

# Construction Notification For The Willow Island-Mill Creek 138kV Transmission Line Extension Project #4



Case No. 19-1775-EL-BNR

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

Submitted by:  
AEP Ohio Transmission Company, Inc.

September 19, 2019

## CONSTRUCTION NOTICE

### **AEP Ohio Transco's Willow Island-Mill Creek 138 kV Transmission Line Extension Project #4**

4906-6-05

American Electric Power Transmission Company, Inc. ("AEP Ohio Transco" or the "Company") provides the following information to the Ohio Power Siting Board ("OPSB") pursuant to Ohio Administrative Code Section 4906-6-05.

#### 4906-6-05(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 Construction Notice.**

AEP Ohio Transco proposes the Willow Island-Mill Creek 138kV Transmission Line Extension Project #4 ("Project"), located in Newport Township, Washington County, Ohio. This Project was previously filed as part of the Willow Island-Mill Creek 138kV Transmission Line Extension Project #2 (19-0956-EL-BNR), which has been withdrawn. The purpose of this Project is to install a switch structure, a dead end structure, and approximately 120ft of 138 kV transmission line. The new 138 kV line connects the switch structure to the dead end structure (approximately 50ft) and the dead end structure to the station bay (approximately 70ft). The Project will be constructed on existing AEP Ohio property and right-of-way ("ROW"). Appendix A shows the location of the Project.

The Project meets the requirements for a Construction Notice ("CN") because it is within the types of projects defined by (1)(a) of Appendix A to O.A.C. 4906-1-01, *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 line(s) for operation at a higher transmission voltage, as follows:*

- (a) *Line(s) not greater than 0.2 miles in length*

The Project has been assigned Case No. 19-1775-EL-BNR.

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## **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.**

This Project's overall purpose is to eliminate an existing 138kV hard tap and install a motor operated air break switch at Reno Substation. To accommodate the new motor air break switch, a new switching structure and a dead end structure will be installed approximately 30ft north of Reno Station. The switch structure will connect to the existing Willow Island-Mill Creek 138kV Transmission Line. The adjustments to the Willow Island-Mill Creek 138kV Transmission Line that connect the line to this switch structure are filed within Case No. 19-1774-EL-BLN.

The Project will improve the operational resiliency at Reno Station, located between Levee Station and Belmont Station (Figure 3). Under the current configuration, power cannot be restored if there is an outage between Belmont and Levee substations unless the line is manually repaired. An outage at Reno Substation currently results in a loss of distribution load as Levee Substation cannot handle all of the Reno Substation load. Installing the new air break switch allows Reno Substation to be isolated during outages or scheduled maintenance, reducing the impacts to the transmission and distribution systems in the area. The new switch will allow switching operations to take place remotely, facilitating more timely restoration of service when an outage occurs.

The PJM supplemental project identification number is s1860. This Project was not included in the Company's 2019 Long-Term Forecast Report because it does not involve the construction of a new transmission line or substation.

## **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.**

Appendix A shows the location of the Project in relation to existing assets.

## **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.**

The Project's location was chosen to ensure minimal impacts to the surrounding area. The structures will be installed on AEP Ohio property and ROW. The transmission line alignment will be on AEP Ohio Property and ROW. The resulting alignment represents the most suitable and least-impactful structure location alternative. Socioeconomic, land use, and ecological information is presented in Section B(10).

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### **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.**

AEP Ohio Transco maintains a website (<http://aeptransmission.com/ohio/>) on which an electronic copy of this CN is available. A paper copy of the CN will be served to the public library in each political subdivision affected by this 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 planned to begin in fourth quarter 2019, and the anticipated in-service date will be approximately November 2019.

### **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.**

Appendix A, Figure 1 provides a topographical map of existing and proposed facilities at 1:24,000 scale, and Figure 2 provides an aerial image showing roads and highways, clearly marked with Project components.

From Columbus, take I-70 E/I-71 N for approximately 80 miles. Take 180A to merge onto I-77 S towards Marietta, follow for 43.8 miles. Take exit 1 for OH-7 towards Marietta, follow for 0.2 mile. Continue onto OH-7 N/Ohio River Scenic Byway in Newport Township for 7 miles. The Project area will be on the north side of the road.

### **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.**

The Project is located on property and ROW owned by AEP Ohio. No additional property easements, options, or land use agreements are necessary to construct the Project or operate the transmission line.

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## **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.**

<b>Voltage</b>	138 kV
<b>Conductors</b>	954KCM ACSR 45/7 "Rail"
<b>Static Wire</b>	7#8 Alumoweld
<b>Insulators</b>	Polymer
<b>ROW Width</b>	100' where outside AEP Ohio property.
<b>Structure type</b>	(1) single pole dead end (1) phase-over-phase switch pole

## **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.**

No occupied residences or institutions are located within 100 feet of the Project.

## **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.**

No occupied residences or institutions are located within 100 feet of the 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 \$711,804 (Class 3 estimate).

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## **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.**

The Project is located within AEP Ohio property and ROW in Newport Township, Washington County, Ohio. The Washington County Auditor lists the land use of this area as “499 Other Commercial Structures”. No tree clearing is anticipated to be required for the Project. No environmental or cultural resources are expected to be impacted as a result of this Project. There are no parks, churches, cemeteries, wildlife management areas, or nature preserve lands within 1,000 feet of the centerline of the Project.

### **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 Project area is on AEP Ohio property surrounded by industrial and commercial facilities and is noted within the Washington County Auditor’s website as commercial use. There are no impacts to agricultural district lands.

### **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.**

A cultural report was completed and will be coordinated directly with the OPSB.

### **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.**

Coordination with the Ohio History Connection (OHC), United States Fish and Wildlife Service (“USFWS”), and the Ohio Department of Natural Resources (“ODNR”) has been completed and coordination letters can be found in Appendix C.

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

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#### **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.**

The Company has coordinated with USFWS and ODNR regarding special status species within the vicinity of the Project. No impacts are expected to such species as a result of this Project. Copies of the coordination letters are included as Appendix C.

#### **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.**

A Ecological Resources Inventory Report was completed by the Company's consultants within the Project Area and is included as Appendix B. There are no streams impacted by the installation of the proposed Project. No wetland impacts are expected to occur.

#### **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.

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## **Appendix A**

**Figure 1**

**Figure 2**

**Figure 3**





## Legend

- Proposed Structures
- Existing Substations
- Existing Transmission Lines
- Proposed Transmission Alignment

## Willow Island - Mill Creek Project 4

September 12, 2019



Figure 1



0 625 1,250 2,500  
Feet





**Legend**

- Proposed Structures
- Existing Substations
- Existing Transmission Lines
- Proposed Transmission Alignment

**Willow Island -  
Mill Creek  
Project 4**

September 12, 2019

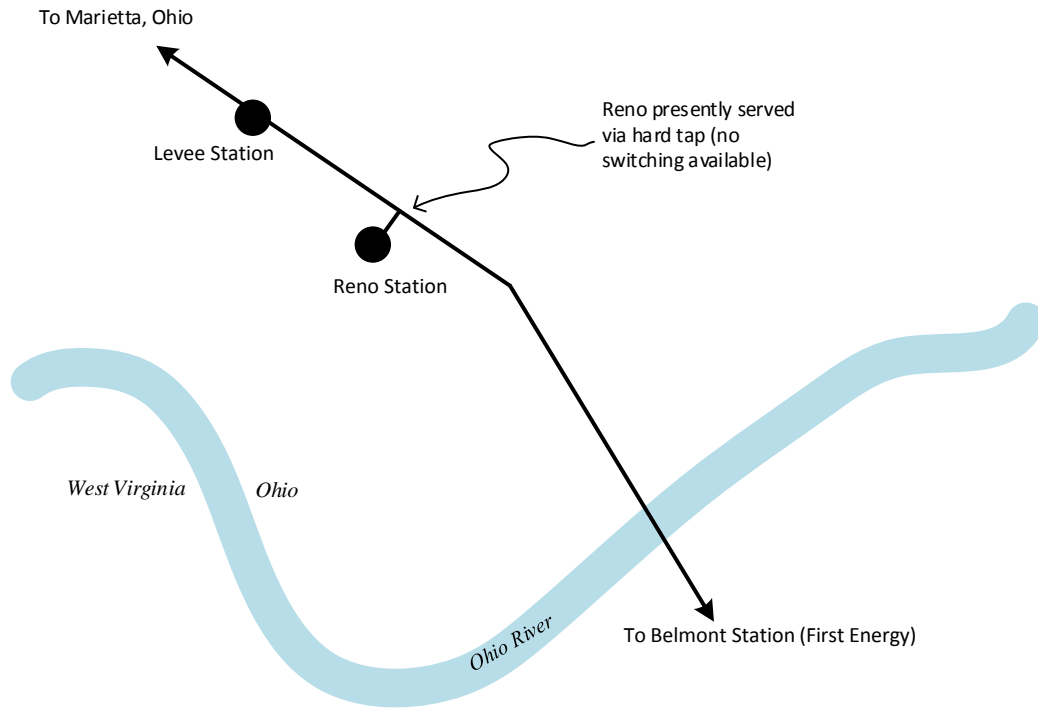


**Figure 2**

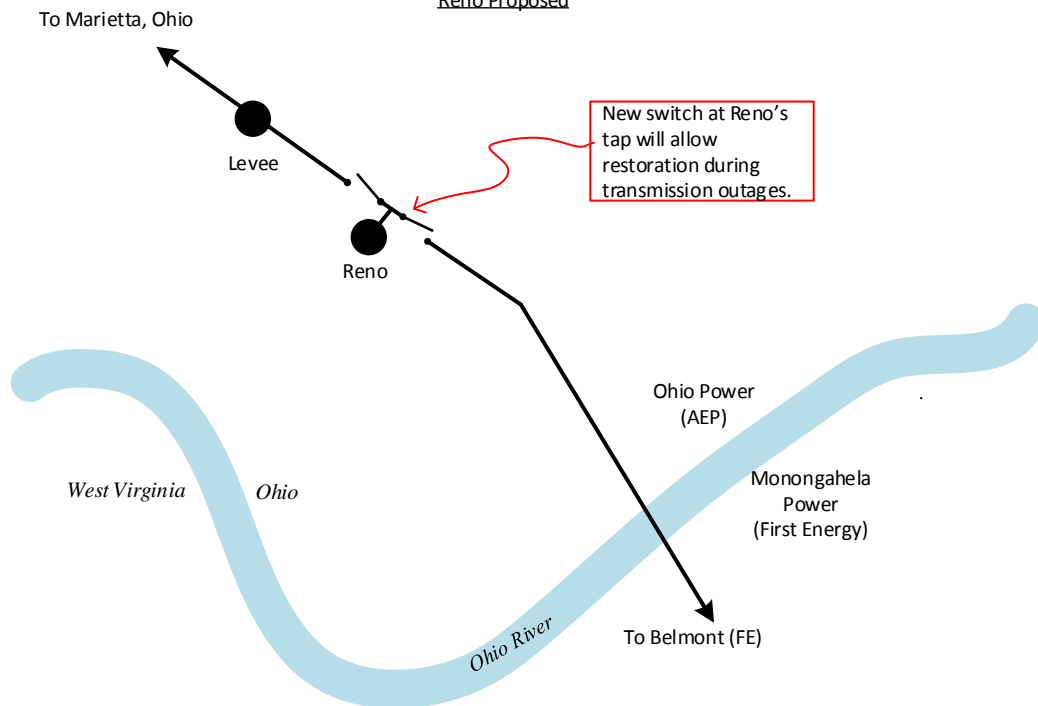


0 75 150 300  
Feet

## Reno Existing System



## Reno Proposed



## **Appendix B      Ecological Resources Inventory Report**

# Ecological Survey Report

AEP Ohio Transmission Company  
Reno Hard Tap Removal Project  
Washington County, Ohio

GAI Project Number: C170352.66, Task 001

May 2019



Prepared by: GAI Consultants, Inc.  
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Prepared for: American Electric Power Service Corporation  
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# Ecological Survey Report

AEP Ohio Transmission Company  
Reno Hard Tap Removal Project  
Washington County, Ohio

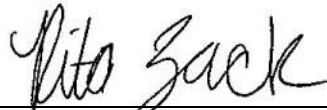
GAI Project Number: C170352.66, Task 001

May 2019

Prepared for:  
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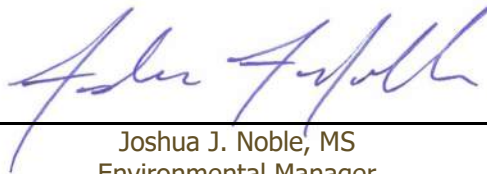
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Table 1 Waterbodies Identified Within the Project Study Area

Table 2 ODNR and USFWS Rare, Threatened, and Endangered (RTE) Species and Critical Habitat Review Results

Figure 1 Project Location Map

Figure 2 Resource Location Map

Figure 3 Stream Eligibility Map

Appendix A Photographs

Appendix B Primary Headwater Habitat Evaluation (HHEI) Data Forms

Appendix C ODNR and USFWS Correspondence

## 1.0 Introduction

GAI Consultants, Inc. (GAI), on behalf of American Electric Power Ohio Transmission Company (AEP), completed an ecological survey for the Reno Hard Tap Removal Project (Project) located in Washington County, Ohio (OH). The proposed Project involves removing an existing hard tap and installing a new 138 kilovolt (kV) two-way phase switch. Approximately 0.99 mile of access roads are proposed to construct the Project.

An ecological survey was completed on December 6, 2018 and March 25, 2019. The Project study area consists of an approximately 3.23-acre area, including the existing station and surrounding areas, as well as a portion of the transmission line right-of-way immediately northwest and southeast of the station. The Project study area also includes a 100-foot-wide corridor centered along the proposed access roads, as shown on Figure 1.

The Project study area is located within the Cow Creek-Ohio River (United States Geological Survey [USGS] Hydrologic Unit Code [HUC] #050302011009) watershed.

This report details the results of the ecological survey regarding the existence of aquatic resources within the Project area (Figure 2).

## 2.0 Methods

### 2.1 Wetlands

The 1987 USACE *Corps of Engineers Wetlands Delineation Manual* (Wetlands Delineation Manual) (USACE, 1987) and the 2012 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountain and Piedmont Region, Version 2.0* (Regional Supplement) (USACE, 2012) describe the methods used to identify and delineate wetlands that fall under the jurisdiction of the USACE. This approach recognizes the three (3) parameters of wetland hydrology, hydrophytic vegetation, and hydric soils to identify and delineate wetland boundaries. In accordance with the Wetlands Delineation Manual and Regional Supplement, GAI completed preliminary data gathering and onsite inspections.

#### 2.1.1 Preliminary Data Gathering

The preliminary data gathering is used to compile and review information that may be helpful in identifying wetlands and/or areas that warrant further inspection during the investigation. The preliminary data gathering includes a review of the following:

- ▶ USGS 7.5-minute topographic mapping for Belmont (USGS, 1979), and Marietta (USGS, 1978), Ohio and Valley Mills (1977), and Willow Island (1979), West Virginia (Figure 1);
- ▶ United States Fish and Wildlife Service (USFWS), National Wetlands Inventory (NWI) mapping (USFWS, 2017) (Figure 2);
- ▶ Federal Emergency Management Agency (FEMA), National Flood Hazard Layer (FEMA, 2015) (Figure 2); and
- ▶ United States Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS, 2017) soil mapping (Figure 2).

Topographic mapping is used to identify mapped streams and the overall shape of the landscape in the Project area to determine potential locations for wetlands, such as floodplains and depressions. NWI mapping is used to determine locations where probable wetlands are



located based on infrared photography. Soil mapping is reviewed to determine the location and extent of mapped hydric soils that have a high probability of containing wetlands.

### 2.1.2 Onsite Inspection

The methodology described in the Regional Supplement identifies areas meeting the definition of a wetland by evaluating three parameters: hydrology, vegetation, and soil. During the on-site inspection, GAI staff traversed the Project study area on foot to determine if any indicators of wetlands were present. When indicators of wetlands are observed, an observation point is established, and a Wetland Determination Data Form (Data Form) is completed to determine if all three wetland indicators are present.

The presence of wetland hydrology is determined by examining the observation point for primary and secondary indicators of wetland hydrology. The presence of any primary indicator signifies the presence of wetland hydrology, or the presence of two (2) or more secondary indicators signifies the presence of wetland hydrology.

Vegetation is characterized by four (4) different strata. This includes trees (woody plants, excluding vines, three inches or more [ $\geq 3.0''$ ] in diameter at breast height [DBH]), saplings/shrubs (woody plants, excluding vines, less than three inches [ $< 3.0''$ ] DBH and greater than or equal to [ $\geq$ ] 3.28 feet tall), herbs (non-woody plants, regardless of size, and all other plants less than [ $<$ ] 3.28 feet tall), and woody vines (greater than 3.28 feet tall). In general, trees and woody vines are sampled within a thirty-foot (30.0') radius, saplings and shrubs are sampled within a fifteen-foot (15.0') radius, and herbs are sampled within a five-foot (5.0') radius.

When evaluating an area for the presence of hydrophytes, classification of the indicator status of vegetation is based on *The National Wetland Plant List: 2016 Update of Wetland Ratings* (Lichvar et al., 2016). The list of possible indicator statuses for plants is as follows:

- ▶ Obligate Wetland (OBL) - Obligate Wetland plants occur in standing water or in saturated soils;
- ▶ Facultative Wetland (FACW) - Facultative Wetland plants nearly always occur in areas of prolonged flooding or require standing water or saturated soils but may on rare occasions, occur in non-wetlands;
- ▶ Facultative (FAC) - Facultative plants occur in a variety of habitats, including wetland and mesic to xeric non-wetland habitats but often occur in standing water or saturated soils;
- ▶ Facultative Upland (FACU) - Facultative Upland plants typically occur in xeric or mesic non-wetland habitats but may frequently occur in standing water or saturated soils; and,
- ▶ Obligate Upland (UPL) - Obligate Upland plants almost never occur in water or saturated soils.

Presence of hydrophytic vegetation is determined by using a Rapid Test, Dominance Test or Prevalence Index. The Rapid Test finds a vegetation community to be hydrophytic if all dominant species are OBL or FACW. Hydrophytic vegetation is considered present based on the Dominance Test if more than fifty percent (50%) of dominant species are OBL, FACW, or FAC. The Prevalence Index weighs the total percent of vegetation cover based on the indicator status of each plant. Hydrophytic vegetation is considered present when the Prevalence Index is less than or equal to ( $\leq$ ) 3.0 (USACE, 2012).

To determine the presence of hydric soils, soil data is collected by digging a minimum sixteen inch (16.0") deep soil pit. The soil profile is studied and described, while possible hydric indicators are examined. Soil indicators described in the Wetlands Delineation Manual and Regional Supplement are used to determine the presence of hydric soils. The presence of any of these indicators signifies a hydric soil.

If all three parameters including wetland hydrology, a dominance of hydrophytic vegetation, and hydric soils are identified at a single observation point, the area is determined to be a wetland. Once a wetland is identified, the boundary is delineated.

Wetland boundaries are determined by looking for locations in which one of the three wetland indicators would transition into an upland characteristic. When the transition is identified, a Data Form is completed in the Upland Area. Wetland boundaries are then marked in the field using pink flagging labeled "WETLAND DELINEATION." The locations of the flags are recorded using a Global Positioning System (GPS) unit. Each wetland is codified with a unique identifier indicating the feature type and number (e.g., W001).

Wetlands are then classified using the *Classification of Wetlands and Deepwater Habitats of the United States* as modified for NWI Mapping Convention. This system classifies wetlands based on topographic position and vegetation type. Palustrine system wetlands found within the study area are classified as Palustrine Emergent (PEM), Palustrine Scrub-Shrub (PSS), Palustrine Forested (PFO), or Palustrine Unconsolidated Bottom (PUB) based on aerial coverage of the vegetative community across the extent of the wetland boundary (Cowardin et al., 1979).

## 2.2 Waterbodies

As with wetlands, Sections 404 and Section 401 of the Clean Water Act (CWA) and state regulations protect waterbodies in OH. Generally, waterbodies are defined as environmental features that have defined beds and banks, ordinary high water mark (OHWM), and contain flowing or standing water for at least a portion of the year.

### 2.2.1 Preliminary Data Gathering

During the preliminary data gathering, the USGS 7.5-minute topographic mapping is examined for the presence of mapped waterbodies including perennial and intermittent streams. In addition, the topographic mapping is used to identify areas likely to contain unmapped waterbodies including ephemeral streams (USGS, 1977, 1978, and 1979) (Figure 1).

The OEPA 401 Water Quality Certification for the 2017 Nationwide Permits Stream Eligibility Web Map (OEPA, 2017) is used to determine eligibility for coverage under the 401 Water Quality Certification (WQC) for the 2017 Nationwide Permits (NWPs). Furthermore, the map is used to identify any ineligible areas that may require a CWA Section 401 individual permit from the OEPA should stream impacts occur within the Project area (OEPA, 2017) (Figure 3).

### 2.2.2 Onsite Inspection

During the onsite inspection, GAI staff traverse the study area, concurrently with the wetland inspection, whereby waterbodies are identified. Waterbodies are identified based on the morphological and hydrologic characteristics of the channel and the presence of aquatic macroinvertebrates.

When a waterbody is identified, field measurements are collected. The measurements include top of bank width, top of bank depth, pool depth, water depth, OHWM width, and OHWM depth. A detailed description of substrate composition is also recorded. Waterbodies are then delineated using white flagging marked with the GAI stream code (e.g., S001). The tops-of-

bank for streams wider than ten feet ( $>10.0'$ ) are delineated, while the centerline of smaller streams is delineated. The locations of the flags are recorded using a sub-meter-capable hand-held GPS unit.

## **2.3 Rare, Threatened, and Endangered Species**

GAI conducts a literature review of potential Rare, Threatened, and Endangered (RTE) species in the vicinity of the Project study area. Potential habitat for RTE species as a result of the literature review is noted during the ecological survey.

### **2.3.1 Preliminary Data Gathering**

A request for review of the Ohio Natural Heritage Database (ONHD) is submitted to the Ohio Department of Natural Resources (ODNR) to determine if any state-listed Threatened or Endangered species occur within a one-mile (1.0 mi) radius of the Project area. A request is also submitted to the USFWS Ohio Ecological Services Field Office to determine if any federally-listed Threatened or Endangered species occur within the vicinity of the Project area.

### **2.3.2 Onsite Inspection**

During the onsite inspection, GAI staff traverse the study area in conjunction with the wetland and waterbody inspections to determine if suitable habitat for state- and/or federally-listed RTE species is present within the study area.

## **3.0 Results**

### **3.1 Wetlands**

#### **3.1.1 Preliminary Data Gathering**

Desktop review of available USFWS NWI digital data for the Project revealed no NWI mapped wetlands located within the Project study area (USFWS, 2017).

According to the USDA-NRCS soil mapping, twelve (12) soil map units are located within the Project study area (Figure 2). No soil map units are classified as hydric, and two (Hackers silt loam [HcA] and Vandalia silty clay loam [VaE]) are known to contain hydric inclusions.

#### **3.1.2 Onsite Inspection**

No wetlands were identified within the Project study area.

#### **3.1.3 Regulatory Discussion**

The USACE guidance divides waterbodies into three (3) groups: Traditionally Navigable Waters (TNWs), non-navigable Relatively Permanent Waters (RPWs), and non-navigable Non-RPWs. TNWs are waterbodies which have been, are, or may be susceptible to use in interstate commerce, including recreational use of the waterbody. RPWs are waterbodies that flow year-round, or at a minimum seasonally, by exhibiting continuous flow for at least three (3) consecutive months, but are not TNWs. Non-RPWs are waterbodies that do not flow continuously for at least three (3) consecutive months, are not TNWs or RPWs, but typically exhibit characteristic beds, banks, and OHWM (USACE, 2007).

The status of wetlands is determined partly based on the classification of the waterbody that the wetland is associated with, and the degree of that association. Wetlands that abut or are adjacent to TNWs are jurisdictional. Wetlands that abut RPWs are jurisdictional. Wetlands that are adjacent to RPWs and wetlands that abut or are adjacent to Non-RPWs must be subjected

to the Significant Nexus Test (SNT) to determine their jurisdictional status. Generally, the USACE considers wetlands that are isolated, meaning that they are not associated with any other surface water feature, as non-jurisdictional; and wetlands that abut or are adjacent to Non-RPWs as needing further examination by the USACE to determine and verify whether they exhibit a significant nexus to waters of the United States. If these wetlands exhibit a significant nexus, they are jurisdictional; if not, they are not subject to USACE jurisdiction (USACE, 2007).

Wetlands that do not exhibit an association with any surface water are categorized as "isolated" under present USACE guidance and policy (USACE, 2007). These wetlands are regulated by the OEPA Division of Surface Water, and may require an Isolated Wetland Permit.

As regulated by Ohio Administrative Code (OAC) rules 3745-1-50 through 3745-1-54, wetlands were also evaluated using the ORAM to determine the appropriate wetland category. Any wetland score that fell within a gray zone between categories was scored one of two ways. Either the wetland was assigned to the higher of the two categories or it was assessed using a non-rapid method to determine its quality (Mack, 2001). The category assigned to a particular wetland determines the requirement, if any, for additional levels of protection administered by the OEPA.

## 3.2 Waterbodies

### 3.2.1 Preliminary Data Gathering

Desktop review of the available USGS topographic mapping revealed one previously mapped stream segment located within the Project study area (Figure 1). Desktop review of OEPA's Stream Eligibility Web Map revealed the Project is located within a watershed categorized as "Eligible" for automatic 401 WQC coverage (Figure 3).

### 3.2.2 Onsite Inspection

Two stream segments were identified and delineated within the Project study area, including one perennial and one intermittent stream. Information on the delineated waterbodies and their classifications can be found in Table 2, and photographs of the identified streams are included in Appendix A.

### 3.2.3 Regulatory Discussion

As with wetlands, present USACE guidance and policy determines the jurisdictional status of waterbodies identified during the Project. TNWs and RPWs are jurisdictional. Non-RPWs must be subjected to the SNT by USACE to determine their jurisdictional status. If Non-RPWs exhibit a Significant Nexus, as defined in USACE guidance documents, they are jurisdictional. If not, they do not fall under the jurisdiction of the USACE.

Streams are generally defined as environmental features that have defined beds and banks, an OHWM, and contain flowing or standing waters for at least a portion of the year (USACE 2005). Streams were classified as perennial, intermittent, or ephemeral based upon presence of flow, estimated duration of flow, stream bed characteristics, and presence of aquatic biota. The USACE *Jurisdictional Determination Form Instructional Guidebook* (USACE, 2007) was used to determine stream classification and flow status.

As regulated by OAC Chapter 3745-1-24, streams were also assessed according to OEPA guidance using either the HHEI for watersheds less than one square mile ( $<1.0 \text{ mi}^2$ ) in size, or the Qualitative Habitat Evaluation Index (QHEI) for watersheds between one and twenty square miles ( $1.0\text{-}20.0 \text{ mi}^2$ ) in size.

### 3.3 Rare, Threatened, and Endangered Species

#### 3.3.1 Preliminary Data Gathering

Desktop review of ODNR, Division of Wildlife's Ohio's Listed Species revealed 336 Endangered, Threatened, Species of Concern, and Species of Interest located in OH (ODNR, 2017). Seventeen (17) of the state-listed species are considered federally endangered, and four (4) are federally threatened.

A review of the USFWS *County Distribution of Federally-Listed Threatened, Endangered, Proposed, and Candidate Species for Ohio*, as well as the USFWS Information for Planning and Consultation (IPaC) website revealed six (6) federally Endangered or Threatened species that may occur within the Project study area (USFWS, 2017). The list of species includes the following:

- ▶ Fanshell (*Cyprogenia stegaria*) - Endangered;
- ▶ Indiana bat (*Myotis sodalis*) - Endangered;
- ▶ Northern long-eared bat (*Myotis septentrionalis*) - Threatened;
- ▶ Pink mucket (pearlymussel) (*Lampsilis abrupta*) - Endangered;
- ▶ Sheepnose mussel (*Plethobasus cyphus*) - Endangered; and
- ▶ Snuffbox mussel (*Epioblasma triquetra*) - Endangered.

In addition to the species listed above, there are four (4) migratory bird species that may occur within the Project study area.

#### 3.3.2 Onsite Inspection

Potential habitat for RTE species was evaluated within the Project study area. In general, the habitat encountered within the study area consisted of the existing station, maintained transmission line right-of-way, agriculture field and maintained lawn. One perennial and one intermittent stream were identified within the study area. Representative photographs of the identified habitat types are included in Appendix A.

#### 3.3.3 Regulatory Discussion

State-listed RTE species fall under the jurisdiction of the ODNR, Division of Wildlife, while federally-listed species are covered under Section 7 of the Endangered Species Act. The Bald and Golden Eagle Protection Act and Migratory Bird Act aim to extend protection to certain bird species that fall under the jurisdiction of the USFWS. Based on the desktop review and onsite inspection, informal consultation with the ODNR and USFWS has been initiated to determine if any activities associated with the proposed Project may affect state- and/or federally-listed RTE species. The ODNR and USFWS consultation letters were submitted on December 20, 2018. A response from the USFWS was received on December 21, 2018 and is included in Appendix C. A response from the ODNR was received on January 25, 2019 and is also included in Appendix C.

## 4.0 Conclusions

An ecological survey was conducted within the Project study area on December 6, 2018 and March 25, 2019. Two streams (one perennial and one intermittent) were identified within the Project study area. No wetlands were identified within the Project study area. Summaries of the delineated aquatic features are provided in Table 1 and a map of their locations is depicted on Figure 2. Photographs of the stream features are included in Appendix A, while HHEI Data Forms are provided in Appendix B.

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## TABLES



Table 2  
Waterbodies Identified Within the Project Study Area

Stream I.D. <sup>1</sup>	Waterbody Name	OEPA WQ Designation <sup>2</sup>	OEPA Stream Eligibility <sup>3</sup>	Stream Type	USACE Classification <sup>4</sup>	HHEI Score <sup>5</sup>	PHWH Class <sup>5</sup>	QHEI Score <sup>6</sup>	Width (feet) <sup>7</sup>	OHEM Width (feet)	OHEM Depth (inches)	Stream Length <sup>8</sup> (feet)	Latitude <sup>9</sup>	Longitude <sup>9</sup>	Figure 2 (sheet)
S001	UNT to the Ohio River	-	Eligible	Perennial	RPW	68	Class III	-	12	9.5	10	127	39.353939	-81.353608	1
S002	UNT to the Ohio River	-	Eligible	Intermittent	RPW	53	Class III	-	6	5	8	115	39.354005	-81.353595	1

Notes:

- 1
- GAI map designation.
- 2
- As defined by OAC Chapter 3745-1 Water Quality Standards, Water use designations and statewide criteria (OAC 3745-1-07). [http://www.epa.ohio.gov/dsw/rules/3745\\_1.aspx](http://www.epa.ohio.gov/dsw/rules/3745_1.aspx).
- 3
- As defined by the 401 WQC conditions for stream eligibility coverage under the 2017 NWP program. Streams located in Possibly Eligible areas are eligible for coverage if the pH is <6.5 or stream flow is ephemeral. Streams located in Possibly Eligible areas are also eligible for coverage if the HHEI score is <50, or if the HHEI score is between 50-69 and substrate composition is ≤10% coarse types (includes cumulative percentage of bedrock, boulders, boulder slabs, and cobble).
- 4
- Jurisdictional status is the opinion of GAI and must be confirmed by USACE and state agencies through the JD process. RPW - Relatively Permanent Waters.
- 5
- Scoring for OEPA Headwater Habitat Evaluation Index (HHEI) Primary Headwater Habitats (PHWH). Class I = 0 - 29.9 and include “normally dry channels with little or no aquatic life present”; Class II = 30 - 69.9 and are equivalent to “warm water habitat”; Class III = 70 – 100 and typically have perennial flow with cool-cold water adapted native fauna.
- 6
- Narrative rating for headwater streams using the OEPA Qualitative Habitat Evaluation Index (QHEI). Excellent = ≥70; Good = 55 - 60; Fair = 43 - 54; Poor = 30 - 42; Very Poor = <30.
- 7
- Width in feet from tops of stream bank.
- 8
- Total stream length (in feet) located within the Project study area.
- 9
- North American Datum, 1983.

**Table 2**  
**ODNR and USFWS RTE Species and Critical Habitat Review Results**

Common Name	Scientific Name	Habitat Type	Listing Status <sup>1</sup>	Habitat Type Present Within the Project Area?	Impacts to Habitat/Species Anticipated?	Restricted Construction Dates
<b>Amphibians</b>						
Eastern hellbender <sup>4</sup>	<i>Cryptobranchus alleganiensis</i>	Rocky, clear creeks and rivers, usually where there are large rocks for shelter	E, FSC	No	No; Known habitat types are not present within the Project area	-
Eastern spadefoot <sup>4</sup>	<i>Scaphiopus holbrookii</i>	Flooded agricultural fields or other water-holding depressions, underground burrows	E	No	No; Known habitat types are not present within the Project area	-
<b>Bats</b>						
Indiana bat <sup>2, 4</sup>	<i>Myotis sodalis</i>	Trees >3" dbh, caves abandoned mines, wooded areas with loose tree bark or dead or dying trees	E, FE	Yes	No; Avoided with winter tree clearing	April 1 to September 30
Northern long-eared bat <sup>2</sup>	<i>Myotis septentrionalis</i>	Roost in cavities or in crevices of both live trees and snags; Hibernate in caves and mines with constant temperatures, high humidity, and no air currents	SC, FT	Yes	No; Avoided with winter tree clearing	April 1 to September 30
<b>Fish</b>						
Blue sucker <sup>4</sup>	<i>Cycleptus elongatus</i>	Deep, swiftly flowing chutes or channels of large rivers	E, FSC	No	No; Known habitat types are not present within the Project area	-
Western banded killfish <sup>4</sup>	<i>Fundulus diaphanous menona</i>	Areas with an abundance of rooted aquatic vegetation, clear waters and with substrates of clean sand or organic debris free of silt	E	No	No; Known habitat types are not present within the Project area	-
Ohio lamprey <sup>3, 4</sup>	<i>Ichthyomyzon bdellium</i>	Clear brooks with fast flowing water and either sand or gravel bottoms, slow moving water with soft substrate and large bodies of water	E	No	No; Known habitat types are not present within the Project area	-

Common Name	Scientific Name	Habitat Type	Listing Status <sup>1</sup>	Habitat Type Present Within the Project Area?	Impacts to Habitat/Species Anticipated?	Restricted Construction Dates
<b><i>Fish (Continued)</i></b>						
Northern madtom <sup>4</sup>	<i>Noturus stigmosus</i>	Deep swift riffles of large rivers	E	No	No; Known habitat types are not present within the Project area	-
Tippecanoe darter <sup>3, 4</sup>	<i>Etheostoma tippecanoe</i>	Medium to large streams and rivers	T	No	No; Known habitat types are not present within the Project area	-
Mountain madtom <sup>4</sup>	<i>Noturus eleutherus</i>	Deep swift riffles of large rivers	T	No	No; Known habitat types are not present within the Project area	-
Paddlefish <sup>4</sup>	<i>Polyodon spathula</i>	Sluggish pools and backwater areas of the Ohio River and larger tributaries	T	No	No; Known habitat types are not present within the Project area	-
Channel darter <sup>3, 4</sup>	<i>Percina copelandi</i>	Large, coarse sand or fine gravel bars in large rivers or along the shore of Lake Erie	T	No	No; Known habitat types are not present within the Project area	-
River darter <sup>3, 4</sup>	<i>Percina shumardi</i>	Large rivers typically in areas of swift current	T	No	No; Known habitat types are not present within the Project area	-
<b><i>Insects</i></b>						
Regal fritillary	<i>Speyeria idalia</i>	Tall grass and mixed-grass prairies	E	No	No; Known habitat types are not present within the Project area	-
<b><i>Mammals</i></b>						
Black bear	<i>Ursus americanus</i>	Large forested areas	E	No	No; Known habitat types are not present within the Project area	-
<b><i>Mussels</i></b>						
Fanshell <sup>4</sup>	<i>Cyprogenia stegaria</i>	Found in medium to large rivers with sand or gravel substrates and a moderate current	E, FE	No	No; Known habitat types are not present within the Project area	-
Butterfly <sup>3, 4</sup>	<i>Ellipsaria lineolata</i>	Large rivers with swift currents and gravel or sand substrates	E	No	No; Known habitat types are not present within the Project area	-
Elephant ear <sup>4</sup>	<i>Elliptio crassidens crassidens</i>	Mud, sand or fine gravel of large rivers	E	No	No; Known habitat types are not present within the Project area	-

Common Name	Scientific Name	Habitat Type	Listing Status <sup>1</sup>	Habitat Type Present Within the Project Area?	Impacts to Habitat/Species Anticipated?	Restricted Construction Dates
<b>Mussels (Continued)</b>						
Purple cat's paw	<i>Epioblasma obliquata obliquata</i>	Large rivers of the Ohio River basin with shallow waters and a swift current	E, FE	No	No; Known habitat types are not present within the Project area	-
Northern riffleshell	<i>Epioblasma torulosa rangiana</i>	Large and small streams, buried in bottoms of firmly packed sand or gravel	E, FE	No	No; Known habitat types are not present within the Project area	-
Snuffbox <sup>4</sup>	<i>Epioblasma triquetra</i>	Small or medium sized creeks, inhabiting areas with a swift current	E, FE	No	No; Known habitat types are not present within the Project area	-
Ebonysell	<i>Fusconaia ebena</i>	Deep, strong currents of large rivers.	E	No	No; Known habitat types are not present within the Project area	-
Long-solid <sup>4</sup>	<i>Fusconaia maculata maculate</i>	Large or small rivers with gravel substrate	E	No	No; Known habitat types are not present within the Project area	-
Pink mucket <sup>4</sup>	<i>Lampsilis orbiculate</i>	Found in mud and sand and in shallow riffles and shoals swept free of silt in major rivers and tributaries	E, FE	No	No; Known habitat types are not present within the Project area	-
Sharp-ridged pocketbook <sup>4</sup>	<i>Lampsilis ovate</i>	Large rivers in coarse sand or gravel	E	No	No; Known habitat types are not present within the Project area	-
Yellow sandshell	<i>Lampsilis teres</i>	Small streams, large rivers and oxbow lakes.	E	No	No; Known habitat types are not present within the Project area	-
Washboard <sup>4</sup>	<i>Megaloniaias nervosa</i>	Small or larger rivers in a variety of substrate including mud, sand or gravel	E	No	No; Known habitat types are not present within the Project area	-
Sheepnose <sup>4</sup>	<i>Plethobasus cyphus</i>	Found in shallow areas of larger rivers and streams with moderate to swift currents flowing over coarse sand and gravel	E, FE	No	No; Known habitat types are not present within the Project area	-
Clubshell	<i>Pleurobema clava</i>	Prefers clean, loose sand and gravel in medium to small rivers and streams	E, FE	No	No; Known habitat types are not present within the Project area	-

Common Name	Scientific Name	Habitat Type	Listing Status <sup>1</sup>	Habitat Type Present Within the Project Area?	Impacts to Habitat/Species Anticipated?	Restricted Construction Dates
<b>Mussels (Continued)</b>						
Ohio pigtoe <sup>4</sup>	<i>Pleurobema cordatum</i>	Medium-sized rivers with mud, sand, gravel or cobble	E	No	No; Known habitat types are not present within the Project area	-
Pyramid pigtoe	<i>Pleurobema rubrum</i>	Medium to large rivers in sand or gravel	E	No	No; Known habitat types are not present within the Project area	-
Rabbitsfoot	<i>Quadrula cylindrica cylindrica</i>	Clear waters of small and medium sized rivers on riffle and shoal areas near banks	E, FT	No	No; Known habitat types are not present within the Project area	-
Monkeyface <sup>4</sup>	<i>Quadrula metanevra</i>	Medium to large rivers and streams in areas with mixed sand and/or gravel.	E	No	No; Known habitat types are not present within the Project area	-
Black sandshell <sup>4</sup>	<i>Ligumia recta</i>	Found in varying sizes of creeks, rivers, and lakes with sand and gravel bottoms and a moderate current	T	No	No; Known habitat types are not present within the Project area	-
Threehorn wartyback <sup>3, 4</sup>	<i>Obliquaria reflexa</i>	Large rivers with moderately strong current and a substrate composed of gravel, sand and mud	T	No	No; Known habitat types are not present within the Project area	-
Fawnsfoot <sup>4</sup>	<i>Truncilla donaciformis</i>	Freshwater lakes	T	No	No; Known habitat types are not present within the Project area	-
<b>Plants</b>						
Bradley's spleenwort	<i>Asplenium bradleyi</i>	Exposed, barren situations, often in full sun, on acidic rocks; crevices, ledges and cliff faces	E	Yes	No; Impacts to this species are not anticipated, per the agency responses	-
Obed shield lichen	<i>Canoparmelia amabilis</i>	Open pine-oak woods	E	No	No; Known habitat types are not present within the Project area	-
Speckled wood-lily	<i>Clintonia umbellulata</i>	Variety of mature, mesic woods, often with hemlocks. Deep shade, ravines and slopes	E	No	No; Known habitat types are not present within the Project area	-

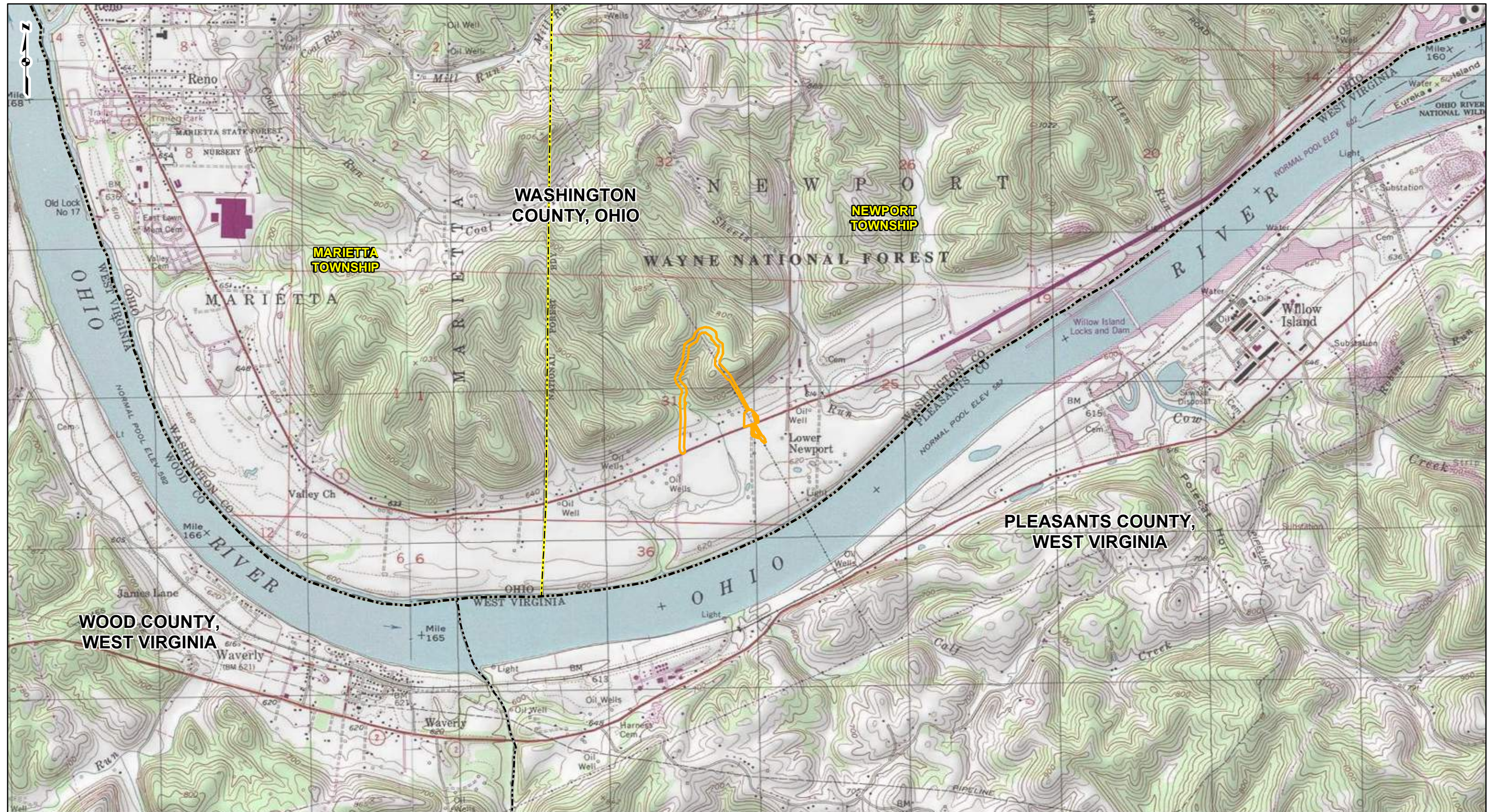
Common Name	Scientific Name	Habitat Type	Listing Status <sup>1</sup>	Habitat Type Present Within the Project Area?	Impacts to Habitat/Species Anticipated?	Restricted Construction Dates
<b>Plants (Continued)</b>						
Old-field toadflax	<i>Linaria canadensis</i>	Open areas, usually in sandy, acidic soil. Fields, floodplains, dry woods borders and weedy roadsides	E	No	No; Known habitat types are not present within the Project area	-
Camphor-weed	<i>Pluchea camphorata</i>	Swamps, wet woods, marshes, borders of streams, ponds and ditches.	E	No	No; Known habitat types are not present within the Project area	-
Sparse-lobed grape fern	<i>Botrychium biternatum</i>	Bottoms, ravines, mesic woods and thickets in various pH with fairly rich soil	T	No	No; Known habitat types are not present within the Project area	-
Midland sedge	<i>Carex mesochorea</i>	Well-drained openings and clearings; oak woods, borders and fields	T	Yes	No; Impacts to this species are not anticipated, per the agency responses	-
Golden-knees	<i>Chrysogonum virginianum</i>	Rich woods and shaded rocks	T	No	No; Known habitat types are not present within the Project area	-
Downy white beard-tongue	<i>Penstemon pallidus</i>	Fields, roadsides and open woods	T	Yes	No; Impacts to this species are not anticipated, per the agency responses	-
Yellow fringed orchid	<i>Platanthera ciliaris</i>	A variety of sunny, wet situations in acidic, often sandy substrates. Pastures, wet fields, depressions, seepage areas and roadbanks	T	Yes	No; Impacts to this species are not anticipated, per the agency responses	-
Chalky ramalina	<i>Ramalina pollinaria</i>	Rock and bark in sheltered areas	T	No	No; Known habitat types are not present within the Project area	-
Rock skullcap	<i>Scutellaria saxatilis</i>	Semi-shade, dry woods.	T	No	No; Known habitat types are not present within the Project area	-
<b>Reptiles</b>						
Timber rattlesnake <sup>4</sup>	<i>Crotalus horridus</i>	Wooded areas, sunlit gaps in the canopy and deep rock crevices.	E, FSC	No	No; Known habitat types are not present within the Project area	-

Notes:

- <sup>1</sup> E = state endangered; T = state threatened; P = state potentially threatened; SC = state species of concern; FE = federal endangered; FT = federal threatened; FSC = federal species of concern; FC = federal candidate.
- <sup>2</sup> Federally listed species, migratory bird, or species of concern comments included in the USFWS response, dated December 21, 2018.
- <sup>3</sup> Natural Heritage Database record at or within a one-mile radius of the Project area.
- <sup>4</sup> ODNR, Division of Wildlife (DOW) comments included in the ODNR response, dated January 25, 2019.

## FIGURES





**PROJECT LOCATION**

WASHINGTON COUNTY, OHIO

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: BELMONT (1979) AND MARIETTA (1978), OHIO, VALLEY MILLS (1977) AND WILLOW ISLAND (1979), WEST VIRGINIA, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND USGS, ACCESSED 05/2019.

**LEGEND**

- Study Area
- Township Boundary
- County Boundary

0 1,000 2,000 4,000 Feet

**FIGURE 1**  
**PROJECT LOCATION MAP**

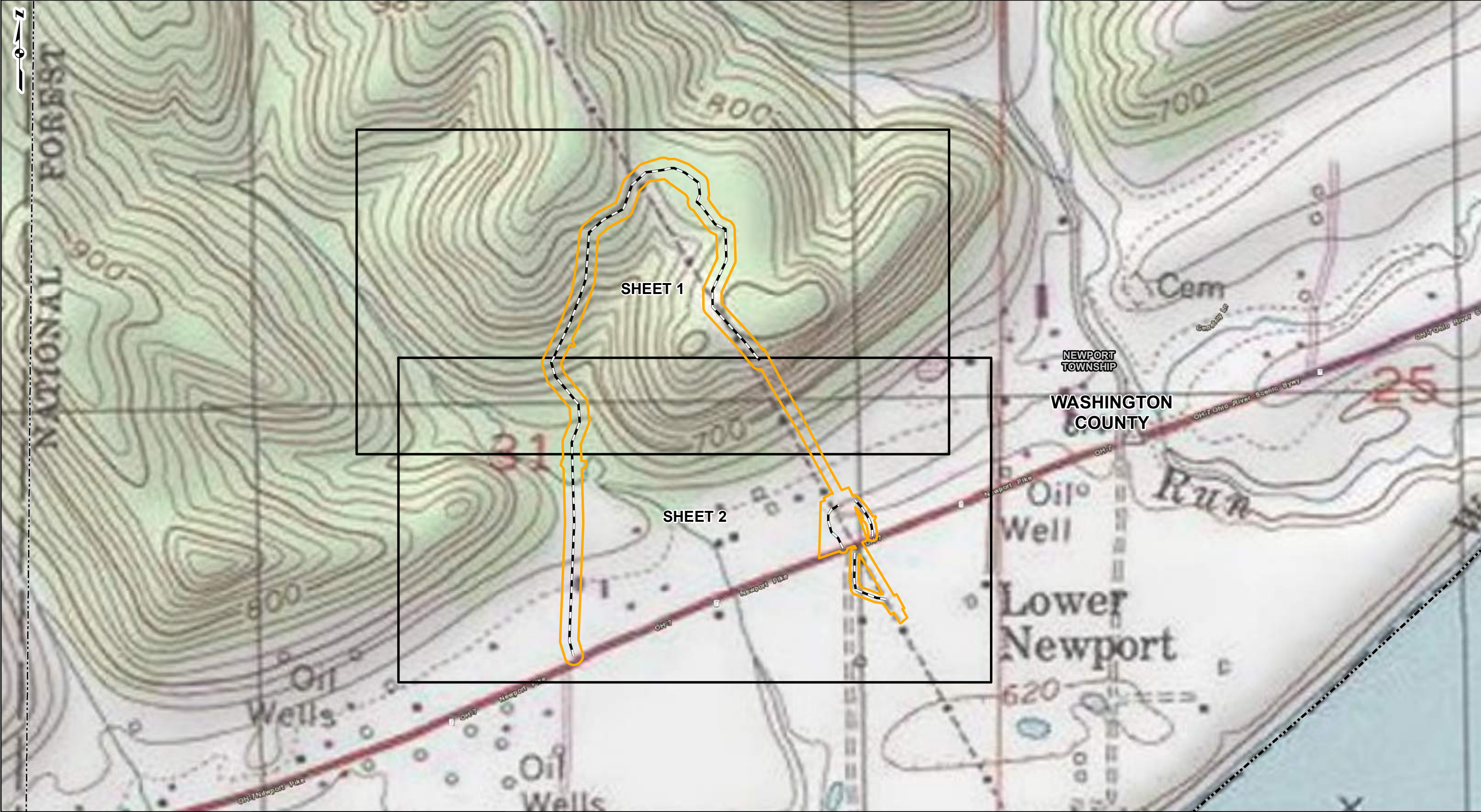
**RENO HARD TAP  
REMOVAL PROJECT**

**AMERICAN ELECTRIC POWER**

DRAWN BY: JTH  
CHECKED: EFJ

DATE: 5/2/2019  
APPROVED: REZ





PROJECT LOCATION



WASHINGTON COUNTY, OHIO

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLE: WILLOW ISLAND (1979), OHIO, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND USGS, ACCESSED 05/2019.

LEGEND

- Access Road
- Study Area
- Township Boundary
- County Boundary
- Map\_Index\_Features

0 250 500 1,000 Feet

FIGURE 2  
RESOURCE LOCATION MAP  
SHEET INDEX



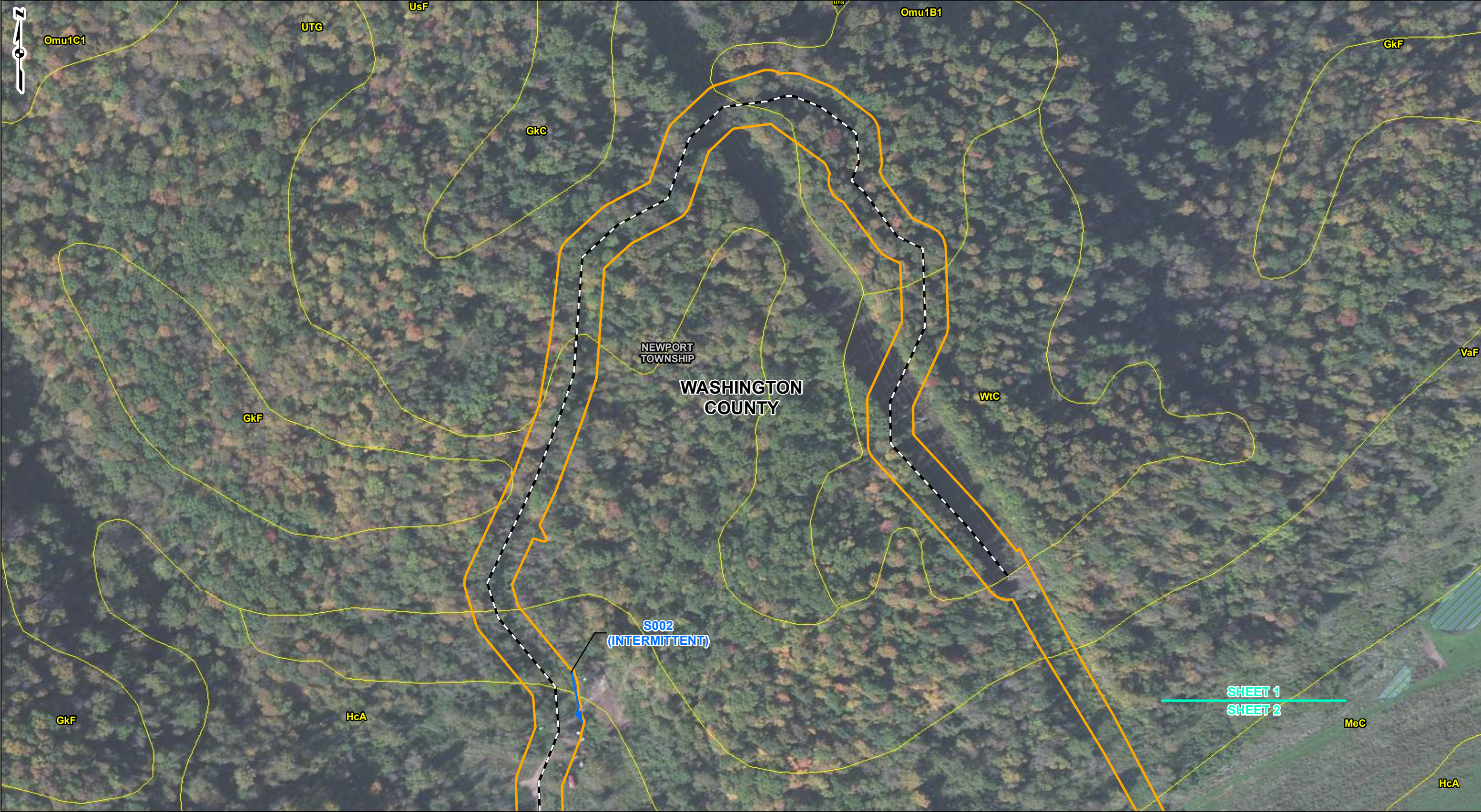
RENO HARD TAP  
REMOVAL PROJECT  
AMERICAN ELECTRIC POWER



DRAWN BY: JTH  
CHECKED: EFJ

DATE: 5/2/2019  
APPROVED: REZ





PROJECT LOCATION



WASHINGTON COUNTY, OHIO



REFERENCES: ESRI WORLD IMAGERY (CLARITY), ARCGIS ONLINE, ACCESSED 05/2019. WORLD TRANSPORTATION, ESRI, DELORME, HERE, MAPMYINDIA, TOMTOM, © OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY, OBTAINED THROUGH ESRI ARCGIS ONLINE, ACCESSED 05/2019. NATIONAL WETLAND INVENTORY (NWI) WETLANDS, USFWS, 2018. NATIONAL FLOOD HAZARD LAYER, FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), OHIO, 2018. SOIL SURVEY GEOGRAPHIC (SSURGO) DATABASE FOR WASHINGTON COUNTY, OHIO, USDA/NRCS, 2018. OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR) LAND, 2018.

**LEGEND**

Access Road	NWI Wetland
Stream	100-Year Floodplain
Study Area	FEMA Floodway
Soil Type Boundary	Township Boundary
ODNR Land	County Boundary

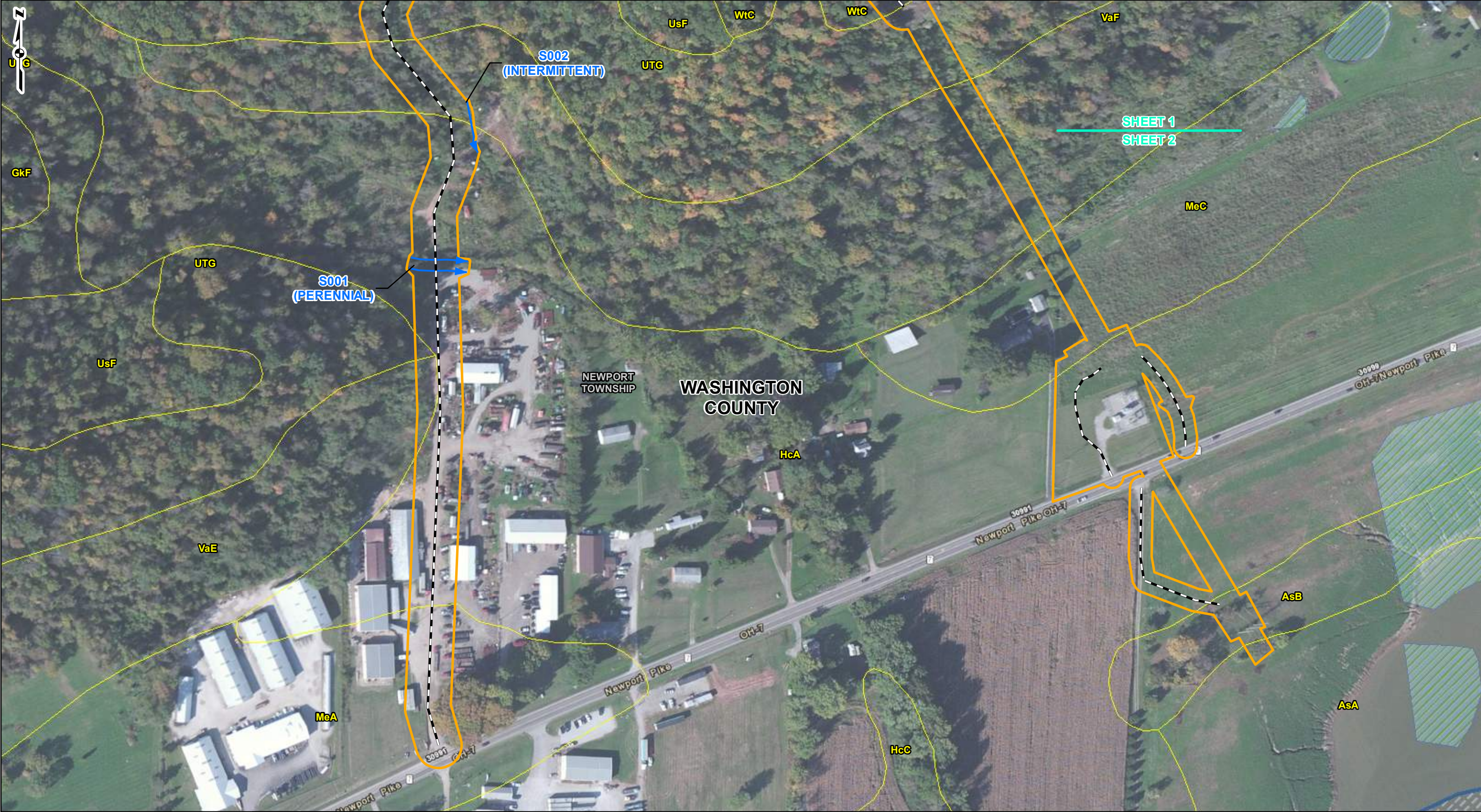
0 100 200 400 Feet

**FIGURE 2**  
**RESOURCE LOCATION MAP**  
**SHEET 1 OF 2**

 **RENO HARD TAP  
REMOVAL PROJECT**  
**AMERICAN ELECTRIC POWER** 

DRAWN BY: JTH      DATE: 5/2/2019  
CHECKED: EFJ      APPROVED: REZ





PROJECT LOCATION



WASHINGTON COUNTY, OHIO

REFERENCES: ESRI WORLD IMAGERY (CLARITY), ARCGIS ONLINE, ACCESSED 05/2019. WORLD TRANSPORTATION, ESRI, DELORME, HERE, MAPMYINDIA, TOMTOM, © OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY, OBTAINED THROUGH ESRI ARCGIS ONLINE, ACCESSED 05/2019. NATIONAL WETLAND INVENTORY (NWI) WETLANDS, USFWS, 2018. NATIONAL FLOOD HAZARD LAYER, FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), OHIO, 2018. SOIL SURVEY GEOGRAPHIC (SSURGO) DATABASE FOR WASHINGTON COUNTY, OHIO, USDA/NRCS, 2018. OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR) LAND, 2018.

LEGEND

- Access Road
- Stream
- Study Area
- Soil Type Boundary
- ODNR Land
- NWI Wetland
- 100-Year Floodplain
- FEMA Floodway
- Township Boundary
- County Boundary

0 100 200 400 Feet

FIGURE 2  
RESOURCE LOCATION MAP  
SHEET 2 OF 2



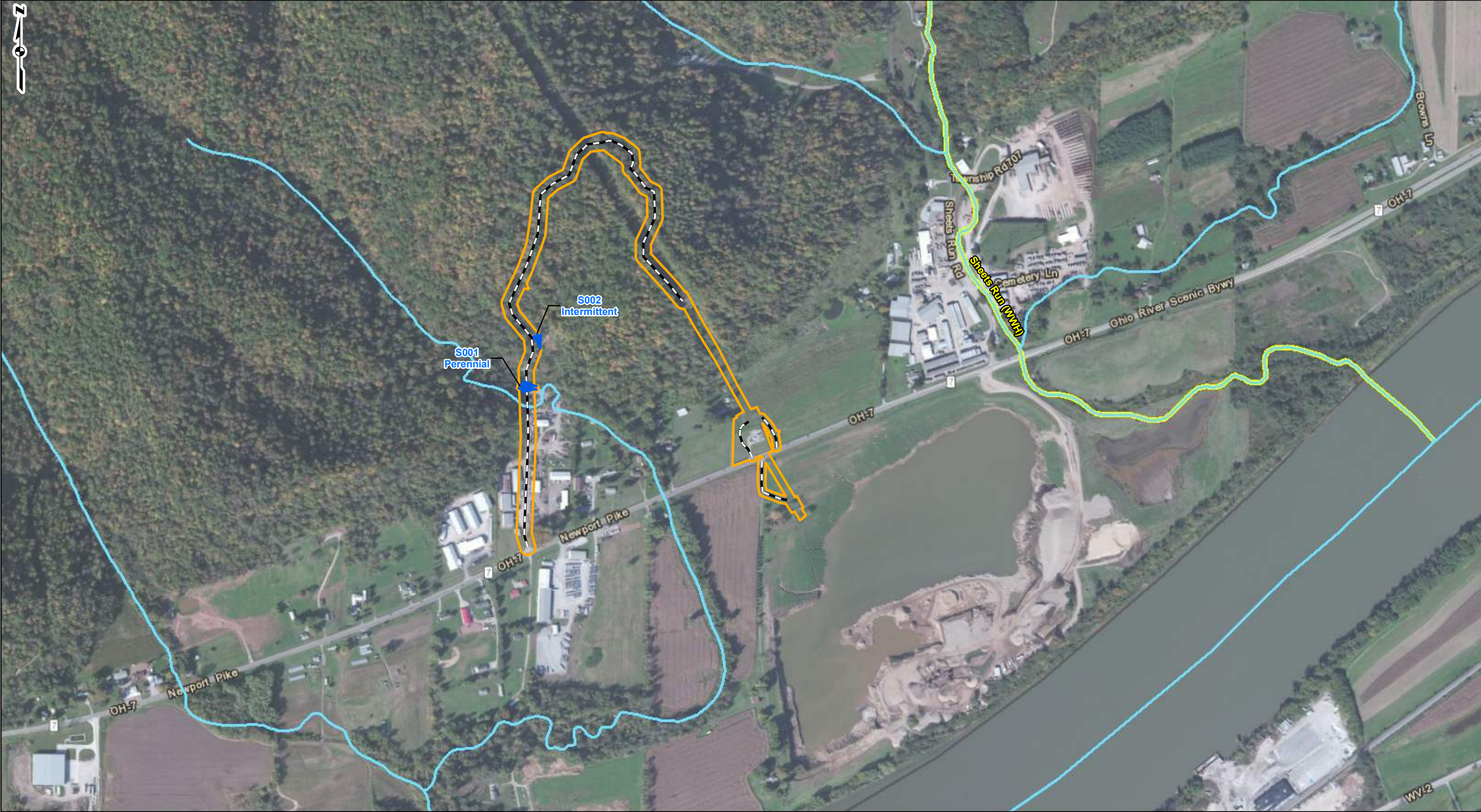
RENO HARD TAP  
REMOVAL PROJECT  
AMERICAN ELECTRIC POWER



DRAWN BY: JTH  
CHECKED: EFJ

DATE: 5/2/2019  
APPROVED: REZ











PROJECT LOCATION



WASHINGTON COUNTY, OHIO



REFERENCES: ESRI WORLD IMAGERY (CLARITY), ARCGIS ONLINE, ACCESSED 05/2019. WORLD TRANSPORTATION, ESRI, DELORME, HERE, MAPMYINDIA, TOMTOM, © OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY, OBTAINED THROUGH ESRI ARCGIS ONLINE, ACCESSED 05/2019. STREAM ELIGIBILITY, OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA), 2017. NHD STREAMS, NATIONAL HYDROGRAPHY DATASET (NHD), USGS, 2015. WQS STREAMS, OHIO WATER QUALITY STANDARDS, 2010.

**LEGEND**

 Study Area	<b>OEPA Stream Eligibility:</b>
 NHD Stream	 Ineligible
 OH WQS Stream	 Possibly Eligible
	 Eligible

0 300 600 1,200 Feet

**FIGURE 3**  
**STREAM ELIGIBILITY MAP**



**RENO HARD TAP  
REMOVAL PROJECT  
AMERICAN ELECTRIC POWER**

DRAWN BY: JTH	DATE: 5/2/2019
CHECKED: EFJ	APPROVED: REZ



## **APPENDIX A**

### **Photographs**



**Photograph 1. Stream 001, Upstream, Facing West**



**Photograph 2. Stream 001, Downstream, Facing East**



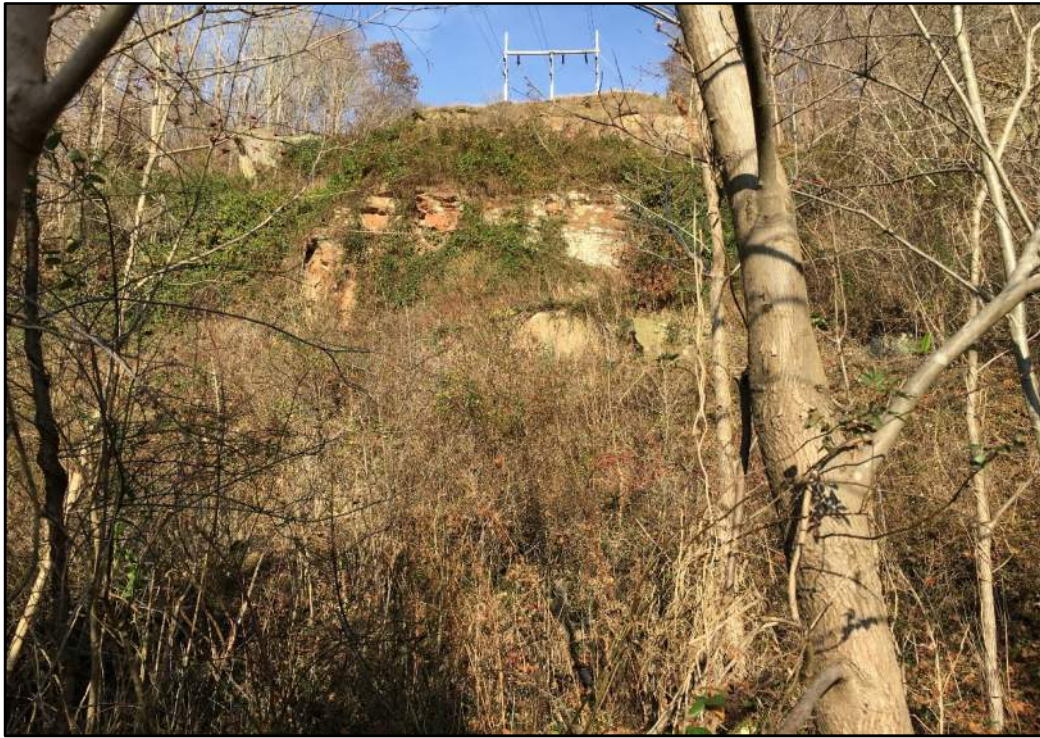


**Photograph 3. Stream 002, Upstream, Facing North**



**Photograph 4. Stream 002, Downstream, Facing South**





**Photograph 5. Representative upland habitat, Facing North**



**Photograph 6. Representative upland habitat, Facing East**





**Photograph 7. Representative upland habitat, Facing South**



**Photograph 8. Representative upland habitat, Facing Northeast**

## **APPENDIX B**

### **Primary Headwater Habitat Evaluation (HHEI) Data Forms**

**Ohio** Primary Headwater Habitat Field Evaluation Form  
Ohio Environmental Protection Agency  
HHEI Score (sum of metrics 1+2+3) **68**

SITE NAME/LOCATION APP- Peno Head Tap  
SITE NUMBER S001 RIVER BASIN Ohio River RIVER CODE 050302011009 DRAINAGE AREA (mi<sup>2</sup>) 0.44  
LENGTH OF STREAM REACH (ft) 127 LAT 39.353939 LONG -81.353608 RIVER MILE \_\_\_\_\_  
DATE 3/25/2019 SCORER KLV COMMENTS SOH-KLV-001 (PER)

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☒ NONE / NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

<b>1. SUBSTRATE (Estimate percent of every type present). Check ONLY 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 &amp; B</b>		<b>HHEI Metric Points</b> Substrate Max = 40 <b>18</b> A + B																											
<table border="1"> <thead> <tr> <th>TYPE</th> <th>PERCENT</th> <th>TYPE</th> <th>PERCENT</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> BLDR SLABS [16 pts]</td> <td></td> <td><input checked="" type="checkbox"/> SILT [3 pt]</td> <td><u>45</u></td> </tr> <tr> <td><input type="checkbox"/> BOULDER (&gt;256 mm) [16 pts]</td> <td></td> <td><input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]</td> <td><u>5</u></td> </tr> <tr> <td><input type="checkbox"/> BEDROCK [16 pts]</td> <td></td> <td><input type="checkbox"/> FINE DETRITUS [3 pts]</td> <td></td> </tr> <tr> <td><input type="checkbox"/> COBBLE (65-256 mm) [12 pts]</td> <td><u>15</u></td> <td><input type="checkbox"/> CLAY or HARDPAN [0 pt]</td> <td></td> </tr> <tr> <td><input checked="" type="checkbox"/> GRAVEL (2-64 mm) [9 pts]</td> <td><u>20</u></td> <td><input type="checkbox"/> MUCK [0 pts]</td> <td></td> </tr> <tr> <td><input type="checkbox"/> SAND (&lt;2 mm) [6 pts]</td> <td><u>10</u></td> <td><input type="checkbox"/> ARTIFICIAL [3 pts]</td> <td><u>5</u></td> </tr> </tbody> </table>	TYPE		PERCENT	TYPE	PERCENT	<input type="checkbox"/> BLDR SLABS [16 pts]		<input checked="" type="checkbox"/> SILT [3 pt]	<u>45</u>	<input type="checkbox"/> BOULDER (>256 mm) [16 pts]		<input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]	<u>5</u>	<input type="checkbox"/> BEDROCK [16 pts]		<input type="checkbox"/> FINE DETRITUS [3 pts]		<input type="checkbox"/> COBBLE (65-256 mm) [12 pts]	<u>15</u>	<input type="checkbox"/> CLAY or HARDPAN [0 pt]		<input checked="" type="checkbox"/> GRAVEL (2-64 mm) [9 pts]	<u>20</u>	<input type="checkbox"/> MUCK [0 pts]		<input type="checkbox"/> SAND (<2 mm) [6 pts]	<u>10</u>	<input type="checkbox"/> ARTIFICIAL [3 pts]	<u>5</u>
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This information must also be completed

**RIPARIAN ZONE AND FLOODPLAIN QUALITY** ★ NOTE: River Left (L) and Right (R) as looking downstream

RIPARIAN WIDTH (Per Bank)		FLOODPLAIN QUALITY (Most Predominant per Bank)	
L	R	L	R
<input type="checkbox"/>	<input type="checkbox"/> Wide >10m	<input type="checkbox"/>	<input type="checkbox"/> Mature Forest, Wetland
<input type="checkbox"/>	<input type="checkbox"/> Moderate 5-10m	<input type="checkbox"/>	<input type="checkbox"/> Immature Forest, Shrub or Old Field
<input type="checkbox"/>	<input type="checkbox"/> Narrow <5m	<input type="checkbox"/>	<input checked="" type="checkbox"/> Residential, Park, New Field
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> None	<input type="checkbox"/>	<input type="checkbox"/> Fenced Pasture
		<input type="checkbox"/>	<input type="checkbox"/> Conservation Tillage
		<input type="checkbox"/>	<input checked="" type="checkbox"/> Urban or Industrial
		<input type="checkbox"/>	<input type="checkbox"/> Open Pasture, Row Crop
		<input type="checkbox"/>	<input type="checkbox"/> Mining or Construction

COMMENTS \_\_\_\_\_

**FLOW REGIME (At Time of Evaluation) (Check ONLY one box):**

<input checked="" type="checkbox"/> Stream Flowing	<input type="checkbox"/> Moist Channel, isolated pools, no flow (intermittent)
<input type="checkbox"/> Subsurface flow with isolated pools (interstitial)	<input type="checkbox"/> Dry channel, no water (ephemeral)

COMMENTS \_\_\_\_\_

**SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):**

<input type="checkbox"/> None	<input checked="" type="checkbox"/> 1.0	<input type="checkbox"/> 2.0	<input type="checkbox"/> 3.0
<input type="checkbox"/> 0.5	<input type="checkbox"/> 1.5	<input type="checkbox"/> 2.5	<input type="checkbox"/> >3

**STREAM GRADIENT ESTIMATE**

☐ Flat (0.5 #100 ft) 
 ☒ Flat to Moderate 
 ☐ Moderate (2 #100 ft) 
 ☐ Moderate to Severe 
 ☐ Severe (10 #100 ft)

**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: Ohio River Distance from Evaluated Stream .60 miles  
☐ 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: Willow Island, WV NRCS Soil Map Page: \_\_\_\_\_ NRCS Soil Map Stream Order: \_\_\_\_\_  
County: Washington Co. Township/City: Newport Twp.

**MISCELLANEOUS**

Base Flow Conditions? (Y/N): Y Date of last precipitation: 3/25/2019 Quantity: .50"

Photo-documentation Notes: \_\_\_\_\_

Elevated Turbidity? (Y/N): N Canopy (% open): 45%

Were samples collected for water chemistry? (Y/N): 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) Y If not, explain: \_\_\_\_\_

Additional comments/description of pollution impacts: \_\_\_\_\_

**BIOLOGICAL OBSERVATIONS**

(Record all observations below)

Fish Observed? (Y/N) N Species observed (if known): \_\_\_\_\_

Frogs or Tadpoles Observed? (Y/N) N Species observed (if known): \_\_\_\_\_

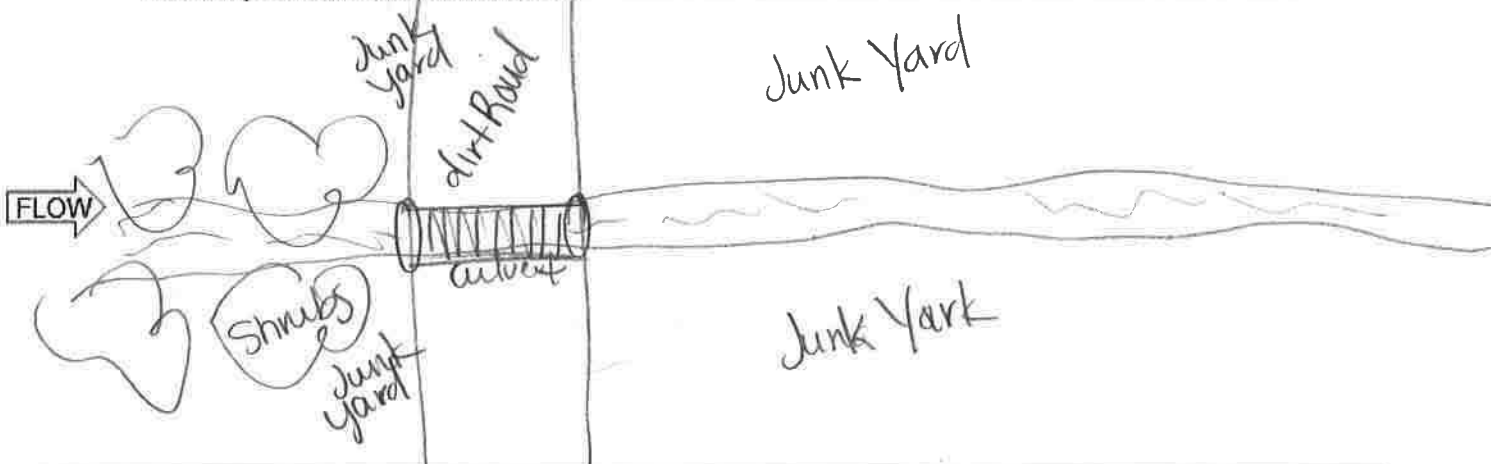
Salamanders Observed? (Y/N) N Species observed (if known): \_\_\_\_\_

Aquatic Macroinvertebrates Observed? (Y/N) 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



**Ohio** Primary Headwater Habitat Field Evaluation Form  
Ohio Environmental Protection Agency  
HHEI Score (sum of metrics 1+2+3) **53**

SITE NAME/LOCATION ATP - Reno Hard Tap  
SITE NUMBER S002 RIVER BASIN Ohio River RIVER CODE 050302011009 DRAINAGE AREA (mi<sup>2</sup>) 0.04 mi<sup>2</sup>  
LENGTH OF STREAM REACH (ft) 114 LAT 39.354794 LONG -81.353328 RIVER MILE \_\_\_\_\_  
DATE 3/25/19 SCORER KLV COMMENTS SOH-KLV-002 (INT)

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☒ NONE / NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

<b>1. SUBSTRATE</b> (Estimate percent of every type present). Check ONLY 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				<b>HHEI Metric Points</b>  Substrate Max = 40  <b>17</b>  A + B																												
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COMMENTS _____ AVERAGE BANKFULL WIDTH (meters): <b>6</b>																																

This information must also be completed

**RIPARIAN ZONE AND FLOODPLAIN QUALITY** \* NOTE: River Left (L) and Right (R) as looking downstream.

RIPARIAN WIDTH (Per Bank)		FLOODPLAIN QUALITY (Most Predominant per Bank)	
L	R	L	R
<input checked="" type="checkbox"/>	<input type="checkbox"/> Wide >10m	<input type="checkbox"/>	<input type="checkbox"/> Mature Forest, Wetland
<input checked="" type="checkbox"/>	<input type="checkbox"/> Moderate 5-10m	<input checked="" type="checkbox"/>	<input type="checkbox"/> Immature Forest, Shrub or Old Field
<input type="checkbox"/>	<input type="checkbox"/> Narrow <5m	<input type="checkbox"/>	<input type="checkbox"/> Residential, Park, New Field
<input type="checkbox"/>	<input type="checkbox"/> None	<input type="checkbox"/>	<input type="checkbox"/> Fenced Pasture
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		<input checked="" type="checkbox"/>	<input type="checkbox"/> Urban or Industrial
		<input type="checkbox"/>	<input type="checkbox"/> Open Pasture, Row Crop
		<input type="checkbox"/>	<input type="checkbox"/> Mining or Construction

COMMENTS \_\_\_\_\_

**FLOW REGIME** (At Time of Evaluation) (Check ONLY one box):

<input checked="" type="checkbox"/> Stream Flowing	<input type="checkbox"/> Moist Channel, isolated pools, no flow (intermittent)
<input type="checkbox"/> Subsurface flow with isolated pools (interstitial)	<input type="checkbox"/> Dry channel, no water (ephemeral)

COMMENTS \_\_\_\_\_

**SINUOSITY** (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):

<input type="checkbox"/> None	<input type="checkbox"/> 1.0	<input type="checkbox"/> 2.0	<input type="checkbox"/> 3.0
<input type="checkbox"/> 0.5	<input checked="" type="checkbox"/> 1.5	<input type="checkbox"/> 2.5	<input type="checkbox"/> >3

**STREAM GRADIENT ESTIMATE**

<input type="checkbox"/> Flat (0.5 %/100 ft)	<input type="checkbox"/> Flat to Moderate	<input checked="" type="checkbox"/> Moderate (2 %/100 ft)	<input type="checkbox"/> Moderate to Severe	<input type="checkbox"/> Severe (10 %/100 ft)
--	---	---	---	---

**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: Ohio River Distance from Evaluated Stream .60 miles  
☐ 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: Willow Island, WV NRCS Soil Map Page: \_\_\_\_\_ NRCS Soil Map Stream Order: \_\_\_\_\_  
 County: Washington, Co. Township/City: Newport Twp.

**MISCELLANEOUS**

Base Flow Conditions? (Y/N): Y Date of last precipitation: 3/25/19 Quantity: 50"

Photo-documentation Notes: \_\_\_\_\_

Elevated Turbidity? (Y/N): N Canopy (% open): 30%

Were samples collected for water chemistry? (Y/N): 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) Y If not, explain: \_\_\_\_\_

Additional comments/description of pollution impacts: \_\_\_\_\_

**BIOLOGICAL OBSERVATIONS**

(Record all observations below)

Fish Observed? (Y/N) N Species observed (if known): \_\_\_\_\_

Frogs or Tadpoles Observed? (Y/N) N Species observed (if known): \_\_\_\_\_

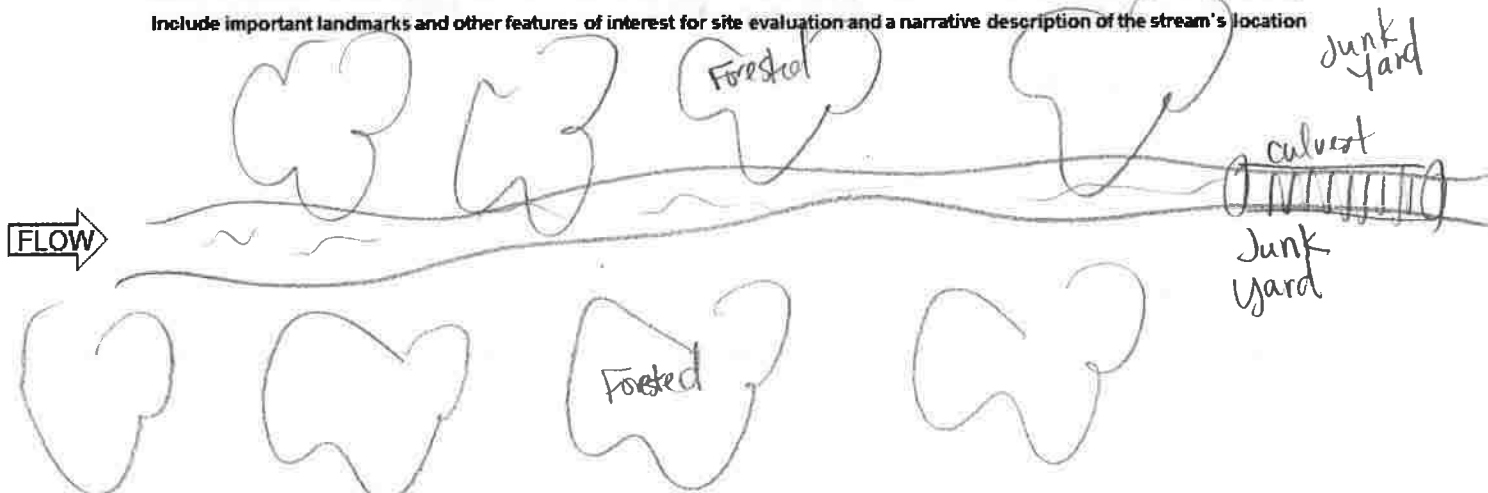
Salamanders Observed? (Y/N) N Species observed (if known): \_\_\_\_\_

Aquatic Macroinvertebrates Observed? (Y/N) 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





## **APPENDIX C**

### **ODNR and USFWS Correspondence**

**Rita Zack**

---

**From:** Finfera, Jennifer <jennifer\_finfera@fws.gov>  
**Sent:** Friday, December 21, 2018 1:06 PM  
**To:** Rita Zack  
**Subject:** AEP Reno Hard Tap Removal Project, Washington County, Ohio

TAILS# 03E15000-2019-TA-0455

Re: AEP Reno Hard Tap Removal Project, Washington County, Ohio

Dear Ms. Zack,

We have received your recent correspondence requesting information about the subject proposal. There are no federal wilderness areas, wildlife refuges or designated critical habitat within the vicinity of the project area. The following comments and recommendations will assist you in fulfilling the requirements for consultation under section 7 of the Endangered Species Act of 1973, as amended (ESA).

The U.S. Fish and Wildlife Service (Service) recommends that proposed developments avoid and minimize water quality impacts and impacts to high quality fish and wildlife habitat (e.g., forests, streams, wetlands). Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the 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. All disturbed areas should be mulched and revegetated with native plant species. Prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

**MIGRATORY BIRD COMMENTS:** There are no records of bald eagle nests within 10 miles of the project area. Due to the project type and location, this species would not be expected within the project area, and no impact to this species is expected. Relative to this species, this precludes the need for further action on this project as required by the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act.

**FEDERALLY LISTED SPECIES COMMENTS:** All projects in the State of Ohio lie within the range of the federally endangered **Indiana bat** (*Myotis sodalis*) and the federally threatened **northern long-eared bat** (*Myotis septentrionalis*). In Ohio, presence of the Indiana bat and northern long-eared bat is assumed 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 travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags  $\geq 3$  inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) 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 and abandoned mines.

We recommend that trees be saved 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 that removal of any trees  $\geq 3$  inches dbh only occur between October 1 and March 31. 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 between October 1 and March 31 is recommended where Indiana bats are assumed present.

If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), 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 that 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.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, proposed, or candidate species. Should the project design change, or during the term of this action, 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, consultation with the Service should be initiated to assess any potential impacts.

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 ESA, and are consistent with the intent of the National Environmental Policy Act of 1969 and the Service's Mitigation Policy. This letter provides technical assistance only and does not serve as a completed section 7 consultation document.

If you have questions please contact me.

Sincerely,

Jenny Finfera

--

Jenny Finfera  
Wildlife Biologist  
Ecological Services  
4625 Morse Road, Suite 104  
Columbus, Ohio 43230

Phone: 614-416-8993 ext.13  
Fax: 614-416-8994



Canton Office  
3720 Dressler Road Northwest  
Canton, Ohio 44718

T 330.433.2680  
F 330.433.2694

December 20, 2018  
Project C170352.66

United States Fish and Wildlife Service  
Ohio Ecological Services Field Office  
4625 Morse Road, Suite 104  
Columbus, Ohio 43230

**American Electric Power  
Reno Hard Tap Removal Project  
Request for Technical Assistance Regarding Threatened  
and Endangered Species and Critical Habitat  
Washington County, Ohio**

Dear Mr. Everson:

GAI Consultants, Inc. (GAI), on behalf of American Electric Power (AEP), is requesting information regarding state- and federally-listed threatened and endangered species in the vicinity of the Reno Hard Tap Removal Project (Project) in Washington County, Ohio. As part of this request, please also provide information specific to any threatened and endangered bats. GAI is also requesting the locations of any known golden or bald eagle nests known in the area.

The proposed Project involves removing an existing hard tap and installing a new 138kV two way phase switch. The switch is proposed to be installed to the east of the existing Reno Station.

The study area for the Project is shown on the attached map (Figure 1). The habitat within the study area consists of maintained transmission line right-of-way, agriculture field, and maintained lawn. Project shapefiles have been included to aid in your review.

GAI and AEP thank you in advance for your assistance. Please contact me at 234.203.0773 or via email at [r.zack@gaiconsultants.com](mailto:r.zack@gaiconsultants.com) if you have any questions or require further information.

Sincerely,  
**GAI Consultants, Inc.**

A handwritten signature in black ink that reads 'Rita Zack'.

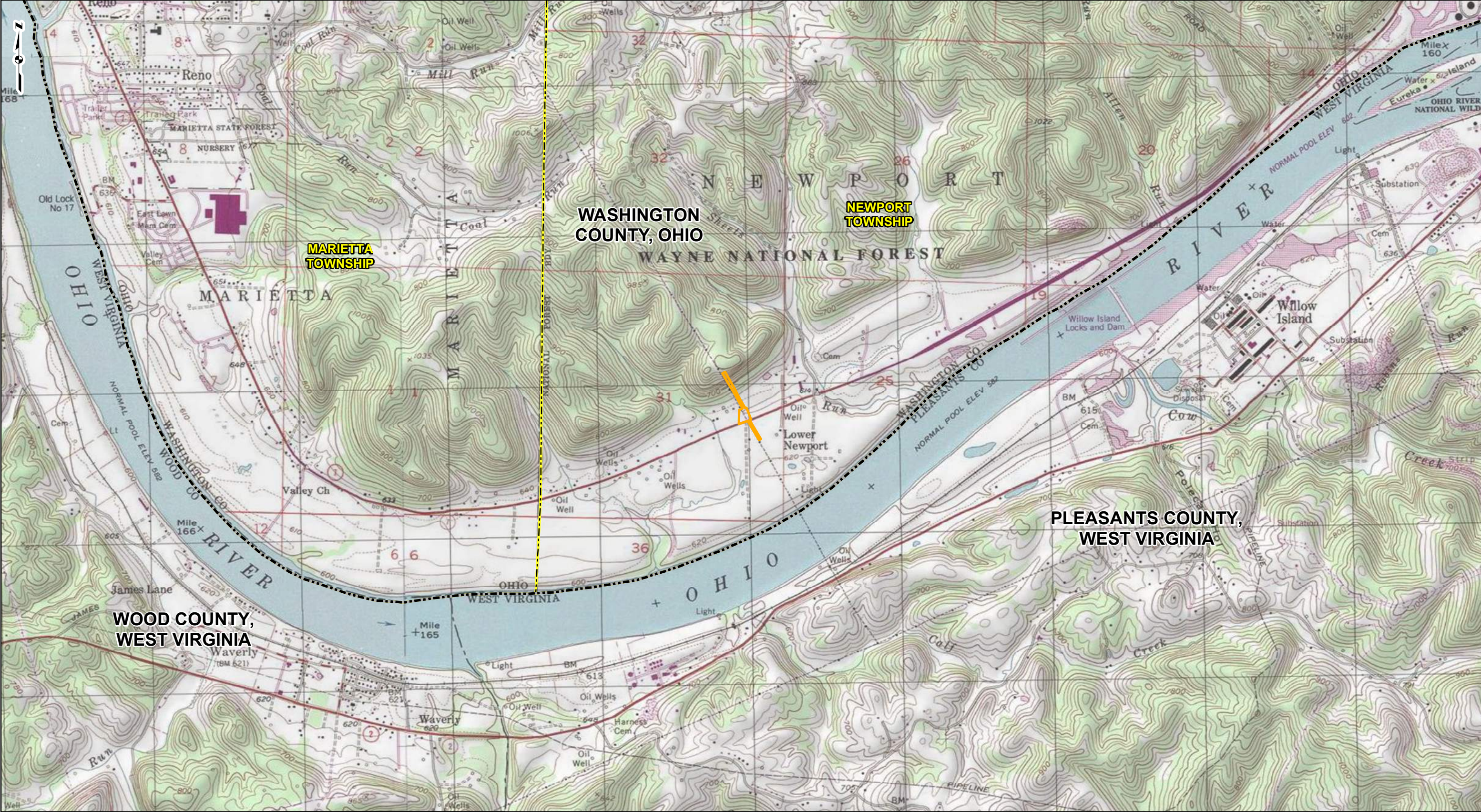
Rita E. Zack  
Project Environmental Specialist

REZ/djz

Attachments: Attachment 1 (Project Location Map)  
Project Shapefiles

**ATTACHMENT 1**  
**PROJECT LOCATION MAP**





PROJECT LOCATION



WASHINGTON COUNTY, OHIO

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: BELMONT (1979) AND MARIETTA (1978), OHIO, VALLEY MILLS (1977) AND WILLOW ISLAND (1979), WEST VIRGINIA, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND USGS, ACCESSED 12/2018.

LEGEND

- Study Area
- County Boundary
- Township Boundary

0 1,000 2,000 4,000 Feet

PROJECT LOCATION MAP



RENO HARD TAP  
REMOVAL PROJECT  
AMERICAN ELECTRIC POWER



DRAWN BY: JTH  
CHECKED:

DATE: 12/17/2018  
APPROVED:





# Ohio Department of Natural Resources

MIKE DEWINE, GOVERNOR

MARY MERTZ, DIRECTOR

**Office of Real Estate**  
*Paul R. Baldridge, Chief*  
2045 Morse Road – Bldg. E-2  
Columbus, OH 43229  
Phone: (614) 265-6649  
Fax: (614) 267-4764

January 25, 2019

Rita Zack  
GAI Consultants, Inc.  
3720 Dressler Road NW  
Canton, Ohio 44718

**Re:** 18-1319; Reno Hard Tap Removal Project

**Project:** The proposed project involves removing an existing hard tap and installing a new 138kV two-way phase switch east of the existing Reno Station.

**Location:** The proposed project is located in Newport Township, Washington County, 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 records at or within a one-mile radius of the project area.

Floodplain forest plant community  
Butterfly (*Ellipsaria lineolata*), E  
Threehorn wartyback (*Obliquaria reflexa*), T  
Deertoe (*Truncilla truncata*), SC  
Tippecanoe darter (*Etheostoma tippecanoe*), T  
Ohio lamprey (*Ichthyomyzon bdellium*), E  
Channel darter (*Percina copelandi*), T  
River darter (*Percina shumardi*), T  
Newport Township Woods Conservation Site  
Wayne National Forest – US Forest Service

The review was performed on the project area you specified in your 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.

A Conservation Site is an area deemed by the Natural Heritage Database to be a high quality natural area not currently under formal protection. It may, for example, harbor one or more rare species, be an outstanding example of a plant community or have geologically significant features, etc. These sites may be in private ownership and our listing of them does not imply permission for access.

Statuses are defined as: E = state endangered; T = state threatened; P = state potentially threatened; SC = state species of concern; SI = state special interest; A = species recently added to state inventory, status not yet determined; X = presumed extirpated in Ohio; FE = federal endangered, FT = federal threatened, FSC = federal species of concern, FC = federal candidate species.

**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 project is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species. The following species of trees have relatively high value as potential Indiana bat roost trees to include: shagbark hickory (*Carya ovata*), shellbark hickory (*Carya laciniosa*), bitternut hickory (*Carya cordiformis*), black ash (*Fraxinus nigra*), green ash (*Fraxinus pennsylvanica*), white ash (*Fraxinus americana*), shingle oak (*Quercus imbricaria*), northern red oak (*Quercus rubra*), slippery elm (*Ulmus rubra*), American elm (*Ulmus americana*), eastern cottonwood (*Populus deltoides*), silver maple (*Acer saccharinum*), sassafras (*Sassafras albidum*), post oak (*Quercus stellata*), and white oak (*Quercus alba*). Indiana bat roost trees consists of trees that include dead and dying trees with exfoliating bark, crevices, or cavities in upland areas or riparian corridors and living trees with exfoliating bark, cavities, or hollow areas formed from broken branches or tops. However, Indiana bats are also dependent on the forest structure surrounding roost trees. 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 the summer months, the DOW recommends a net survey be conducted between June 1 and August 15, prior to any cutting. Net surveys should incorporate either nine net nights per square 0.5 kilometer of project area, or four net nights per kilometer for linear projects. If no tree removal is proposed, this project is not likely to impact this species.

The project is within the range of the sheepsnout (*Plethobasus cyphus*), a state endangered and federally endangered mussel, the fanshell (*Cyprogenia stegaria*), a state endangered and federally endangered mussel, the pink mucket (*Lampsilis orbiculata*), a state endangered and federally endangered mussel, the snuffbox (*Epioblasma triquetra*), a state endangered and federally endangered mussel, the washboard (*Megaloniais nervosa*), a state endangered mussel, the butterfly (*Ellipsaria lineolata*), a state endangered mussel, the elephant-ear (*Elliptio crassidens*), a state endangered mussel, the long-solid (*Fusconaia maculata maculata*), a state endangered mussel, the sharp-ridged pocketbook (*Lampsilis ovata*), a state endangered mussel, the Ohio pigtoe (*Pleurobema cordatum*), a state endangered mussel, the pyramid pigtoe (*Pleurobema rubrum*), a state endangered mussel, the monkeyface (*Quadrula metanevra*), a state endangered

mussel, the black sandshell (*Ligumia recta*), a state threatened mussel, the threehorn wartyback (*Obliquaria reflexa*), a state threatened mussel, and the fawnsfoot (*Truncilla donaciformis*), a state threatened mussel. Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact these species.

The project is within the range of the blue sucker (*Cycoreptus elongatus*), a state endangered fish and a Federal species of concern, the western banded killifish (*Fundulus diaphanus menona*), a state endangered fish, the northern madtom (*Noturus stigmosus*), a state endangered fish, the Ohio lamprey (*Ichthyomyzon bdellium*), a state endangered fish, the paddlefish (*Polyodon spathula*) a state threatened fish, the mountain madtom (*Noturus eleutherus*), a state threatened fish, the river darter (*Percina shumardi*), a state threatened fish, the mountain madtom (*Noturus eleutherus*), a state threatened fish, the channel darter (*Percina copelandi*), a state threatened fish, and the Tippecanoe darter (*Etheostoma tippecanoe*), a state threatened fish. Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact these species.

The project is within the range of the timber rattlesnake (*Crotalus horridus horridus*), a state endangered species, and a federal species of concern. The timber rattlesnake is a woodland species, utilizing dry slopes and rocky outcrops. In addition to using wooded areas, the timber rattlesnake utilizes sunlit gaps in the canopy for basking and deep rock crevices for overwintering. Due to the location, the type of habitat present at the project site, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*), a state endangered species and a federal species of concern. Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size to provide suitable habitat, this project is not likely to impact this species.

The project is within the range of the eastern spadefoot toad (*Scaphiopus holbrookii*), a state endangered species. This species is found in areas of sandy soils that are associated with river valleys. Breeding habitats may include flooded agricultural fields or other water holding depressions. Due to the location, the habitat at the project site and within the vicinity of the project area, and the type of work proposed, 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 U.S. 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](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 Sarah Tebbe, Environmental Specialist, at (614) 265-6397 or [Sarah.Tebbe@dnr.state.oh.us](mailto:Sarah.Tebbe@dnr.state.oh.us) if you have questions about these comments or need additional information.

John Kessler  
Environmental Services Administrator



Canton Office  
3720 Dressler Road Northwest  
Canton, Ohio 44718

T 330.433.2680  
F 330.433.2694

December 20, 2018  
Project C170352.66

Environmental Review Staff  
Ohio Department of Natural Resources  
Division of Wildlife - Ohio Natural Heritage Program  
2045 Morse Road, Building G-3  
Columbus, Ohio 43229-6693

**American Electric Power  
Reno Hard Tap Removal Project  
Request for Technical Assistance Regarding Threatened  
and Endangered Species and Critical Habitat  
Washington County, Ohio**

Dear Staff:

GAI Consultants, Inc. (GAI), on behalf of American Electric Power (AEP), is requesting information regarding state- and federally-listed threatened and endangered species in the vicinity of the Reno Hard Tap Removal Project (Project) in Washington County, Ohio. As part of this request, please also provide information specific to any threatened and endangered bats. GAI is also requesting the locations of any known golden or bald eagle nests known in the area.

The proposed Project involves removing an existing hard tap and installing a new 138kV two way phase switch. The switch is proposed to be installed to the east of the existing Reno Station.

The study area for the Project is shown on the attached map (Figure 1). The habitat within the study area consists of maintained transmission line right-of-way, agriculture field, and maintained lawn. Project shapefiles have been included to aid in your review.

GAI and AEP thank you in advance for your assistance. Please contact me at 234.203.0773 or via email at [r.zack@gaiconsultants.com](mailto:r.zack@gaiconsultants.com) if you have any questions or require further information.

Sincerely,

**GAI Consultants, Inc.**

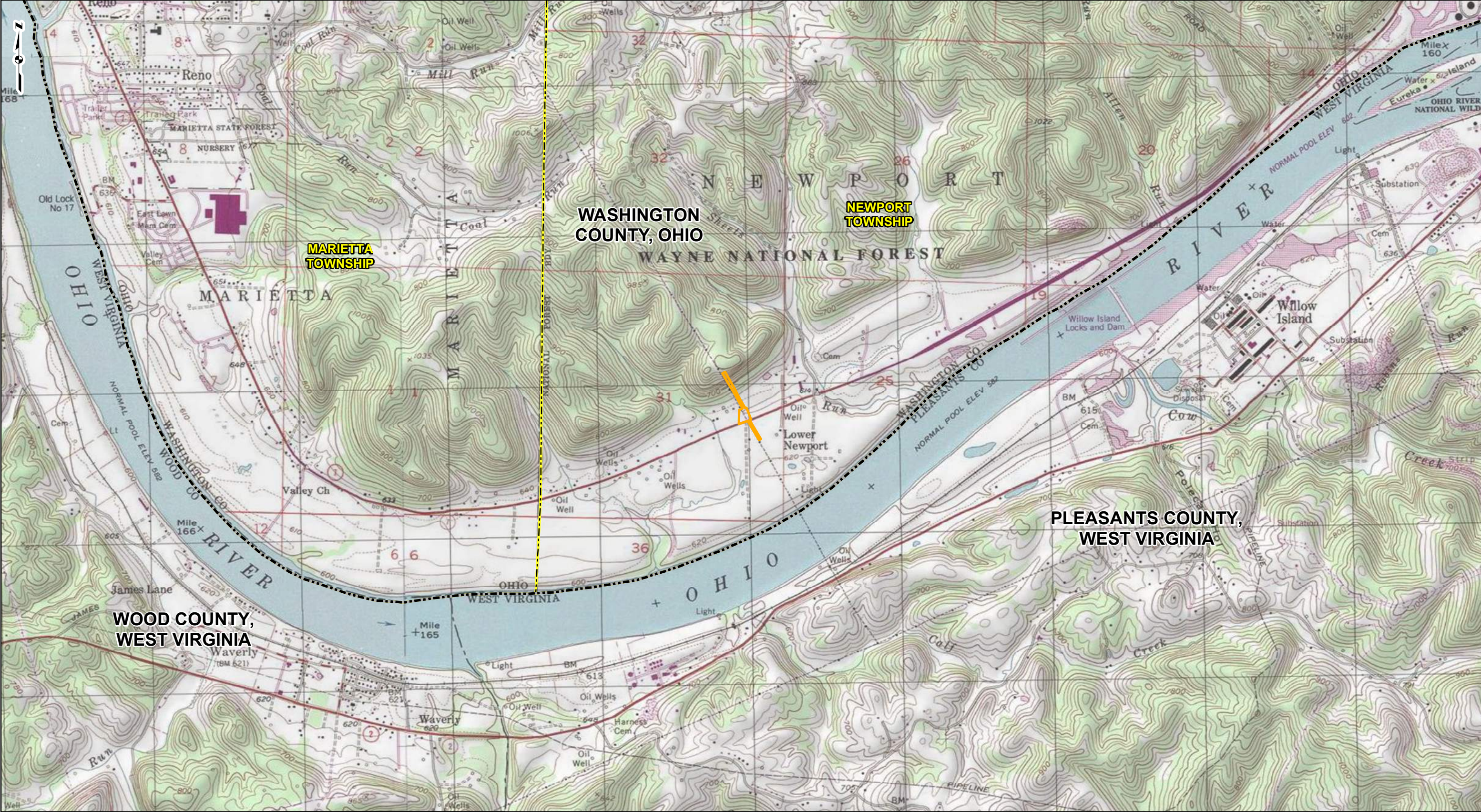
Rita E. Zack  
Project Environmental Specialist

REZ/djz

Attachments: Attachment 1 (Project Location Map)  
Project Shapefiles

**ATTACHMENT 1**  
**PROJECT LOCATION MAP**








PROJECT LOCATION



WASHINGTON COUNTY, OHIO



REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: BELMONT (1979) AND MARIETTA (1978), OHIO, VALLEY MILLS (1977) AND WILLOW ISLAND (1979), WEST VIRGINIA, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND USGS, ACCESSED 12/2018.

**LEGEND**

-  Study Area
-  County Boundary
-  Township Boundary

0 1,000 2,000 4,000 Feet

**PROJECT LOCATION MAP**



**RENO HARD TAP  
REMOVAL PROJECT  
AMERICAN ELECTRIC POWER**

DRAWN BY: JTH  
CHECKED:

DATE: 12/17/2018  
APPROVED:



## Appendix C      Agency Coordination Letters

**Rita Zack**

---

**From:** Finfera, Jennifer <jennifer\_finfera@fws.gov>  
**Sent:** Friday, December 21, 2018 1:06 PM  
**To:** Rita Zack  
**Subject:** AEP Reno Hard Tap Removal Project, Washington County, Ohio

TAILS# 03E15000-2019-TA-0455

Re: AEP Reno Hard Tap Removal Project, Washington County, Ohio

Dear Ms. Zack,

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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 ESA, and are consistent with the intent of the National Environmental Policy Act of 1969 and the Service's Mitigation Policy. This letter provides technical assistance only and does not serve as a completed section 7 consultation document.

If you have questions please contact me.

Sincerely,

Jenny Finfera

--

Jenny Finfera  
Wildlife Biologist  
Ecological Services  
4625 Morse Road, Suite 104  
Columbus, Ohio 43230

Phone: 614-416-8993 ext.13  
Fax: 614-416-8994



Canton Office  
3720 Dressler Road Northwest  
Canton, Ohio 44718

T 330.433.2680  
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December 20, 2018  
Project C170352.66

United States Fish and Wildlife Service  
Ohio Ecological Services Field Office  
4625 Morse Road, Suite 104  
Columbus, Ohio 43230

**American Electric Power  
Reno Hard Tap Removal Project  
Request for Technical Assistance Regarding Threatened  
and Endangered Species and Critical Habitat  
Washington County, Ohio**

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The proposed Project involves removing an existing hard tap and installing a new 138kV two way phase switch. The switch is proposed to be installed to the east of the existing Reno Station.

The study area for the Project is shown on the attached map (Figure 1). The habitat within the study area consists of maintained transmission line right-of-way, agriculture field, and maintained lawn. Project shapefiles have been included to aid in your review.

GAI and AEP thank you in advance for your assistance. Please contact me at 234.203.0773 or via email at [r.zack@gaiconsultants.com](mailto:r.zack@gaiconsultants.com) if you have any questions or require further information.

Sincerely,  
**GAI Consultants, Inc.**

A handwritten signature in black ink that reads 'Rita Zack'.

Rita E. Zack  
Project Environmental Specialist

REZ/djz

Attachments: Attachment 1 (Project Location Map)  
Project Shapefiles





January 3, 2019

In reply, please refer to:  
2018-WAS-43529

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

RE: Reno Hard Tap Removal Project – Newport Township, Washington County, Ohio

Dear Mr. Weller:

This is in response to correspondence, received on December 5, 2018, regarding the above-referenced project. The comments of Ohio's 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 4906-4). The comments of Ohio's 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]).

Archaeological and architectural investigations have been completed and reviewed for the Reno Hard Tap Removal Project in Newport Township, Washington County, Ohio. The scope of work for this project involves the removal of a hard tap line and a slight realignment of the existing Will Island-Mill Creek 138kV electric line.

The following comments pertain to the *Phase I Archaeological Investigations for the Reno Hard Tap Removal Project (part of Will Island-Mill Creek Electric Line) in Newport Township, Washington County, Ohio* by Weller & Associated, Inc. (2018).

A literature review, visual inspection, and shovel test unit excavation were completed as part of the investigations. The current investigations did not result in the identification of any cultural materials. No additional investigation is necessary.

The following comments pertain to the *History/Architecture Investigations for the Reno Hard Tap Removal Project (part of Will Island-Mill Creek Electric Line) in Newport Township, Washington County, Ohio* by Weller & Associates, Inc. (2018).

A literature review and field survey were completed as part of the investigations. Five properties fifty years of age or older, including two previously recorded Ohio Historic Inventory (OHI) properties (WAS0213418 and WAS0213518), were identified within the 1,000' study area.

It is Weller's recommendation that the identified properties are not eligible for inclusion in the National Register of Historic Places due to historical and architectural insignificance. Our office agrees with Weller's recommendations of eligibility.

January 3, 2019  
Ryan J. Weller  
Page 2

Based on the information provided, we agree the project will have no effect on historic properties. No further coordination with this office is necessary, unless the project changes or new/additional historic properties are discovered during implementation of the project. In such a situation, our office should be contacted. If you have any questions, please contact me at (614) 298-2000 or [jwilliams@ohiohistory.org](mailto:jwilliams@ohiohistory.org). Thank you for your cooperation.

Sincerely,



Joy Williams, Project Reviews Manager  
Resource Protection and Review

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