Soil Survey Bloubl	
Lat/Long or UTM Coordinate 40.79863 ~ 84,1374 USGS Quad Name Elida County Allen Township American Section and Subsection Soll Hydrologic Unit Code 04100070404 Site Visit 0/29/2021 National Wetland Inventory Map N/A Ohio Wetland Inventory Map N/A Soil Survey B191B1 Delineation_geppt/map	

### **Background Information**

Sketch: Include north arrow, relationship with	other surface waters	vogatation serves at		1.00
	other surface waters,	vegetation zones, et	с.	
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See	Appendix	A.		
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Comments, Narrative Discussion, Justification	of Category Changes			
Comments, Narrative Discussion, Justification	of Category Changes	•		
Comments, Narrative Discussion, Justification	of Category Changes	1		
Comments, Narrative Discussion, Justification	of Category Changes			
Comments, Narrative Discussion, Justification	of Category Changes			
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#### **Scoring Boundary Worksheet**

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#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	~	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	



ORAM v. 5.0 Field Form Quantitative Rating



105

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality

# **ORAM Summary Worksheet**

ALL LA DEMONSTRATION		circle	
		answer or	
		insert	Result
		score	
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
	Metric 2. Buffers and surrounding land use	3	
1-4	Metric 3. Hydrology	5	
	Metric 4. Habitat	3.5	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	-1	
	TOTAL SCORE	10.5	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

# Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

# **Background Information**

Name: Fthan Wilson
Date: 10/20/2021
Affiliation:
Address:
4300 Lynn Road, Suite 205 Ravenna, OH 44266
(419) 351-9050
e-mail address: Sdenham @ envsi.com
Name of Wetland:
Vegetation Communit(ies):
HGM Class(es):
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
SEE APPENDIX A,
Lat/Long or LITM Coordinate
40,79933, -84.1379
Elida
Allen
American Subsection
S 01
041000070404
U/29/2021
Unio wetland Inventory Map
Soll Survey
Delineation report/map AHached

Name of Wetland: 1-2 Wetland Size (acres, hectares): 0.031 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Final score : Category: Category 1 8.5

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	~	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	

PEM 1-L

ORAM v. 5.0 Field Form Quantitative Rating



PEM 2-L

ORAM v. 5.0 Field Form Quantitative Rating



1	of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

9

End of Quantitative Rating. Complete Categorization Worksheets.

### **ORAM Summary Worksheet**

		circle	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
		answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered	YES (NO)	If yes, Category 3.
	Species Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands –	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	0	
Rating	Metric 2. Buffers and surrounding land use	7	
	Metric 3. Hydrology		
1-11)	Metric 4. Habitat	10	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion,	-1	
	TOTAL SCORE	19	Category based on score breakpoints CAT

Complete Wetland Categorization Worksheet.

# Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

### **Background Information**

Name:	
Date:	
Affiliation:	
Environmental Solutions and Innovations, Inc.	
4300 Lunn Road. Suite 205 Ravenna, OH 44260	>
Phone Number:	
e-mail address:	
sdenham @ envsi.com	
Name of Wetland:	
Vegetation Communit(ies):	
HGM Class(es):	
SEE APPENDIX H,	
Latil and an UTM Constitute	
40,79401, -84.1324	
Elida Elida	
County Allen	
Terreschie	
rownship American	
Section and Subsection	
Section and Subsection Soll Hydrologic Unit Code	
Section and Subsection Soll Hydrologic Unit Code 041000070404 Site Visit	
I ownship American   Section and Subsection SOII   Hydrologic Unit Code 041000070404   Site Visit 0/20/2021   National Wetland Inventory Map	
I ownship American   Section and Subsection SOII   Hydrologic Unit Code 041000070404   Site Visit 0/20/2021   National Wetland Inventory Map NA   Ohio Wetland Inventory Map NA	
Township American   Section and Subsection SOII   Hydrologic Unit Code 041000070404   Site Visit 0/20/2021   National Wetland Inventory Map NA   Ohio Wetland Inventory Map NA   Soil Survey NA	
Township American   Section and Subsection SOII   Hydrologic Unit Code 041000070404   Site Visit 0/29/2021   National Wetland Inventory Map N/A   Ohio Wetland Inventory Map N/A   Soil Survey S.A	
Township American   Section and Subsection SOII   Hydrologic Unit Code 041000070404   Site Visit 0/29/2021   National Wetland Inventory Map N/A   Ohio Wetland Inventory Map N/A   Soil Survey S.A   Delineation report/map Attached	

Name of Wetland: 1-m Wetland Size (acres, hectares): 0.145 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NA Category: Category 1 Final score : 15.5

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	~	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	A
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
40	Lake Disin Sand Dusining (Oak Onemings) is the wetland lagsted in	Go to Question 10	
10	Lucas, Fulton, Henry, or Wood Counties and can the wetland be	120 (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	~
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Rating	



last revised 1 February 2001 jjm
ORAM v. 5.0 Field Form Quantitative Rating



# 155

End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts

and of highest quality

# **ORAM Summary Worksheet**

		circle answer or insert	Result
		SCOFE	
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	5	
Raung	Metric 2. Buffers and surrounding land use	1	
1-11	Metric 3. Hydrology	6	
	Metric 4. Habitat	4.5	A AND AND
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	3	
	TOTAL SCORE	15.5	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

# Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

# **Background Information**

Name:	
Date:	
0/20/2021 Affiliation:	
Environmental Solutions and Innovations, Inc.	
Address:	
Phone Number:	
(419) 351-9050	
e-mail address:	
Name of Wetland:	
Vegetation Communit(ies):	
Scrub/Shrub	
HGM Class(es): P55	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
	- ) -
SEE APPENDIX A,	
Lat/Long or UTM Coordinate	
USGS Quad Name	
County	
Allen	
American	
Section and Subsection	
Hydrologic Unit Code	
Site Visit ( )	
0/29/2021	
National Wetland Inventory Map	
Ohio Wetland Inventory Map	
Soil Survey	-
H <sub>r</sub> B	
	the second s
Attached	

Netland Size (acres, bectares):	A	dia tana			-
Sketch: Include north arrow, re	O. O GO	other ourface water			
		other surface water	s, vegetation zones, et	c.	4.4
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### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	~	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

## **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	



ORAM v. 5.0 Field Form Quantitative Rating



15,5

End of Quantitative Rating. Complete Categorization Worksheets.

3

quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality

# **ORAM Summary Worksheet**

		circle	State of the second
		answer or insert	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	D	
rading	Metric 2. Buffers and surrounding land use	5	
1-N	Metric 3. Hydrology	6	
	Metric 4. Habitat	4.5	
	Metric 5. Special Wetland Communities	o	
	Metric 6. Plant communities, interspersion, microtopography	0	
	TOTAL SCORE	15.5	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

# Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

# **Background Information**

ethan Wilson
Lindi Volean
Date:
filiation:
Environmental Solutions and Innovations, Inc.
4300 Lynn Road, Suite 205 Ravenna, OH 44200
Phone Number:
(419) <u>551-</u> 4050 e-mail address:
sdenham @ envsi.com
Name of Wetland: 1 - 0
Vegetation Communit(ies):
HGM Class(es):
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
SEE APPENDIX A.
JEL THIE STATE
Lat/Long or UTM Coordinate 40, 77824、 ~ 84, 1159
Lat/Long or UTM Coordinate 40,77824, ~84, 1159 USGS Quad Name
Lat/Long or UTM Coordinate <u>40,77824</u> , ~84, 1159 USGS Quad Name Cairo County Alleo
Lat/Long or UTM Coordinate <u>40.77824</u> , -84.1159 USGS Quad Name Cairo County Allen Township
Lat/Long or UTM Coordinate <u>40.77824</u> , -84.1159 USGS Quad Name Cairo County Allen Township American Section and Subsection
Lat/Long or UTM Coordinate <u>40,77824</u> , -84, 1159 USGS Quad Name Cairo County Allen Township American Section and Subsection <u>5013</u> Hydrologic Unit Code
Lat/Long or UTM Coordinate <u>40.77824</u> , -84.1159 USGS Quad Name Cairo County Allen Township American Section and Subsection S 013 Hydrologic Unit Code OHIOCOOTOHOH
Lat/Long or UTM Coordinate 40.77824, -84.1159 USGS Quad Name Cairo County Allen Township American Section and Subsection S 013 Hydrologic Unit Code 041000070404 Site Visit U/29/2021
Lat/Long or UTM Coordinate 40.77824, -84.1159 USGS Quad Name Cairo County Allen Township American Section and Subsection Sol3 Hydrologic Unit Code 041000070404 Site Visit U[29]2021 National Wetland Inventory Map PFOLA
Lat/Long or UTM Coordinate <u>40.77824</u> , -84.1159 USGS Quad Name Cairo County Allen Township American Section and Subsection Section and Subsection Sol3 Hydrologic Unit Code OHIOCOOTO404 Site Visit U29/2021 National Wetland Inventory Map PFOIA Ohio Wetland Inventory Map
Lat/Long or UTM Coordinate <u>40.77824</u> , -84.1159 USGS Quad Name Cairo County Allen Township American Section and Subsection S 013 Hydrologic Unit Code 0410C0070404 Site Visit U22/2021 National Wetland Inventory Map PFOIA Ohio Wetland Inventory Map
Lat/Long or UTM Coordinate 40.77824, -84, 1159 USGS Quad Name Cairo County Allen Township American Section and Subsection Sol3 Hydrologic Unit Code 041000070404 Site Visit 0/29/2021 National Wetland Inventory Map PFOIA Ohio Wetland Inventory Map NA Soil Survey PmA Delineation report/map

Name of Wetland: 1-0 Wetland Size (acres, hectares): 0.031 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Category: Category 1 Final score : 19

### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

## **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	





1-O (PEM)

19

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

of marginal quality

and of highest quality

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts

## **ORAM Summary Worksheet**

		circle answer or	
		score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
	Metric 2. Buffers and surrounding land use	5	
1-0	Metric 3. Hydrology	9	
	Metric 4. Habitat	4	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	1	
	TOTAL SCORE	19	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

# Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

## **Background Information**

Name:
Date:
6/29/2021
Environmental Solutions and Innovations, Inc.
Address:
4300 Lynn Road, Suite 205 Ravenna, OH 44200
(419) 351 - 9050
e-mail address:
Sdenham @ envsi.com
Name of Wethand. 1 - P
Vegetation Communit(ies): Emergent
HGM Class(es):
VEM
Location of Wedand. Include map, address, north arrow, landmarks, distances, roads, etc.
CEE ADDENIDIX A
DEE MITCHOUX II,
Lat/Long or UTM Coordinate
40,79274, -84,1311 USGS Quad Name
Elida
County Allen
Township
Section and Subsection
SOIL
041060070404
Site Visit (0/00/202)
National Wetland Inventory Map
Obio Wetland Inventory Mon
Soil Survey
Delineation report/map

Name of Wetland: 1-P Wetland Size (acres, hectares): 0.090 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A Comments, Narrative Discussion, Justification of Category Changes: NA Category: Category 1 Final score : 10

### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

## **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	



1-P(PEM)

1-P(PEM)

ORAM v. 5.0 Field Form Quantitative Rating



10

End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts

and of highest quality

# **ORAM Summary Worksheet**

		circle	
		answer or	
		insert	Result
		score	
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	D	
. isting	Metric 2. Buffers and surrounding land use	2	
1-P	Metric 3. Hydrology	5	
	Metric 4. Habitat	4	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	-1	
	TOTAL SCORE	10	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

# Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

# **Background Information**

Name: Ethan Wilbon		
Date: (0/20/202)		
Affiliation:		
Environmental Solutions and Innovations, Inc.		
4300 Lynn Road, Suite 205 Ravenna, OH 44266		
Phone Number: (419) 351 - 9050		
e-mail address:		
Name of Wetland:		
Vegetation Communit(ies):		
HGM Class(05).		
PEM		
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.		
SEE APPENDIX A,		
The same house in the second		
Lat/Long or UTM Coordinate		
USGS Quad Name Fildo		
County		
Township		
American		
Soll		
041000070404		
Site Visit 0/29/2021		
National Wetland Inventory Map		
Ohio Wetland Inventory Map		
Soil Survey		
Delineation report/map		
(Htackad		

Name of Wetland: 1-Q Wetland Size (acres, hectares): 0.018 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Category: Category 1 16.5 Final score :

2.

### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

## **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its guality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	


ORAM v. 5.0 Field Form Quantitative Rating



16.5

End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts

and of highest quality

## **ORAM Summary Worksheet**

1411111111		circle	
		answer or	
		insert	Result
		score	
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands - Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands ~ Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
ruung	Metric 2. Buffers and surrounding land use	3	
1-0	Metric 3. Hydrology	6	
1	Metric 4. Habitat	5.5	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	2	
	TOTAL SCORE	16.5	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

### Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

## **Background Information**

Ethan Wilson     Date: $w/2a/2021$ Affiliation:   Environmental Solutions and Innovations, Inc.     Address:   How of the solutions and Innovations, Inc.     Address:   4300 Lynn Road, Suite 205 Ravenna, OH 44200     Phone Number:   (419) 351 - 9050     e-mail address:   Sdenham @ envsi.com     Name of Wetland:   1 - R     Vegetation Communit(les):   Emargent     HGM Class(es):   PEM     Location of Wetland: Include map, address, north arrow, landmarks, distances, roads, etc.     SEE   APPENDIX A,
w/29/2021     Affiliation:     Environmental Solutions and Innovations, Inc.     Address:     4300 Lynn Road, Suite 205 Ravenna, OH 44266     Phone Number:     (419) 351 - 9050     e-mail address:     Sdenham @ envsi.com     Name of Wetland:     1 - R     Vegetation Communit(ies):     Emergent     HGM Class(es):     PEM     Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.     SEE APPENDIX A,
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Sdenham @ envsi.com Name of Wetland: I - R Vegetation Communit(ies): Emergent HGM Class(es): PEM Location of Wetland: Include map, address, north arrow, landmarks, distances, roads, etc. SEE APPENDIX A,
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SEE APPENDIX A,
SEE APPENDIX A,
SEE APPENDIX A,
SEE APPENDIX A,
SEE APPENDIX A,
Lat/Long or UTM Coordinate
40,77755, -84,1147
Cairo
County Allen
Township
Section and Subsection
5013
Hydrologic Unit Code 041000070404
Site Visit
National Wetland Inventory Map
National Wetland Inventory Map
Of 129 12021   National Wetland Inventory Map   Ohio Wetland Inventory Map   N/A
Olympic   National Wetland Inventory Map   N/A     Ohio Wetland Inventory Map   N/A     Soil Survey
Of 12011001   National Wetland Inventory Map   N/A   Ohio Wetland Inventory Map   N/A   Soil Survey   PmA   Delineation report/map

Name of Wetland: 1-R Wetland Size (acres, hectares): Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Final score : Category: 24 Category 1

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	



ORAM v. 5.0 Field Form Quantitative Rating



## 24

End of Quantitative Rating. Complete Categorization Worksheets.

3

quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality

## **ORAM Summary Worksheet**

		circle	
		answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	2	
rading	Metric 2. Buffers and surrounding land use	5	
1-E	Metric 3. Hydrology	5	
	Metric 4. Habitat	8	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	ч	
	TOTAL SCORE	24	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

### Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

### **Background Information**

Name: Ethan Wilbon
Date: (0/20/202)
Affiliation:
Address:
4300 Lynn Road, Suite 205 Ravenna, OH 44266
Phone Number: (419) 351 - 90.50
e-mail address:
Name of Wetland:
Vegetation Communit(ies):
Emergent
PEM
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
SEE APPENDIX A.
JEE THILE OF A TY
Lat/Long or UTM Coordinate リンフスタロー ~ Srd 1110フ
Lat/Long or UTM Coordinate 40.77894, ~ 84.1107 USGS Quad Name
Lat/Long or UTM Coordinate 40.77894, ~ 84.1167 USGS Quad Name Cairo County
Lat/Long or UTM Coordinate 40.77894, ~84.1167 USGS Quad Name Cairo County Allen Township
Lat/Long or UTM Coordinate <u>40.77894</u> , ~ 84.1167 USGS Quad Name Cairo County Allen Township American Section and Subsection
Lat/Long or UTM Coordinate <u>40.777894</u> , -84.1167 USGS Quad Name Cairo County Allen Township American Section and Subsection SO13
Lat/Long or UTM Coordinate 40.77894, ~84.1167 USGS Quad Name Cairo County Allen Township American Section and Subsection Sol3 Hydrologic Unit Code 041000070404
Lat/Long or UTM Coordinate 40.77894, ~94.1167 USGS Quad Name Cairo County Allen Township American Section and Subsection Sol3 Hydrologic Unit Code 041000070404 Site Visit (0/20/2021
Lat/Long or UTM Coordinate 40.77894, ~84.1167 USGS Quad Name Cairco County Allen Township American Section and Subsection Sol3 Hydrologic Unit Code 041000070404 Site Visit 61201 Valiand Inventory Map
Lat/Long or UTM Coordinate 40.77894, ~84.1167 USGS Quad Name Cairco County Allen Township American Section and Subsection So13 Hydrologic Unit Code 041000070404 Site Visit 0/20/2021 National Wetland Inventory Map NA Ohio Wetland Inventory Map
Lat/Long or UTM Coordinate 40.77894 - 84.1167 USGS Quad Name Cairco County Allen Township American Section and Subsection Sol3 Hydrologic Unit Code 041000070404 Site Visit 0/20/2021 National Wetland Inventory Map NA Ohio Wetland Inventory Map NA
Lat/Long or UTM Coordinate 40.77894, ~84.1167 USGS Quad Name Cairo County Allen Township American Section and Subsection Sol3 Hydrologic Unit Code 041000070404 Site Visit 0/20/2021 National Wetland Inventory Map NA Ohio Wetland Inventory Map NA

Name of Wetland: 1-5. Wetland Size (acres, hectares): 01070 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Category: Category 1 Final score : 19

2

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	



ORAM v. 5.0 Field Form Quantitative Rating





End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts

and of highest quality

## **ORAM Summary Worksheet**

		circle answer or	
		insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
, taung	Metric 2. Buffers and surrounding land use	5	
1-5	Metric 3. Hydrology	5	
	Metric 4. Habitat	6	Phillips Internet
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	3	
	TOTAL SCORE	19	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

### Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

## **Background Information**

Name: Fthan Wilson
Date: (0/29/202)
Affiliation:
Address:
4300 Lynn Road, Suite 205 Ravenna, OH 44200
(419) 351-9050
sdenham @ envsi.com
Name of Wetland:
Vegetation Communit(ies):
HGM Class(es):
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
SEE APPENDIX A,
and the state of the second
Lat/Long or UTM Coordinate 40, 78125 - 84, 1191
USGS Quad Name Cairo
County Allen
Township American
Section and Subsection
Hydrologic Unit Code
Site Visit 10/20/2021
National Wetland Inventory Map
Ohio Wetland Inventory Map
Soil Survey
Delineation report/map Attached

1

Name of Wetland: 1-Wetland Size (acres, hectares): 0,221 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Category: Category 1 Final score : 27

2.

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	~	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the provided of the substant of the s	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	



1-T(Pem)



1-TLPEM)

# 27

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest

quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality

### **ORAM Summary Worksheet**

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	T	
	Metric 2. Buffers and surrounding land use	7	
1-Π	Metric 3. Hydrology	lo	
	Metric 4. Habitat	4	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	5	
	TOTAL SCORE	27	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

### Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

## **Background Information**

Name: Ethan Wilson
Date: 10/20/2021
Affiliation:
Address:
4300 Lynn Road, Suite 205 Ravenna, OH 44266
(419) 351 - 9050
e-mail address:
Name of Wetland:
Vegetation Communit(ies):
HGM Class(es):
VEM
Location of wettand: include map, address, forth arrow, fandmarks, distances, roads, etc.
SEE APPENDIX A,
522
Lat/Long or UTM Coordinate
40.78139, ~84.1190
Cairo
County Allen
Township American
Section and Subsection
Hydrologic Unit Code
Site Visit (Alag 1992)
National Wetland Inventory Map
Ohio Wetland Inventory Map
Soil Survey
SKA
Delinection report/man

Name of Wetland:		
Wetland Size (acres, hectares):	17	Tu
Sketch: Include north arrow, relationship	with other surfáce waters, vegetation zones, etc.	12
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1	A applied & A	
De	e Mppenor VI	
Comments, Narrative Discussion, Justifica	ation of Category Changes:	
1		
	and the second	
	NIA	
14 Mar 14		
Plant and a state for	Cotogony	A
rinal score : 22	Category.	Caregory I

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	~	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substantial area and areas an	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	




End of Quantitative Rating. Complete Categorization Worksheets.

3

quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality

# **ORAM Summary Worksheet**

		circle	
		answer or	
		insert	Result
		score	
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
	Metric 2. Buffers and surrounding land use	7	
1-0	Metric 3. Hydrology	10	
	Metric 4. Habitat	4	
	Metric 5. Special Wetland Communities	0 .	
	Metric 6. Plant communities, interspersion, microtopography	1	
	TOTAL SCORE	22	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

## **Background Information**

Name:	
Date:	
6/29/2021	
Environmental Solutions and Innovations, Inc.	
Address:	
4300 Lynn Koad, Suite ZOS Kavenna, OH 49200	
(419) 351-9050	
e-mail address:	
Name of Wetland:	
Vegetation Communit/ies):	
Emergent	
HGM Class(es):	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
	1
SEE APPENDIX A,	
	-
Lat/Long or UTM Coordinate 40, 7810 - 84, 1193	
USGS Quad Name	
County	
Allen	
American	
Section and Subsection	
Hydrologic Unit Code	
Site Visit , ,	
0/29/2021	
Ohio Wetland Inventory Map	
Soil Survey	-
Delineation report/main	
Attached	

Name of Wetland: - V Wetland Size (acres, hectares): 0, 012 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Category: Final score : Category 1 21

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	



1-V(PEM)



1-V(PEM)

# 21

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality

## **ORAM Summary Worksheet**

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	0	The second second
rading	Metric 2. Buffers and surrounding land use	7	
1-V	Metric 3. Hydrology	9	
	Metric 4. Habitat	4	A CONTRACTOR
	Metric 5. Special Wetland Communities	D	No. of Concession, State of State
	Metric 6. Plant communities, interspersion, microtopography	1	
	TOTAL SCORE	21.	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

### **Background Information**

LINNI WIDDI	
Date:	
Affiliation:	
Environmental Solutions and Innovations, Inc.	-
4300 June Road Suite 205 Rovenna, OH 4421010	
Phone Number:	
(419) 351 - 9050	
sdenham @ envsi.com	
Name of Wetland:	
Vegetation Communit(ies):	
HGM Class(as).	
PEM	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
SEE APPENDIX A,	3
Lat/Long or UTM Coordinate	
Lat/Long or UTM Coordinate 40.78192 - 84.1194 USGS Quad Name	
Lat/Long or UTM Coordinate 40.78192, -84. 1194 USGS Quad Name Cairo	
Lat/Long or UTM Coordinate 40.78192, -84.1194 USGS Quad Name Cairo County Allen	
Lat/Long or UTM Coordinate <u>40.78192</u> , -84. 1194 USGS Quad Name Cairo County Allen Township American	
Lat/Long or UTM Coordinate 40.78192, -84.1194 USGS Quad Name Cairo County Allen Township American Section and Subsection	
Lat/Long or UTM Coordinate 40.78192, -84.1194 USGS Quad Name Cairo County Allen Township American Section and Subsection SOB Hydrologic Unit Code	
Lat/Long or UTM Coordinate 40.78192, -84.1194 USGS Quad Name Cairo County Allen Township American Section and Subsection SOB Hydrologic Unit Code 041000070404	
Lat/Long or UTM Coordinate 40.78192, -84.1194 USGS Quad Name Cairo County Allen Township American Section and Subsection Sol3 Hydrologic Unit Code 041000070404 Site Visit U/29/2021	
Lat/Long or UTM Coordinate 40.78192 - 84.1194 USGS Quad Name Cairo County Allen Township American Section and Subsection SOB Hydrologic Unit Code 041000070404 Site Visit U/29/2021 National Wetland Inventory Map	
Lat/Long or UTM Coordinate <u>40.78192</u> , -84. 1194 USGS Quad Name Cairo County Allen Township American Section and Subsection Sol3 Hydrologic Unit Code 041000070404 Site Visit 0/29/2021 National Wetland Inventory Map	
Lat/Long or UTM Coordinate 40.78192, -84.1194 USGS Quad Name Cairo County Allen Township American Section and Subsection SOB Hydrologic Unit Code 041000070404 Site Visit 0/29/2021 National Wetland Inventory Map N/A	
Lat/Long or UTM Coordinate 40.78192, -84.1194 USGS Quad Name Cairo County Allen Township American Section and Subsection SOB Hydrologic Unit Code 041000070404 Site Visit 0/20/2021 National Wetland Inventory Map N/A Soil Survey BIOB	
Lat/Long or UTM Coordinate 40.78192, -84.1194 USGS Quad Name Cairo County Allen Township American Section and Subsection SOB Hydrologic Unit Code 041000070404 Site Visit 041000070404 Site Visit 0429/2021 National Wetland Inventory Map N/A Soil Survey BIALBI Delineation report/map	

Name of Wetland: 1-W Wetland Size (acres, hectares): 0.005 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Category: Category 1 Final score : 20

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	~	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	





I-W (PEM)

10

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

of marginal quality

and of highest quality

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts

# **ORAM Summary Worksheet**

CONTRACTOR OF		circle	
		answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	0	
Rading	Metric 2. Buffers and surrounding land use	٦	
1-W	Metric 3. Hydrology	9	
	Metric 4. Habitat	3	La distanti di second
	Metric 5. Special Wetland Communities	D	
	Metric 6. Plant communities, interspersion, microtopography	t	
	TOTAL SCORE	20	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

### **Background Information**

Name:	
Date:	
Affiliation:	
Environmental Solutions and Innovations, Inc.	
Address: U300 June Road Suite 205 Rovenna OH 4421010	
Phone Number:	
(419) 351 - 9050	
sdenham @ envsi.com	
Name of Wetland:	
Vegetation Communit(ies):	
Emergint	
PEM	
SEE APPENDIX A,	
SEE APPENDIX A,	
Lat/Long or UTM Coordinate 40, 7819, -84.1196	
SEE APPENDIX A, Lat/Long or UTM Coordinate 40, 7819, -84.1196 USGS Quad Name Calco	
SEE APPENDIX A, Lat/Long or UTM Coordinate <u>40, 7819, -84.1196</u> USGS Quad Name Caico County Allen	
SEE APPENDIX A, Lat/Long or UTM Coordinate 40, 7819, -84.1196 USGS Quad Name Caico County Allen Township American	
SEE APPENDIX A, Lat/Long or UTM Coordinate 40, 7819, -84.1196 USGS Quad Name Caico County Allen Township Section and Subsection	
SEE APPENDIX A, Lat/Long or UTM Coordinate <u>40, 7819, -84.1196</u> USGS Quad Name Caico County <u>Allen</u> Township <u>American</u> Section and Subsection <u>503</u> Hydrologic Unit Code	
SEE APPENDIX A, Lat/Long or UTM Coordinate 40, 7819, -84.1196 USGS Quad Name Caico County Allen Township American Section and Subsection SOB Hydrologic Unit Code 041 000070464	
SEE APPENDIX A, Lat/Long or UTM Coordinate <u>40, 7819, -84.1190</u> USGS Quad Name Cairo County <u>Allen</u> Township <u>American</u> Section and Subsection <u>5013</u> Hydrologic Unit Code <u>041000070464</u> Site Visit <u>U29/2021</u>	
SEE APPENDIX A, Lat/Long or UTM Coordinate <u>40, 7819, -84.1196</u> USGS Quad Name <u>Cairco</u> County <u>Allen</u> Township <u>American</u> Section and Subsection <u>SOB</u> Hydrologic Unit Code <u>OHI COOCTOM64</u> Site Visit <u>U/29/2021</u> National Wetland Inventory Map	
SEE APPENDIX A, Lat/Long or UTM Coordinate <u>40, 7819, -84.1190</u> USGS Quad Name Caico County Allen Township American Section and Subsection Sold Hydrologic Unit Code OHI COOOTOHOU Site Visit <u>612021</u> National Wetland Inventory Map N/A Ohio Wetland Inventory Map	
SEE APPENDIX A, Lat/Long or UTM Coordinate <u>40,7819,-84.1190</u> USGS Quad Name <u>Cairco</u> County <u>Allen</u> Township <u>American</u> Section and Subsection <u>SOB</u> Hydrologic Unit Code <u>041000070404</u> Site Visit <u>0/20/2021</u> National Wetland Inventory Map <u>N/A</u> Soll Survey	
SEE APPENDIX A, Lat/Long or UTM Coordinate 40, 7819, -84.1190 USGS Quad Name CAICO County Allen Township American Section and Subsection SOB Hydrologic Unit Code 041000070404 Site Visit 0/20/2021 National Wetland Inventory Map N/A Ohio Wetland Inventory Map N/A Soll Survey BILBI Delineation report/men	

Name of Wetland: - X Wetland Size (acres, hectares): 01018 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NA Category: Category 1 Final score : 20

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	~	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	

I-X (PEM)





I-X (PFM)

# 20

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest

quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality

## **ORAM Summary Worksheet**

	circle	
	answer or	
	insert	Result
	score	
Question 1 Critical Habitat	YES NO	If yes, Category 3.
Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
Question 4. Significant bird habitat	YES NO	If yes, Category 3.
Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
Question 6. Bogs	YES NO	If yes, Category 3.
Question 7. Fens	YES NO	If yes, Category 3.
Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Question 9d. Lake Erie Wetlands Unrestricted with native plants	YES NO	If yes, Category 3
Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Question 10. Oak Openings	YES NO	If yes, Category 3
Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Metric 1. Size	0	
Metric 2. Buffers and surrounding land use	7	
Metric 3. Hydrology	9	
Metric 4. Habitat	3	
Metric 5. Special Wetland Communities	0	
Metric 6. Plant communities, interspersion, microtopography	1	
TOTAL SCORE	20	Category based on score breakpoints
	Question 1 Critical Habitat   Question 2. Threatened or Endangered   Species   Question 3. High Quality Natural Wetland   Question 4. Significant bird habitat   Question 5. Category 1 Wetlands   Question 6. Bogs   Question 7. Fens   Question 8a. Old Growth Forest   Question 9b. Lake Erie Wetlands -   Question 9b. Lake Erie Wetlands -   Question 9d. Lake Erie Wetlands -   Unrestricted with native plants   Question 10. Oak Openings   Question 11. Relict Wet Prairies   Metric 1. Size   Metric 2. Buffers and surrounding land use   Metric 3. Hydrology   Metric 4. Habitat   Metric 5. Special Wetland Communities   Metric 6. Plant communities, interspersion, microtopography   TOTAL SCORE	Circle answer or insert score   Question 1 Critical Habitat YES NO   Question 2. Threatened or Endangered Species YES NO   Question 3. High Quality Natural Wetland YES NO   Question 4. Significant bird habitat YES NO   Question 5. Category 1 Wetlands YES NO   Question 6. Bogs YES NO   Question 7. Fens YES NO   Question 8a. Old Growth Forest YES NO   Question 9b. Lake Erie Wetlands - YES NO   Question 9b. Lake Erie Wetlands - YES NO   Question 9d. Lake Erie Wetlands - YES NO   Question 10. Oak Openings YES NO   Question 11. Relict Wet Prairies YES NO   Metric 1. Size O   Metric 2. Buffers and surrounding land use T   Metric 3. Hydrology Q   Metric 4. Habitat 3   Metric 5. Special Wetland Communities O   Metric 6. Plant communities, interspersion, microtopography 1   TOTAL SCORE ZO

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

## **Background Information**

Fthan Wilson	
Date: 10/20/2021	
Affiliation:	
Address:	
4300 Lynn Road, Suite 205 Ravenna, OH 44266	-
(419) 351 - 9050	
e-mail address: Sdenham @ envsi.com	
Name of Wetland:	
Vegetation Communit(ies):	
HGM Class(es):	_
VEM	_
SEE APPENDIX A,	
Lat/Long or UTM Coordinate	
USGS Quad Name	
County	
County Allen	
County Allen Township American	
County Allen Township American Section and Subsection S013	
County Allen Township American Section and Subsection S013 Hydrologic Unit Code 041000070404	
County Allen Township American Section and Subsection S013 Hydrologic Unit Code 041000070404 Site Visit 0/29/2021	
County Allen Township American Section and Subsection S013 Hydrologic Unit Code 041000070404 Site Visit 0/29/2021 National Wetland Inventory Map	
County Allen Township American Section and Subsection S013 Hydrologic Unit Code 041000070404 Site Visit 0/29/2021 National Wetland Inventory Map N/A	
County Allen Township American Section and Subsection S013 Hydrologic Unit Code 041000070404 Site Visit 0/29/2021 National Wetland Inventory Map N/A Ohio Wetland Inventory Map N/A	
County Allen   Township American   Section and Subsection S013   Hydrologic Unit Code OHI 000070404   Site Visit 0/20/2021   National Wetland Inventory Map N/A   Ohio Wetland Inventory Map N/A   Soil Survey BIG 181   Delineation report/map Ohio Wetland Inventory Map	

Name of Wetland: 1- 4 Wetland Size (acres, hectares): Wetland Size (acres, hectares): 01030 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Category: Category 1 Final score : 22

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substantial area and areas an	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	




1-Y (PEM)



End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality

## **ORAM Summary Worksheet**

120		circle answer or	
		insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	0	
rading	Metric 2. Buffers and surrounding land use	7	Mar Shaw Shaw
1-4	Metric 3. Hydrology	9	
	Metric 4. Habitat	4	and the second second
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion,	2	
	TOTAL SCORE	22	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

Background Information
Name: Fthan Wilson
Date: 4/29/2021
Affiliation: Environmental Solutions and Innovations, Inc.
Address: 4300 Lunn Road, Suite 205 Ravenna, OH 44266
Phone Number: (419) 351 - 9050
e-mail address: Sdenham @ envsi.com
Name of Wetland: 1 - Z
Vegetation Communit(ies):
HGM Class(es): PEM
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
SEE APPENDIX A,
Lat/Long or UTM Coordinate
USGS Quad Name
County Allen
Township American
Section and Subsection
Hydrologic Unit Code 041000070404
Site Visit 0/29/2021
National Wetland Inventory Map
Ohio Wetland Inventory Map
Soil Survey

Name of Wetland: - 2 Wetland Size (acres, hectares): 0.119 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Category: Final score : Category 1 117 :

2

### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	~	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

## **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	



1-2 (PEM)



1-Z (PEM)

# 17

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest

quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality

## **ORAM Summary Worksheet**

		circle	
		answer or	
		insert	Result
		score	and a second a second
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	0	
. usung	Metric 2. Buffers and surrounding land use	4	
1-2	Metric 3. Hydrology	10	
	Metric 4. Habitat	4	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	-1	
	TOTAL SCORE	רו	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

# **Background Information**

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Name:	
Date:	
Affiliation:	
Environmental Solutions and Innovations, Inc.	-
Address: H300 June Road Suite 205 Ravenna, OH 44200	
Phone Number:	
(419) 351 - 9050	-
sdenham @ envsi.com	_
Name of Wetland: 1 - AA	
Vegetation Communit(ies):	
HGM Class(es):	$\neg$
PEM	_
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
SEE APPENDIX A,	
	a kill
Lat/Long or UTM Coordinate 40,7773, -84.1150	
USGS Quad Name	
County	
Township	
Section and Subsection	
5013	
041000070404	
Site Visit 0/29/2021	
National Wetland Inventory Map	_
Ohio Wetland Inventory Map	
Soil Survey	
PmA	
Attached	

Name of Wetland: 1-AA Wetland Size (acres, hectares): 

 Wetland Size (acres, hectares):
 0.036

 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.

See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Category: Category 1 Final score : 14.5

### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

## **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	



ORAM v. 5.0 Field Form Quantitative Rating



4.5

End of Quantitative Rating. Complete Categorization Worksheets.

and of highest guality

# **ORAM Summary Worksheet**

		circle	
		answer or	
		insert	Result
Section and the		score	
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands –	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	2	
Raung	Metric 2. Buffers and surrounding land use	3	
I-AA	Metric 3. Hydrology	6	
	Metric 4. Habitat	4.5	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	-1	
	TOTAL SCORE	14.5	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

## **Background Information**

Name:	
Date:	
7/1/2021	
Affiliation:	
Address:	
4300 Juno Road Suite 205 Rouman All III	
Phone Number:	1266
(724) 591-0686	
e-mail address:	
Name of Wetland:	
Veretation Communities)	
Facesacht	
HGM Class(es):	
PEMI	
SEE APPENDIX A.	
at/Long or UTM Coordinate 40, 7631, -84, 0932 SGS Quad Name	
ounty	
Allen	
bwnsnip	
ection and Subsection	
Varalagic Unit Cada	
041000070404	
te Visit	
ational Wetland Inventory Map	
N/A	
No wedand inventory Map	
il Survey	
0.1	
BICIA)	
BICIA) lineation report/map Attached	

Name of Wetland: 1-AB Wetland Size (acres, hectares): 0.008 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NA Final score : 14 Category: Category 2

### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

## **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its guality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	

1-AB (PEM)





1-AB(PEN)

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality



End of Quantitative Rating. Complete Categorization Worksheets.

# **ORAM Summary Worksheet**

	and the second and the second s	circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES (NO)	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands - Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	Ö	
I AR	Metric 2. Buffers and surrounding land use	1	
(- 10	Metric 3. Hydrology	9	
	Metric 4. Habitat	3	
*	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion,	1	
	TOTAL SCORE	194 <sub>1</sub>	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

## **Background Information**

Name: Ethan Wilson	
Date:	
Affiliation:	
Environmental Solutions and Innovations Inc	
Address:	
Phone Number: Phone Number: Phone Number:	2
(724) 591-00810	
e-mail address:	
ewilson @ envsi.com	
Name of Wetland: I-AC	
Vegetation Communit(ies):	
Emergent HGM Class(es):	
PEM	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
SEE APPENDIX A.	
Lat/Long or UTM Coordinate	
40.76309, -84.0438	
Cairo	
Allen	
Township	
Section and Subsection	
5019	
Aydrologic Unit Code	
bite Visit	
ational Wetland Inventory Man	
NA	
hio Wetland Inventory Map	
oil Survey	
PmA	
Attached	
114 HALFIELA	

Name of Wetland: 1-AC Wetland Size (acres, hectares): 0.050 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NA Category: Category 1 Final score : 17

### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	~	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

## **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	


1- AC (PEM)



17

End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts

and of highest quality

# **ORAM Summary Worksheet**

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES (NO)	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	0	
AC	Metric 2. Buffers and surrounding land use	t	
[	Metric 3. Hydrology	10	
3	Metric 4. Habitat	4	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	2	
	TOTAL SCORE	<b>۲</b>	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

# Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

# **Background Information**

Name:	
Ethan Wilson	
7/1/2021	
Affiliation:	
Environmental Solutions and Innovations In	r
Address:	0.
4300 Lynn Road, Suite 205 Ravenna, OH	44266
(724) 591 - 0.0810	
e-mail address:	
ewilson@envsi.com	
Name of Wetland: I-AD	
Vegetation Communit(ies):	
Emergent	
HGM Class(es):	
Location of Wetland: include man, addroco, north arrow low low to the	
SEE APPENDIX A.	
at/Long or UTM Coordinate HO. 76262, -84.0864 SGS Quad Name Cairo	
Allen	
ownship	
ection and Subsection	
S 07.0	
/drologic Unit Code	
0410000 10560	
7/1/2021	
ational Wetland Inventory Map	
nio Wetland Inventory Map	
NA	
BleIAI	
lineation repet/men	
meation reportingp	
Attached	

Name of Wetland: I-AD Wetland Size (acres, hectares): 0.143 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NIA Category: Final score : 8 Category 1

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	~	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	

ORAM v. 5.0 Field Form Quantitative Rating



### PEM 2-AD

ORAM v. 5.0 Field Form Quantitative Rating



13

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality

# **ORAM Summary Worksheet**

		circle answer or insert sçore	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	T	
Raung	Metric 2. Buffers and surrounding land use	1	
	Metric 3. Hydrology	6	
1-AD	Metric 4. Habitat	6	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion,	-1	
	TOTAL SCORE	13	Category based on score breakpoints CATT

Complete Wetland Categorization Worksheet.

# Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

## **Background Information**

Name:	
Date:	
7/1/2021	
Affiliation:	
Address:	Inc.
4300 Junn Road Suite 205 Rousses AH	11110
Phone Number:	44266
(724) 591-0686	
e-mail address:	
Name of Wetland:	
I-AE	
Vegetation Communit(ies):	4
HGM Class(es):	a
PEM, PSS and PFO	
ocation of Wetland: include map, address, north arrow, landmarks, distances, roads,	etc.
at/Long or UTM Coordinate 40. つゆろろり、 - おり、 0869 SGS Quad Name	
Cairo	
Allen	
ownship	
Bath	
/drologic Unit Code	
041000070300	
7/1/2021	
tional Wetland Inventory Map	
PSSIA PSSIA	
N/A	
ill Survey	
(4) 0 1 (1)	
BIELAI lineation report/map	
lineation report/map Attached	

Name of Wetland: 1-AE Wetland Size (acres, hectares): 0.971 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NA Category: Final score : 19.5 Category 1

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	



ORAM v. 5.0 Field Form Quantitative Rating





End of Quantitative Rating. Complete Categorization Worksheets.

3

quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality

# **ORAM Summary Worksheet**

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES (NO)	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	2	
I-AE	Metric 2. Buffers and surrounding land use	3	
1.1.1-	Metric 3. Hydrology	5	
	Metric 4. Habitat	6.5	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	3	
	TOTAL SCORE	19.5	Category based on scor breakpoints

Complete Wetland Categorization Worksheet.

# Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

# **Background Information**

Name:	
Ethan Wilson	
Date:	
7/1/2021	
Affiliation:	
Address:	
4300 June Road Suite 205 Roman OH was	
Phone Number:	
(724) 591-00810	
e-mail address:	
ewilson & envsi.com	
Name of Wetland: 1-AF	
Vegetation Communit(ies):	
Emergent	
HGM Class(es):	
Location of Wetland: include map, address, north arrow, landmarke, distances, reade, ste	
SEE APPENDIX A.	
Lat/Long or UTM Coordinate 40.7628, -84.0976 USGS Quad Name Cairo County Allen	
Township	-
Section and Subsection	
5019	-
Hydrologic Unit Code	-
Site Visit	
7/1/2021	
lational Wetland Inventory Map	-
VEMIA	
N/A	-
oil Survey	
GUB	
Pelineation report/map	-
muchea	

Name of Wetland: 1-AF Wetland Size (acres, hectares): 0.084 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Final score : q Category: Category 1

2

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	

PEM 1-AF

ORAM v. 5.0 Field Form Quantitative Rating



PEM 1-AF

ORAM v. 5.0 Field Form Quantitative Rating



13

End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts

and of highest quality

## **ORAM Summary Worksheet**

		circle	
		answer or	
		insert	Result
		score	
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES (NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	- <b>L</b> D	
Ū	Metric 2. Buffers and surrounding land use	1	
	Metric 3. Hydrology	6	
1-AF)	Metric 4. Habitat	ω	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	-1	
	TOTAL SCORE	13	Category based on score breakpoints CAT

Complete Wetland Categorization Worksheet.

# Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

# **Background Information**

1

Name: F-than Wilson
Date: [0/20/202]
Affiliation:
Environmental Solutions and Innovations, Inc.
4300 Lynn Road, Suite 205 Ravenna, OH 44200
Phone Number:
e-mail address:
sdenham @ envsi.com
Name of Wetland: 1 - AG
Vegetation Communit(ies):
HGM Class(es):
PEM
Location of wettand: include map, address, north arrow, fandmarks, distances, roads, etc.
SEE APPENDIX A,
Let# one or LITM Coordinate
40.76481, -84.1014
USGS Quad Name
County
Township
Batton and Subsection
Sol9
Hydrologic Unit Code 041000070404
Site Visit uppa 2021
National Wetland Inventory Map
Ohio Wetland Inventory Map
N/A
Soil Survey B5A
Soil Survey BSA Delineation report/map

Name of Wetland: 1- AG Wetland Size (acres, hectares): Wetland Size (acres, hectares): 0.183 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Category: Category 1 Final score : 16

2.

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	

1-AG(PEM)


1-AG (PEM)



110	
in	

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

of marginal quality

and of highest quality

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts

## **ORAM Summary Worksheet**

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	A lange	
	Metric 2. Buffers and surrounding land use	4	
1- AG	Metric 3. Hydrology	9	
	Metric 4. Habitat	4	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	-2	
	TOTAL SCORE	16	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

Name:	
Date:	
6/29/2021	
Affiliation:	
Address:	
4300 Lynn Road, Suite 205 Ravenna, OH 44266	
Phone Number: $(\mu a) = 351 - 0.050$	
e-mail address:	
sdenham @ envsi.com	
Name of Wetland: 1 - AH	
Vegetation Communit(ies): Emergent, Scrub/shrub, Forested	
HGM Class(es):	
Location of Wetland: include man address north arrow landmarke distances roads ato	
Lat/Long or UTM Coordinate	
USGS Quad Name	
County	
Townshin	
Bath	
SOI9	
Hydrologic Unit Code	
Site Visit	
Site Visit U/29/2021 National Wetland Inventory Map	
Site Visit U2212021 National Wetland Inventory Map N/A	
Site Visit U[29]2021 National Wetland Inventory Map	
Site Visit U29/2021 National Wetland Inventory Map N/A Ohio Wetland Inventory Map N/A Soil Survey	
Site Visit U29/2021 National Wetland Inventory Map N/A Ohio Wetland Inventory Map N/A Soil Survey PmA Delineation report/map	

#### **Background Information**

Name of Wetland: I-AH Wetland Size (acres, hectares): Wetland Size (acres, hectares): 0.412 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NA Category: Category 1 Final score : 27

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	





0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

End of Quantitative Rating. Complete Categorization Worksheets.

## **ORAM Summary Worksheet**

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	in the second	
rading	Metric 2. Buffers and surrounding land use	9	
I-AH	Metric 3. Hydrology	11	
1 11.1	Metric 4. Habitat	10	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	D	
	TOTAL SCORE	27	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

#### **Background Information**

Name: Ethan Wilson	
Date: (0/20/202)	
Affiliation:	
Address:	
4300 Lynn Road, Suite 205 Ravenna, OH 44266 Phone Number:	
(419) <u>351 - 90.50</u> e-mail address:	
sdenham @ envsi.com	
Name of Wetland: 1 - AI	
Emergent	
HGM Class(es): PEM	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
Lat/Long or UTM Coordinate	and the state of the
40.7031, -84, 1002 USGS Quad Name	
County	
Township	
Section and Subsection	
Hydrologic Unit Code	
Site Visit ulpalanzi	
National Wetland Inventory Map	
Ohio Wetland Inventory Map	
Soil Survey	-
Delineation report/map Attached	

Name of Wetland: 1- AI Wetland Size (acres, hectares): 
 Wetiand Size (acres, hectares):
 0.063

 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.
 See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Category: Category 1 Final score : 19 1

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	



1-AI (PEM)



End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts

and of highest quality

## **ORAM Summary Worksheet**

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	0	
ruung	Metric 2. Buffers and surrounding land use	5	
I-AT	Metric 3. Hydrology	11	
1 112	Metric 4. Habitat	ч	
	Metric 5. Special Wetland Communities	0	Charles and the second
	Metric 6. Plant communities, interspersion, microtopography	-1	
	TOTAL SCORE	19	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

## **Background Information**

Name:					
Date:					
Affiliation:					
Environmental Solutions and Innovations, Inc.					
4300 Lynn Road, Suite 205 Ravenna, OH 44266					
Phone Number:					
e-mail address:					
sdenham @ envsi.com					
Name of Wetland: 1 - AJ					
Vegetation Communit(ies): Forested					
HGM Class(es):					
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.					
SEE APPENDIX A,					
Lat/Long or UTM Coordinate					
40,77874, -84,1118					
Cairo					
County					
Township					
Section and Subsection					
S015 Hydrologic Unit Code					
041000070404 Site Vielt					
u/29/2021					
National Wetland Inventory Map	-				
Ohio Wetland Inventory Map					
Soil Survey					
Soil Survey PmA					
Soil Survey PmA Delineation report/map Attached	-				

Name of Wetland: 1- AJ Wetland Size (acres, hectares): Wetland Size (acres, hectares): 0.021 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A Comments, Narrative Discussion, Justification of Category Changes: N/A Category: Contegory 1 Final score : 27

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its guality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	



1-AJ (PFO)



22

End of Quantitative Rating. Complete Categorization Worksheets.

3

quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality

# **ORAM Summary Worksheet**

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	0	
Raung	Metric 2. Buffers and surrounding land use	4	
1-AJ	Metric 3. Hydrology	10	Statistic and straight
1 11-	Metric 4. Habitat	5	And the state of the state of the
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion,	5	
	TOTAL SCORE	22	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

# **Background Information**

٦

Name: Ethan Wilbon				
Date: (0/20/202)				
Affiliation:				
Environmental Solutions and Mnovalions, Inc.				
4300 Lynn Road, Suite 205 Ravenna, OH 44200	)			
Phone Number: $(\mu_{10}) 351 - 9050$				
e-mail address:				
Name of Wetland:				
Veretation Communit(ies):				
Forested				
HGM Class(es): PFO				
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.				
CEE ADDENIDIX A				
SEE APPLISUIX II,				
Lat/Long or UTM Coordinate				
USGS Quad Name				
County				
Allen				
American				
Section and Subsection				
Hydrologic Unit Code				
Site Visit				
National Wetland Inventory Map				
Obio Wetland Inventory Man				
	-			
Soil Survey				
Delineation report/map				

Name of Wetland: 1-AK Wetland Size (acres, hectares): 

 Wetland Size (acres, hectares):
 O.OBV

 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.

See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NA Category: Category 1 Final score : 27

2 .

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis</i> , or	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	A
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	



1-AK(PFO)
I-AK (PFO)

ORAM v. 5.0 Field Form Quantitative Rating



27

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality

# **ORAM Summary Worksheet**

		circle	
		answer or insert	Result
		score	
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	11	
rading	Metric 2. Buffers and surrounding land use	2	
I-AK	Metric 3. Hydrology	11	
	Metric 4. Habitat	9	SAL ANT SAND
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	ч	
	TOTAL SCORE	27	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

# Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

# **Background Information**

Ethan Wilson
Date:
Affiliation:
Environmental Solutions and Inconstitutes Inc
Address:
4300 Lynn Road, Suite 205 Ravenna, OH 44266
Phone Number:
e-mail address:
ewilson & envisi com
Name of Wetland:
Vegetation Communit(ies):
Emergert
HGM Class(es):
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
SEE APPENDIX A.
Lat/Long or UTM Coordinate
40.89296, -84.2939
USGS Quad Name
County
Putnam
Township
Township Jennings Section and Subsection
Putnam    Township    Jennings    Section and Subsection    SOO4
Putnam Township Jennings Section and Subsection SOU Hydrologic Unit Code OH1000070204 Site Visit
Putnam Township Jennings Section and Subsection SOOU Hydrologic Unit Code O41000070204 Site Visit 7/1/2021
Putnam      Township      Jennings      Section and Subsection      Social      Hydrologic Unit Code      OH1000070204      Site Visit      7/1/2021      National Wetland Inventory Map
Putnam      Township      Jennings      Section and Subsection      Sooy      Hydrologic Unit Code      OH1000070204      Site Visit      1/1/2021      National Wetland Inventory Map      Dhio Wetland Inventory Map
Putnam      Township      Jennings      Section and Subsection      Source      Source      OHIOOCOTO20H      Site Visit      T/1/2021      National Wetland Inventory Map      N/A      Soil Survey
Putnam      Township    Jennings      Section and Subsection    SOO4      Hydrologic Unit Code    041000070204      Site Visit    1/1/2021      National Wetland Inventory Map    N/A      Dhio Wetland Inventory Map    N/A      Soil Survey    So      Delineation report/map    So

Name of Wetland: 

 Name of Wetland:
 1 - AL

 Wetland Size (acres, hectares):
 0.166

 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.

See Appendix A Comments, Narrative Discussion, Justification of Category Changes: NA Category: Final score : Cat 1 18

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	



1-AL (PEM)

1-ALLPEM)

#### ORAM v. 5.0 Field Form Quantitative Rating



## 18

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality

## **ORAM Summary Worksheet**

4		circle answer or insert sçore	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands -	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	1	
Rating	Metric 2. Buffers and surrounding land use	5	
	Metric 3. Hydrology	10	
1- AL	Metric 4. Habitat	3	10月1日、10日
	Metric 5. Special Wetland Communities	D	
	Metric 6. Plant communities, interspersion,	-1	
	TOTAL SCORE	18	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

# Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

### **Background Information**

Name:	
Date:	
6/30/2021	
Affiliation:	
Address:	
4300 Lynn Road, Suite 205 Rovenna, OH 442101	10
Phone Number:	
(419) 351 - 9050	
Sdenham @ enusi com	
Name of Wetland:	
Vegetation Communit(les):	
Emercient	
HGM Class(es):	
Location of Wetland: include map, address, north arrow landmarks, distances, roads, sto	
SEE APPENDIX A,	
Lat/Long or UTM Coordinate 40.78405, -84.1225 USGS Quad Name	
County	
Township	
American	
Section and Subsection	
Hydrologic Unit Code	
CIII Concernation in the	
041000070404 Site Visit	
Site Visit 04/000070404	
Site Visit U[30]2021 National Wetland Inventory Map	
Site Visit U[30]202] National Wetland Inventory Map N/A Ohio Wetland Inventory Map	
Site Visit 0/30/2021 National Wetland Inventory Map	
Site Visit U 30 2021 National Wetland Inventory Map NA Ohio Wetland Inventory Map NA Soil Survey Gwg5B2	
Site Visit U[30]2021 National Wetland Inventory Map N/A Ohio Wetland Inventory Map N/A Soil Survey Gwg5B2 Delineation report/map Attoched	

Name of Wetland: Z-A Wetland Size (acres, hectares): 

 Wetland Size (acres, hectares):
 0.521

 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.

See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NA Category: Contegory 1 Final score : 25

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	





0	Absent	•
1	Present very small amounts or if more common of marginal quality	
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality	
3	Present in moderate or greater amounts and of highest quality	

End of Quantitative Rating. Complete Categorization Worksheets.

# **ORAM Summary Worksheet**

		circle	
		insert	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	2	
reating	Metric 2. Buffers and surrounding land use	4	
2-A	Metric 3. Hydrology	10	
	Metric 4. Habitat	6	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	3	
	TOTAL SCORE	25	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

# Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

## **Background Information**

Name:	
Ethan Wilson	
6/30/2021	
Affiliation:	
Environmental Solutions and Innovations, Inc.	
4300 Lunn Road, Suite 205 Ravenna, OH 44260	>
Phone Number:	
(419) 351 - 9050	
Sdenham @ envsi.com	
Name of Wetland: 7 _ 6	
Vegetation Communit(les):	
Emergent	
HGM Class(es):	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
Lat/Long.or.LITM.Coordinate	
40.78055, -84, 1248	
Cairo	
County	
Township	
Hmlrican Section and Subsection	
SOI3	
Hydrologic Unit Code	
Site Visit (120/202)	
National Wetland Inventory Map	
N/A	
Soil Survey	-
Delineation report/map	

Name of Wetland: 2-B Wetland Size (acres, hectares): 0.022 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Category: Category 10:2 gray zone Final score : 33

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	





End of Quantitative Rating. Complete Categorization Worksheets.

2

3

of marginal quality

and of highest quality

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts

# **ORAM Summary Worksheet**

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	MIC	
raung	Metric 2. Buffers and surrounding land use	ч	
2-B	Metric 3. Hydrology	12	
2	Metric 4. Habitat	8	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	8	
	TOTAL SCORE	33	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	0	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any	YES	NO	categorized by the ORAM Evaluate the wetland using the 1) parative criteria in OAC
of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	Wetland should be evaluated for possible Category 3 status	0	Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES ( Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



### End of Ohio Rapid Assessment Method for Wetlands.

Name:
Date:
6/30/2021
Environmental solutions and Innovations. Inc.
Address:
<u>H300 Lynn Koad, Suite 205 Ravenna, OH 44266</u>
(419) 351-9050
e-mail address:
Name of Wetland:
Vegetation Communit(log):
Emergent
HGM Class(es):
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
_at/Long or UTM Coordinate
40.77526, -84.1126
Cairo
Sounty
ownship Analyzan
Section and Subsection
SO13
041000070404
ite Visit (0/30/2021
lational Wetland Inventory Map
14
hio Wetland Inventory Map
hio Wetland Inventory Map
Phio Wetland Inventory Map N/A oil Survey Blg IA I
bhio Wetland Inventory Map N/A oil Survey Bla IA I elineation report/map ATTOChed

### **Background Information**

Name of Wetland: 2-0 Wetland Size (acres, hectares): 

 Wetland Size (acres, hectares):
 0.419

 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.

See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Category: Final score : 25 Category 1

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	




25

End of Quantitative Rating. Complete Categorization Worksheets.

and of highest quality

## **ORAM Summary Worksheet**

		circle	
		insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	2	
, tainig	Metric 2. Buffers and surrounding land use	ч	
2-0	Metric 3. Hydrology	10	
C	Metric 4. Habitat	10	Standard Barris
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	3	
	TOTAL SCORE	25	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

Name: Ethan Wilson	
Date:	
Affiliation:	
Environmental Solutions and Innovations, Inc.	
Address:	
Phone Number:	.00
(419) 351-9050	
e-mail address:	
Name of Wetland:	
Veretation Communit/ise): $2 - D$	
Emeravet	
HGM Class(es):	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
Lat/Long or UTM Coordinate	
40.70548 - 84.1023	
Cairo	
County	
81100	
Township	
Township Bath Section and Subsection	
Allen Township Bath Section and Subsection S019	
Allen Township Bath Section and Subsection S019 Hydrologic Unit Code 041000070404	
Allen Township Bath Section and Subsection Solg Hydrologic Unit Code 041000070404 Site Visit 0/30/2021	
Allen Township Bath Section and Subsection Solg Hydrologic Unit Code 041000070404 Site Visit 0420/2021 National Wetland Inventory Map	
Allen Township Bath Section and Subsection Solg Hydrologic Unit Code OHIOOOOTOHOH Site Visit U[30]202] National Wetland Inventory Map N/A Ohio Wetland Inventory Map	
Allen Township Bath Section and Subsection Solg Hydrologic Unit Code OHIODOG TOHOH Site Visit U[30]202] Vational Wetland Inventory Map N/A Soll Survey	
Allen Township Bath Section and Subsection Solg Hydrologic Unit Code 041000070404 Site Visit 0/30/2021 National Wetland Inventory Map N/A Soll Survey Sub/BSA * Right on the line	
Allen Township Bath Section and Subsection Solg Hydrologic Unit Code 041000070404 Site Visit 0/30/2021 National Wetland Inventory Map N/A Soil Survey Sub/BA Pelineation report/map Attoched	

#### **Background Information**

Name of Wetland: 2-0 Wetland Size (acres, hectares): Wetland Size (acres, hectares): 0.365 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Category: Category 1 Final score : 25

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	





2-DIPEN

# 25

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest

quality or in small amounts of highest quality Present in moderate or greater amounts

and of highest quality

## **ORAM Summary Worksheet**

		circle	
		answer or	
		insert	Result
		score	
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	2	
reating	Metric 2. Buffers and surrounding land use	7	
7-D	Metric 3. Hydrology	9	
L	Metric 4. Habitat	Ч	
	Metric 5. Special Wetland Communities	D	
	Metric 6. Plant communities, interspersion, microtopography	3	
	TOTAL SCORE	25	Category based on score breakpoints

-+

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

### **Background Information**

News	
Name: Ethan Inijean	
Date:	
6/30/2021	
Affiliation:	C.
Address:	1.
4300 Lunn Road, Suite 205 Ravenna, OH	44260
Phone Number:	
(419) <u>351 - 4050</u>	
sdenham @ envsi.com	
Name of Wetland:	
L – L Vegetation Communit/les):	
Emergent	
HGM Class(es):	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, r	etc.
SEE APPENDIX A,	
SEE APPENDIX A,	
SEE APPENDIX A,	
SEE APPENDIX A, Lat/Long or UTM Coordinate 40.76836, -84.1055	
SEE APPENDIX A, Lat/Long or UTM Coordinate HO.76836, -84.1055 USGS Qued Name	
SEE APPENDIX A, Lat/Long or UTM Coordinate 40.76836, -84.1055 USGS Quad Name Cairo	
SEE APPENDIX A, Lat/Long or UTM Coordinate HO.76836, -84.1055 USGS Quad Name Cairo County Allen	
SEE APPENDIX A, Lat/Long or UTM Coordinate <u>40.76836, -84.1055</u> USGS Quad Name <u>Cairo</u> County <u>Allen</u> Township Bath	
SEE APPENDIX A, Lat/Long or UTM Coordinate <u>40.76836, -84.1055</u> USGS Quad Name <u>Cairo</u> County <u>Allen</u> Township <u>Bath</u> Section and Subsection	
SEE APPENDIX A, Lat/Long or UTM Coordinate <u>40.76836, -84.1055</u> USGS Quad Name <u>Cairo</u> County <u>Allen</u> Township <u>Bath</u> Section and Subsection <u>SOI9</u> Hydrologic Unit Code	
SEE APPENDIX A, Lat/Long or UTM Coordinate <u>40.76836, -84.1055</u> USGS Quad Name Cairo County <u>Allen</u> Township <u>Bath</u> Section and Subsection <u>SOI9</u> Hydrologic Unit Code <u>041000070404</u>	
SEE APPENDIX A, Lat/Long or UTM Coordinate <u>40.76836, -84.1055</u> USGS Quad Name <u>Cairo</u> County <u>Allen</u> Township <u>Bath</u> Section and Subsection <u>SO19</u> Hydrologic Unit Code <u>041000070404</u> Site Visit <u>U/30/2021</u>	
SEE APPENDIX A, Lat/Long or UTM Coordinate <u>H0.76836, -84.1055</u> USGS Quad Name Cairo County <u>Allen</u> Township <u>Bath</u> Section and Subsection <u>SOI9</u> Hydrologic Unit Code <u>OH 1000070404</u> Site Visit <u>U/30/2021</u> National Wetland Inventory Map	
SEE APPENDIX A, Lat/Long or UTM Coordinate <u>40.76836, -84.1055</u> USGS Quad Name Cairo County <u>Allen</u> Township <u>Bath</u> Section and Subsection <u>5019</u> Hydrologic Unit Code <u>041000070404</u> Site Visit <u>0/30/2021</u> National Wetland Inventory Map <u>NA</u>	
SEE APPENDIX A, Lat/Long or UTM Coordinate <u>H0.76836, -84.1055</u> USGS Quad Name <u>Cairo</u> County <u>Allen</u> Township <u>Bath</u> Section and Subsection <u>SOI9</u> Hydrologic Unit Code <u>041000070404</u> Site Visit <u>0/30/2021</u> National Wetland Inventory Map <u>NA</u> Shi Sunsey	
SEE APPENDIX A, Lat/Long or UTM Coordinate H0.76836, -84.1055 USGS Quad Name Cairo County Allen Township Bath Section and Subsection Sol9 Hydrologic Unit Code 041000070404 Site Visit 0/30/2021 National Wetland Inventory Map NA Ohio Wetland Inventory Map NA Soil Survey Gub	
SEE APPENDIX A, Lat/Long or UTM Coordinate <u>40.76836, -84.1055</u> USGS Quad Name Cairo County <u>Allen</u> Township <u>Bath</u> Section and Subsection <u>SOI9</u> Hydrologic Unit Code <u>041000070404</u> Site Visit <u>U/30/2021</u> National Wetland Inventory Map <u>NA</u> Ohio Wetland Inventory Map <u>NA</u> Soil Survey <u>Gub</u>	

١ Name of Wetland: 2-E Wetland Size (acres, hectares): Wetland Size (acres, hectares): 0.650 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Category: Category 1 Final score : 23

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	





2-E (DEM)

# 23

End of Quantitative Rating. Complete Categorization Worksheets.

3

quality or in small amounts of highest quality Present in moderate or greater amounts

and of highest quality

## **ORAM Summary Worksheet**

		circle	
		answer or	
		insert	Result
		score	
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	Z	
ritating	Metric 2. Buffers and surrounding land use	Ч	
2-E	Metric 3. Hydrology	10	
2	Metric 4. Habitat	Ц	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion,	3	
	TOTAL SCORE	23	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

#### **Background Information**

Ethan Wilson Date:	
Date: , ,	
(0/30/202)	
Affiliation:	
Environmental Solutions and Innovations, Inc	
Address: USCO Luna Road Suite 205 Routenno OH L	471010
Phone Number:	1200
(419) 351-9050	
e-mail address:	
Name of Wetland:	
2 - F	
Emergent	
HGM Class(es):	
Location of Wetland: include man address north arrow landmarke distances reads at	
Lat/Long or UTM Coordinate	
Lat/Long or UTM Coordinate 40.7691, ~84.1059 USGS Quad Name	
Lat/Long or UTM Coordinate <u>40.7691</u> - 84.1059 USGS Quad Name Cairo County	
Lat/Long or UTM Coordinate 40.7691, -84.1059 USGS Quad Name Cairo County Allen Township	
Lat/Long or UTM Coordinate <u>40.7691, -84.1059</u> USGS Quad Name <u>Cairo</u> County <u>Allen</u> Township <u>Bath</u> Section and Subsection	
Lat/Long or UTM Coordinate 40.7691, -84.1059 USGS Quad Name Cairco County Allen Township Bath Section and Subsection 5019 Hydrologic Unit Code	
Lat/Long or UTM Coordinate 40.7691, -84.1059 USGS Quad Name Cairo County Allen Township Bath Section and Subsection S019 Hydrologic Unit Code 041000070404	
Lat/Long or UTM Coordinate <u>40.7691 - 84.1059</u> USGS Quad Name Cairo County Allen Township Bath Section and Subsection Sol9 Hydrologic Unit Code OHI000070404 Site Visit U[30]2021	
Lat/Long or UTM Coordinate 40.7691 - 84.1059 USGS Quad Name Cairo County Allen Township Bath Section and Subsection Sol9 Hydrologic Unit Code 041000070404 Site Visit 0/30/2021 National Wetland Inventory Map	
Lat/Long or UTM Coordinate 40.7691 - 84.1059 USGS Quad Name Cairco County Allen Township Bath Section and Subsection Sol9 Hydrologic Unit Code 041000070404 Site Visit 0/30/2021 National Wetland Inventory Map	
Lat/Long or UTM Coordinate 40.7691, -84.1059 USGS Quad Name Cairco County Allen Township Bath Section and Subsection Sol9 Hydrologic Unit Code 041000070404 Site Visit 0/30/2021 National Wetland Inventory Map N/A Soil Survey	
Lat/Long or UTM Coordinate 40.7691, -84.1059 USGS Quad Name Cairo County Allen Township Bath Section and Subsection SO19 Hydrologic Unit Code 041000070404 Site Visit 0/30/2021 National Wetland Inventory Map N/A Soil Survey GuB	
Lat/Long or UTM Coordinate 40.7691 - 84.1059 USGS Quad Name Cairo County Allen Township Bath Section and Subsection Sol9 Hydrologic Unit Code 041000070404 Site Visit 0/30/2021 National Wetland Inventory Map N/A Ohio Wetland Inventory Map N/A Soil Survey GUB Delineation report/map Att Oched	

Name of Wetland: Z-F Wetland Size (acres, hectares): Wetland Size (acres, hectares): 0.001 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. < See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Category: Category 1 Final score : 25

2

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	~	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	



7-F (PEM)



2-F (PEM)

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

of marginal quality

and of highest quality

Present in moderate amounts, but not of highest quality or in small amounts of highest quality Present in moderate or greater amounts

## **ORAM Summary Worksheet**

		circle	
		answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
rading	Metric 2. Buffers and surrounding land use	7	
7-F	Metric 3. Hydrology	10	
2	Metric 4. Habitat	4	
	Metric 5. Special Wetland Communities	D	
	Metric 6. Plant communities, interspersion, microtopography	4	
	TOTAL SCORE	25	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

## **Background Information**

Ethan Wilson	
Date: 0/2/2021	
Affiliation:	
Environmental Solutions and Innovations, Inc.	
4300 Junn Road Suite 205 Ravenna, OH 44266	
Phone Number:	
(419) 351 - 9050	
sdenham @ envsi.com	
Name of Wetland: 2 Q	
Vegetation Communit(les):	
Emergent	
HGM Class(es):	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
SEE APPENDIX A,	
Lat/Long or UTM Coordinate 40.79054, -84.1293 USGS Quad Name	
Lat/Long or UTM Coordinate 40. 79054, -84. 1293 USGS Quad Name Elida County	
Lat/Long or UTM Coordinate 40. 79054, -84. 1293 USGS Quad Name Elida County Allen	
Lat/Long or UTM Coordinate <u>40.79054</u> , -84.1293 USGS Quad Name <u>Elida</u> County <u>Allen</u> Township <u>American</u>	
Lat/Long or UTM Coordinate <u>40. 19054</u> , -84. 1293 USGS Quad Name <u>Elida</u> County <u>Allen</u> Township <u>American</u> Section and Subsection	
Lat/Long or UTM Coordinate <u>40.19054</u> - 84.1293 USGS Quad Name <u>Elida</u> County <u>Allen</u> Township <u>American</u> Section and Subsection <u>501</u> Hydrologic Unit Code	
Lat/Long or UTM Coordinate <u>40. 19054</u> - 84.1293 USGS Quad Name Elida County Allen Township American Section and Subsection Soll Hydrologic Unit Code OH 1000070404 Site Visit O La Lana	
Lat/Long or UTM Coordinate 40. 19054, -84.1293 USGS Quad Name Elida County Allen Township American Section and Subsection 5011 Hydrologic Unit Code 041000070404 Site Visit A 12 12021 National Wetland Inventory Man	
Lat/Long or UTM Coordinate 40. 79054, -84. 1293 USGS Quad Name Elida County Allen Township American Section and Subsection Soll Hydrologic Unit Code 041000070404 Site Visit 9/2/2021 National Wetland Inventory Map	
Lat/Long or UTM Coordinate HO. 79054, -84.1293 USGS Quad Name Elida County Allen Township American Section and Subsection Soll Hydrologic Unit Code OH 000070404 Site Visit A 12 12021 National Wetland Inventory Map HA	
Lat/Long or UTM Coordinate 40. 79054, -84. 1293 USGS Quad Name Elida County Allen Township American Section and Subsection Soll Hydrologic Unit Code 041 000070404 Site Visit 9/12/2021 National Wetland Inventory Map MA Ohio Wetland Inventory Map NA	
Lat/Long or UTM Coordinate HO. 19054, -84.1293 USGS Quad Name Elida County Allen Township American Section and Subsection Soll Hydrologic Unit Code OH 1000010404 Site Visit A 12 12021 National Wetland Inventory Map HA Ohlo Wetland Inventory Map HA Soll Survey SA Delineation geport/map	

Name of Wetland: 3-A Wetland Size (acres, hectares): Wetland Size (acres, hectares): 0.04년 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NA Category: Category 1 Final score : 10

2

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its guality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	

3-A PEM




PEM

10

End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts

and of highest quality

# **ORAM Summary Worksheet**

		circle	
		answer or	
		insert	Result
		score	
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	0	
3-A	Metric 2. Buffers and surrounding land use	2	
	Metric 3. Hydrology	6	
	Metric 4. Habitat	3	The state of the
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	-1	
	TOTAL SCORE	10	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

# Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

### **Background Information**

Name of Wetland: 4-A Wetland Size (acres, hectares): Wetland Size (acres, hectares): 0.066 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Final score : 12 Category: Category 1

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	~	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	





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End of Quantitative Rating. Complete Categorization Worksheets.

# **ORAM Summary Worksheet**

		circle	
		answer or	
		insert	Result
		score	
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	ь	
· · ··································	Metric 2. Buffers and surrounding land use	1	
U-A	Metric 3. Hydrology	6	
A	Metric 4. Habitat	ric 4. Habitat 6	
	Metric 5, Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	-1	
	TOTAL SCORE	12	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

# Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

Background Information
Name:
Date:
12/9/2021
Environmental Solutions and Innovations. Inc
Address:
Phone Number:
(419) 351 - 9050 e-mail address:
sdenham @ envsi.com
Name of Wetland: 4-B
Vegetation Communit(ies): Emergent / Forested
HGM Class(es): PEM / PEO
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
OLL MITCHONA II,
Lat/Long or UTM Coordinate
USGS Quad Name
County
Township
Section and Subsection
-lydrologic Unit Code
Site Visit
2/9/202] Jational Wetlarld Inventory Map
N/A
PmA
Attached

Name of Wetland: 4-B Wetland Size (acres, hectares): 
 Wetland Size (acres, hectares):
 O.ICH

 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.
See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Category: Final score : Category 1 18

2 .

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	

PEM/PED 4-B





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End of Quantitative Rating. Complete Categorization Worksheets.

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# **ORAM Summary Worksheet**

		circle answer or	
		insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	1	
rading	Metric 2. Buffers and surrounding land use	Ą	
H-B	Metric 3. Hydrology	9	
-1	Metric 4. Habitat	7	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	0	
	TOTAL SCORE	18	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

# Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

### **Background Information**

Name:
Date:
12/9/2021
Attiliation: Environmental Salutions and Innovations Inc
Address:
4300 Lynn Road, Suite 205 Ravenna, OH 44266
(419) 351 - 9050
e-mail address:
Sdenham @ envsi.com
Name of Wetland: $H - C$
Vegetation Communit(ies):
HGM Class(es):
VEM
CEE APPENIDIX A
SEE HITCHOUX II,
Lat/Long or UTM Coordinate
40,76363, -84.0996
Cairo
County Allen
Township
Section and Subsection
Hydrologic Unit Code
Site Visit 12/2/2000/0404
National Wetland Inventory Map
N/A
Onio wetland Inventory Map
Soil Survey
Delineation report/map
HTTached

Name of Wetland: 4-0 Wetland Size (acres, hectares): Wetland Size (acres, hectares): 0.1511 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NA Category: Category 1 Final score : 140

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	





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End of Quantitative Rating. Complete Categorization Worksheets.

and of highest quality

# **ORAM Summary Worksheet**

		circle	
		answer or	
		insert	Result
Norretive Deting	Question 1 Critical Habitat	VES	Ifuer Category 2
Narrauve Raung	Question 1 Childa Habitat	TES (NO	Il yes, Category 5.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	A.	
	Metric 2. Buffers and surrounding land use	t	
4-0	Metric 3. Hydrology	10	
4	Metric 4. Habitat	5	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	-3	
	TOTAL SCORE	14	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

# Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

# **Background Information**

Name: Ethan taliban	
Date:	
Affiliation:	
Environmental Solutions and Innovations	Inc
Address:	
Phone Number:	442.00
(724) 591-0686	
e-mail address:	
Name of Wetland:	
Vegetation Communit/ies):	
Forested	
HGM Class(es):	
_ocation of Wetland: include map, address, north arrow, landmarks, distances, reade	ata
at/Long or UTM Coordinate	
40.76323, - 84,0977 SGS Quad Name	
Cairo	
Allen	
winship Protting	
ection and Subsection	
Varologic Unit Code	
641000070404	
12/9/2021	
tional Wetland Inventory Map	
io Wetland Inventory Map	
il Survey	
BsA	
Attached	
1 T T WATER FOR THE THE AND TH	

Name of Wetland: 4-D 1 Wetland Size (acres, hectares): 0.038 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NIA Final score : 21 Category: Category 1

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its guality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	

4-D


#### ORAM v. 5.0 Field Form Quantitative Rating



21

End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts

and of highest quality

## **ORAM Summary Worksheet**

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also b 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES (NO)	If yes, evaluate for Category 3; may also b 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also b 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also b 1 or 2.
Quantitative Rating	Metric 1. Size	0	
	Metric 2. Buffers and surrounding land use	3	
4-0	Metric 3. Hydrology	7	
	Metric 4. Habitat	(î	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion,	6	
	TOTAL SCORE	21	Category based on sco breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

## **Background Information**

Name: Ethan Islikan	
Date:	
12/9/2021	
Affiliation:	
Address:	
4300 Lynn Road, Suite 205 Ravenna, OH 442	2610
Phone Number: $(724)$ SQL = 0.994	
e-mail address:	
ewilson @ envsi.com	
Name of Wetland: 4-6	
Vegetation Communit(ies):	
HGM Class(as): Emergent and Forested	
PEM and PFO	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
SEE HYVENDIX A.	
at/Long or UTM Coordinate <u>40. 7042</u> , -84, 0878 ISGS Quad Name	
Carro	
ownship	
Bath	
ection and Subsection	-
ydrologic Unit Code	
041000070300	
12/9/2021	
ational Wetland Inventory Map	
hio Wetland Inventory Map	
N/A	
BIELAL	
elineation report/map	
mianea	

Name of Wetland: 4-E Wetland Size (acres, hectares): 0,734 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NA Final score : 21 Category: Category 1

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	~	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	





ORAM v. 5.0 Field Form Quantitative Rating



21

End of Quantitative Rating. Complete Categorization Worksheets.

and of highest quality

## **ORAM Summary Worksheet**

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES (NO)	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens .	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	2	
1 5	Metric 2. Buffers and surrounding land use	2	
1-1-	Metric 3. Hydrology	7	
	Metric 4. Habitat	7	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion,	3	R. C. Starter Barra
	TOTAL SCORE	21	Category based on scor breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

### **Background Information**

Name: Ethan Inliban
Date: 12/a/acat
Affiliation:
Environmental Solutions and Innovations. Inc.
Address: 4300 June Road Suite 205 Raine Oll inc
Phone Number: DUTE 205 Ravenna, UH 44266
(724) S91-0686
ewilson & envsi, com
Name of Wetland: 4-F
Vegetation Communit(ies): Emergent
HGM Class(es): PEM
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
SEE APPENDIX A.
Lat/Long or UTM Coordinate
40, 10511 - 84, 0891 USGS Quad Name
Cairo
Allen
Township
Section and Subsection
SO20
041000070501
12/9/2021
National Wetland Inventory Map
Dhio Wetland Inventory Map
Soil Suprov
PmA
Delineation report/map
machea

Name of Wetland: 4-F Wetland Size (acres, hectares): 0,126 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A Comments, Narrative Discussion, Justification of Category Changes: NA Final score : Category: Category 1 17

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	~	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	



ORAM v. 5.0 Field Form Quantitative Rating



17

End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts

and of highest quality

## **ORAM Summary Worksheet**

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
×	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	· · · ·	
n 6	Metric 2. Buffers and surrounding land use	N	
7-1	Metric 3. Hydrology	6	Contract The sector
	Metric 4. Habitat	6	
	Metric 5. Special Wetland Communities	D	
	Metric 6. Plant communities, interspersion, microtopography	3	· 公司的法律的问题。
	TOTAL SCORE	17	Category based on scor breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

## **Background Information**

Name: Ethan talikan	
Date:	
Affiliation:	
Environmental Solutions and Inconstitute loc	
Address:	
4300 Lynn Road, Suite 205 Ravenna, OH 44200	
(724) 591 - 0.0810	
e-mail address:	
ewison & envsi.com	
Name of Wetland: 4 - Gi	
Vegetation Communit(ies):	
HGM Class(es):	
PEM	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
SEE APPENDIX A.	
Lat/Long or UTM Coordinate	
JSGS Quad Name	
Cuito	
Hilen	
Bath	
ection and Subsection	
lydrologic Unit Code	
041000070501	
12/9/2021	
autonal wetland Inventory Map	
hio Wetland Inventory Map	
Dil Survey	
bleineation report/man	
Attached	
	-

Name of Wetland: 4-6 Wetland Size (acres, hectares): 0, 0166 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NIA Final score : Category: 35 Category Z modified

2

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	~	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	

M H-GI





ORAM v. 5.0 Field Form Quantitative Rating





End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts

and of highest quality

# **ORAM Summary Worksheet**

	A REPORT OF A REPORT OF	circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES (NO	If yes, Category 3.
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
•	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	2	
le le	Metric 2. Buffers and surrounding land use	8	
4-01	Metric 3. Hydrology	13	
	Metric 4. Habitat	8	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion,	ч	
	TOTAL SCORE	35	Category based on sco breakpoints

Complete Wetland Categorization Worksheet.

#### Wetland Categorization Worksheet

Choices	Circle one	0	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	categorized by the ORAM Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score greater than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range		If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria		Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



#### End of Ohio Rapid Assessment Method for Wetlands.

### **Background Information**

Name: Ethan Wilson	
Date: 12/9/2021	
Affiliation: Environmental Solutions and Inconstigues Inc	
Address: 4300 Juno Road Suite 205 Roumana OH u	10.
Phone Number: (724) SQL - DLOGIO	1200
e-mail address:	
Name of Wetland: 4-H	
Vegetation Communit(ies):	
HGM Class(es): PFO	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
Lat/Long or UTM Coordinate 40.76552 - 84.0877	
USGS Quad Name Cairo	
Allen	
Bath Section and Subsection	
SO20 Hydrologic Unit Code	
041000070501 Site Visit	
National Wetland Inventory Map	
Dhio Wetland Inventory Map	
Soil Survey	
Delineation report/map	
· · · · 1202 / 16401	

Name of Wetland: 4-H Wetland Size (acres, hectares): 0.080 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NIA Category: Final score : 37 Category Z medified

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	

#### PFO 4-H

ORAM v. 5.0 Field Form Quantitative Rating


ORAM v. 5.0 Field Form Quantitative Rating





End of Quantitative Rating. Complete Categorization Worksheets.

3

quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality

# **ORAM Summary Worksheet**

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES (NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
•	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	Ó	
	Metric 2. Buffers and surrounding land use	8	
1-11	Metric 3. Hydrology	17	
	Metric 4. Habitat	8	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion,	4	
	TOTAL SCORE	37	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

### Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	categorized by the ORAM Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score greater than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



#### End of Ohio Rapid Assessment Method for Wetlands.

## **Background Information**

Name:
Ethan Wilson
12/9/2021
Affiliation:
Environmental Solutions and Innovations, Inc.
Address:
4300 Lynn Road, Suite 205 Ravenna, OH 44266
(724) SQL - QLOQUE
e-mail address:
ewilson@envsi.com
Name of Wetland: リーエ
Vegetation Communit(ies):
Forested
HGM Class(es):
Location of wetland: Include map, address, north arrow, landmarks, distances, roads, etc.
COM DOOR WIN D
SEE FINENULX M.
Let/Long or LITM Constitution
40,76343 -84,0898
USGS Quad Name
Cairo
County
Township
Bath
Section and Subsection
JUI9 Hydrologic Unit Code
Hydrologic Unit Code 041000070.501
Hydrologic Unit Code 041000070501 Site Visit
Hydrologic Unit Code     041000070501       Site Visit     12/0/2021       National Wetland Inventory Map     0
Hydrologic Unit Code     041000070501       Site Visit     12/0/2021       National Wetland Inventory Map     N/A
Hydrologic Unit Code 041000070501   Site Visit 12/9/2021   National Wetland Inventory Map N/A
Hydrologic Unit Code 041000070501   Site Visit 12/0/2021   National Wetland Inventory Map N/A
Hydrologic Unit Code 041000070501   Site Visit 12/0/2021   National Wetland Inventory Map N/A   Ohio Wetland Inventory Map N/A   Soil Survey N/A
Hydrologic Unit Code 041000070501   Site Visit 12/9/2021   National Wetland Inventory Map N/A   Ohio Wetland Inventory Map N/A   Soil Survey N/A
Hydrologic Unit Code 041000070501   Site Visit 12/0/2021   National Wetland Inventory Map N/A   Ohio Wetland Inventory Map N/A   Soil Survey N/A   Ble1A1 Delineation report/map   Attached Attached

Name of Wetland: 4- I Wetland Size (acres, hectares): 0,005 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: N/A Final score : 25 Category: Category 1

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	



#### ORAM v. 5.0 Field Form Quantitative Rating



25

End of Quantitative Rating. Complete Categorization Worksheets.

3

quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality

## **ORAM Summary Worksheet**

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES (NO)	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	2	
n T	Metric 2. Buffers and surrounding land use	1	
4-1	Metric 3. Hydrology	12	
•	Metric 4. Habitat	7	
· ·	Metric 5. Special Wetland Communities	D	
	Metric 6. Plant communities, interspersion, microtopography	3	
	TOTAL SCORE	25	Category based on scor breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

Name of Wetland: 5-A Wetland Size (acres, hectares): Wetland Size (acres, hectares): 0.020 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NA Category: Category 1 Final score : 6 .3

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its guality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	

PEM 5-A

ORAM v. 5.0 Field Form Quantitative Rating



ORAM v. 5.0 Field Form Quantitative Rating



PEM S-A

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

of marginal quality

and of highest quality

Present in moderate amounts, but not of highest

quality or in small amounts of highest quality Present in moderate or greater amounts

#### **ORAM Summary Worksheet**

		circle answer or insert sçore	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES (NO)	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	0	State States
Raung	Metric 2. Buffers and surrounding land use	the first	
	Metric 3. Hydrology	5	And Alexandra The
5-A	Metric 4. Habitat	8	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion,	-3	
	TOTAL SCORE	11	Category based on score breakpoints CAT

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

Name:	
Ethan Wilson	
Date: 12/7/2021	
Affiliation:	
Address:	
4300 Lynn Road, Suite 205 Ravenna, OH 44266	_
Phone Number: $(1110)$ $251 - 0050$	
e-mail address:	
sdenham @ envsi.com	_
Name of Wetland: 5- 6	
Vegetation Communit(les):	
HGM Class(es):	
Location of Wetland; include man address north arrow landmarks distances roads etc.	
Locaton of Hendrid, moluue map, autress, north arrow, ianumarks, uistances, roads, etc.	
0.000 LOW 0	
SEE APPENDIX H,	
Lat/Long or UTM Coordinate	
40,84143, -84,1761	
USGS Quad Name	
County	
Township	
Section and Subsection	
S028	
041000070404	
Site Vieit	
12/-12021	
12/7/2021 National Wetland Inventory Map	
12/7/2021   National Wetland Inventory Map   Ohio Wetland Inventory Map	
12/7/2021   National Wetland Inventory Map   Ohio Wetland Inventory Map   Soil Super	
12/7/2021   National Wetland Inventory Map   NA   Ohio Wetland Inventory Map   NA   Soil Survey   SbA	
12/7/2021   National Wetland Inventory Map   NA   Ohio Wetland Inventory Map   NA   Soil Survey   SbA   Delineation report/map   Attached	

## **Background Information**

Name of Wetland: 5- B Wetland Size (acres, hectares): Wetland Size (acres, hectares): 0.016 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NA Category: Category 1 Final score : 29

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	~	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	



M 5-B



29

End of Quantitative Rating. Complete Categorization Worksheets.

3

quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality

# **ORAM Summary Worksheet**

		circle	
		answer or	
		insert	Result
		score	
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	circle answer or insert score     YES   NO   If yes     angered   YES   NO   If yes     al Wetland   YES   NO   If yes     al Wetland   YES   NO   If yes     ftat   YES   NO   If yes     ds   YES   NO   If yes     vestant   YES   NO   If yes     ds -   YES   NO   If yes     ds -   YES   NO   If yes     s   YES   NO   If yes     s   YES   NO   If yes     ds -   YES   NO   If yes     s   YES   NO   If yes     ing land use   3   3   3	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
	Metric 2. Buffers and surrounding land use	3	
C.B	Metric 3. Hydrology	13	
20	Metric 4. Habitat	13	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	0	
	TOTAL SCORE	29	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

## **Background Information**

Name:
Date:
12/7/2021
Environmental Solutions and Innovations, Inc.
Address:
4300 Lynn Koad, Suite LOS Kavenna, UH 44200
(419) 351-9050
e-mail address:
Sdenham @ Envsi.com
Name of Wetland. 5-C
Vegetation Communit(les):
HGM Class(es):
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
SEE APPENDIX A.
JLL mile on a
Lat/Long or UTM Coordinate
40.8409, -84.1760
Elida
County
Township
Section and Subsection
S 028
Hydrologic Unit Code 041000070404
Site Visit
National Wetland Inventory Map
N/A Obio Watland Investory Man
Soil Survey
Delineation report/map
Liter to Cha Dan

Name of Wetland: 5-0 Wetland Size (acres, hectares): 0.965 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Appendix A. Comments, Narrative Discussion, Justification of Category Changes: NIA Category: Category 1 Final score : 29

#### **Scoring Boundary Worksheet**

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	~	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	$\checkmark$	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	$\checkmark$	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	$\checkmark$	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

#### **Narrative Rating**

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	A
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species?	YES Wetland should be evaluated for possible	NO Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES ( Wetland is a Category 3 wetland.	NO Go to Question 3
		Go to Question 3	5
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	0
4	Significant Breeding or Concentration Area. Does the wetland	YES (	NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) are acidia part of a substant of the second state	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	~
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows 2) supports acidophilic mosses.	YES (	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have $>30\%$ cover, 4) at least one species from Table 1 is present, and 5) the	Wetland is a Category 3 wetland	Go to Question 7
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	8
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in Table 1 is <25%?	Go to Question 8a	R
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	0
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Co to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aguatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
10		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	TES (	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its guality.	Go to Question 11	0
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES (	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	



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te: 1732 A	PEP	Lin	na - Kalida	Rater(s): E.W.	150n, C. Kwolek	Date: 7 Dec 20
29						
51						
subtotal first	page					
	M	letri	c 5. Special W	/etlands.		
29						
0 pts. subtota	Ch	eck all	that apply and score as inc	dicated.		
			Bog (10)			
			Fen (10)			
			Old growth forest (10)	- \		
			Iviature forested wetland (	D)	drolomy (10)	
			Lake Erie coastal/tributary	wetland-unrestricted hydro	drology (10)	
	D		Lake Erie coastal/tributary	Ock Openings) (10)	logy (5)	
			Lake Plain Sand Plaines (	Oak Openings) (10)		
			Known occurrence state/f	adaral threatanad or and	angered species (10)	
		H	Significant migratory cons	bird/water four babitet a		
			Cotogony 1 Wotland Con	Question 1 Quelitation	Deting (10)	
			Category T wetland. See	Question 1 Qualitative I	(aung (-10)	
0		letri	c 6. Plant con	nmunities, int	terspersion, micro	topography.
27						
0 pts. subtota	6a.	. Wetla	and Vegetation Communitie	es. Vegetation	Community Cover Scale	
	Sc	ore all p	present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0	0.2471 acres) contiguous area
		0	Aquatic bed	1	Present and either comprises	small part of wetland's
		1	Emergent		vegetation and is of moderat	te quality, or comprises a
		0	Shrub		significant part but is of low of	quality
	1	c	Forest	2	Present and either comprises	significant part of wetland's
	1	Ø	Mudflats		vegetation and is of moderat	te quality or comprises a smal
		C	Open water		part and is of high quality	
		٤.	Other	3	Present and comprises signific	cant part, or more, of wetland's
	6b.	. horizo	ontal (plan view) Interspers	sion.	vegetation and is of high qua	ality
	Se	elect onl	y one.			
			High (5)	Narrative I	Description of Vegetation Qualit	y .
		_	Moderately high(4)	low	Low spp diversity and/or prede	ominance of nonnative or
	~		Moderate (3)		disturbance tolerant native s	pecies
	L	×	low (1)	mod	ivative spp are dominant comp	ponent of the vegetation,
					although nonnative and/or d	isturbance tolerant native spp
	0-		none (U)	for	can also be present, and spe	ecies diversity moderate to
	to	Table 1	ORAM long form for liet	Add	threatened or ondengared or	ily w/o presence of rare
	0	deduct	points for coverses	hiak	A predominance of paties	ph
	U		Extensive >75% cover / 5	nign	and/or disturbance tolerant	ores, with nonnative spp
		-	Moderate 25 75% cover (-5	3)	anu/or disturbance tolerant r	tu and offen but not always
		×	Sparse 5-25% cover ( 1)		the presence of rore threate	ty and orten, but not always,
	-3	-	Nearly absent <5% cover	(0)	I the presence of rare, threate	med, or endangered spp
		-	Absent (1)	Mudflat an	d Open Water Class Quality	
	6d.	. Micro	topography.	0	Absent <0 1ba (0 247 acres)	
	Sc	ore all	present using 0 to 3 scale	1	Low 0 1 to <1ba (0.247 to 2.47	
	000		Vegetated hummucks/tues	sucks 2	Moderate 1 to <4ha (2.47 to 2.47	88 acres)
		P	Coarse woody debris >15	cm (6in) 2	High 4ha (9.88 acros) or more	
	0	6	Standing dead >25cm (10	in) dbh	I ingli tha (allo acres) of more	
		6	Amphibian breeding pools	Microtopo	graphy Cover Scale	
			Carbon Construction State	0	Absent	
				1	Present very small amounts or	r if more common
					of marginal quality	
				2	Present in moderate amounts.	but not of highest

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29

### End of Quantitative Rating. Complete Categorization Worksheets.

3

quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality
## **ORAM Summary Worksheet**

		circle	
		answer or	
		insert	Result
		score	
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
	Metric 2. Buffers and surrounding land use	3	
	Metric 3. Hydrology	-13	C.A. Standard Strategy
	Metric 4. Habitat	13	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	0	
	TOTAL SCORE	29	Category based on score breakpoints
	and the first state of the second state of the		

Complete Wetland Categorization Worksheet.

## Wetland Categorization Worksheet

Choices	Circle one	$\wedge$	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.