AMERICAN TRANSMISSION SYSTEMS, INCORPORATED
A FIRSTENERGY COMPANY

LETTER OF NOTIFICATION

BAYSHORE-DAVIS BESSE 345 KV TRANSMISSION LINE PARTIAL REBUILD PROJECT
OPSB CASE NO.: 26-0449-EL-BLN

November 18, 2026

American Transmission Systems, Incorporated
76 South Main Street
Akron, Ohio 44308

LETTER OF NOTIFICATION
BAYSHORE-DAVIS BESSE 345 KV TRANSMISSION LINE
PARTIAL REBUILD PROJECT
OPSB CASE NO. 26-0449-EL-BLN

The following information is being provided in accordance with Chapter 4906-6 of the Ohio Administrative Code ("Adm.Code") for the application and review of Accelerated Certificate Applications. Based upon the requirements found in Appendix A to Adm.Code 4906-1-01, this Project qualifies for submittal to the Ohio Power Siting Board ("OPSB") as a Letter of Notification application.

4906-6-05: ACCELERATED APPLICATION REQUIREMENTS

4906-6-05: Name and Reference Number

Name: Bayshore-Davis Besse 345 kV Transmission Line Partial Rebuild Project ("Project")

Reference Number: 3013

4906-6-05 (B)(1): Brief Description of the Project

In this Project, American Transmission Systems, Incorporated ("ATSI"), a FirstEnergy company, proposes to replace six (6) existing lattice towers and seventeen (17) existing H-Frame wood structures, between Structure No. 9 and Structure No. 25. A total of twenty-three (23) existing structures will be replaced with seventeen (17) new steel monopole structures on concrete foundations on an approximately 3.4-mile section of the existing 20.75-mile Bayshore-Davis Besse 345 kV Transmission Line. Twin bundled 954 kcmil 54/7 aluminum steel supported ("ACSS") conductor and two 7#6 alumoweld static wires will be installed from Structure No. 9 to Structure No. 25. The structures will be designed for double circuit configuration, but only one circuit will be initially installed on the southern side of the structures.

The Project is in Carroll Township, Ottawa County, Ohio. The general location of the proposed Project is shown **Exhibit 1**, a partial copy of a United States Geologic Survey

("USGS") Topographic Map, Ottawa County, Ohio Quad Map. **Exhibit 2** provides a partial copy of ESRI aerial imagery. The general layout is shown in **Exhibit 3**.

4906-6-05 (B)(1): Letter of Notification Requirement

The Project meets the requirements for a Letter of Notification application because the Project is within the types of projects defined by Item (2)(b) of the Application Requirement Matrix for Electric Power Transmission Lines, Appendix A of Adm. Code 4906-1-01. This item states:

> *(2) Adding new circuits on existing structures designed for multiple circuit use, replacing conductors on existing structures with larger or bundled conductors, adding structures to an existing line or replacing structures with a different type of structure, for a distance of:*
>
> *(b) More than two miles.*

The proposed Project is within the requirements of Item (2)(b) as it involves replacing twenty-three (23) structures with a different type of structure and replacing conductors with a different type of conductor, on the same centerline as the existing transmission line within the existing right-of-way for a distance greater than two miles.

4906-6-05 (B)(2): Need for the Project

The Project will rebuild the existing Bayshore–Davis Besse 345 kV Transmission Line due to age and deterioration.

The need to rebuild the wood pole section (approx. 3.2 miles) of the Bayshore-Davis Besse 345 kV Transmission Line is primarily due to the condition of the wood pole structures. This circuit consists of 93 lattice towers, and 17 two-pole wood H frame structures (total of 34 wood poles). The line was originally constructed between 1970 and 1971 as all lattice towers. In 1998, several towers were replaced by wood pole H-frame structures due to storm damage. Although these poles are only 27 years old, they are showing significant

degradation at the ground line. A wood pole inspection at ground line was completed in 2023 and found that 32 poles (94%) had measurable shell rot, while 8 poles (24%) had internal or external pockets of rot. Additionally, 22 poles (65%) were in the early stages of decay. One other project driver is line criticality. Evaluating all the transmission lines in Toledo Edison territory, this line ranks 4th in criticality because it is one of the transmission lines out of the Davis Besse Nuclear Power Plant ("Davis Besse"). Therefore, given the condition of this section and criticality of this line, ATSI plans to rebuild the wood pole section using steel pole structures on foundations.

Additionally, this line was originally constructed as double circuit line (345 kV/138 kV). At the time of the storm failure, the second circuit was removed from service due to the configuration of the wood pole section (single circuit H-frames). By replacing these H-frames with double circuit poles, it now restores the possibility of an additional 138 kV or 345 kV circuit out of Davis Besse.

The Project need for the Bayshore-David Besse 345 kV Transmission Line Rebuild was presented at the April 4, 2024, SRRTEP-Western Meeting, and the solution was presented at the July 8, 2025, SRRTEP-Western Meeting. PJM assigned supplemental number s3716.1 for the Project. The PJM SRRTEP-Western presentation slides are included as **Exhibit 4** and provide additional details of the Project drivers.

Consistent with Ohio Substitute House Bill 15, effective in August 2025, ATSI considered the use of advanced technologies on the Project. Some examples of advanced technologies that ATSI considers while proposing reliability enhancement projects are the use of Dynamic Line Rating technologies and/or the use of advanced conductors. Dynamic Line Rating technologies are the use of software and hardware to determine the thermal limits of a transmission line in real time based on rating methodologies and ambient conditions within a given area, which can either increase or decrease the thermal ratings of the transmission line. These advanced conductors allow for increased capacity on a given transmission line due to the reduced sagging of the transmission line at higher temperatures. ATSI proposes to reconductor the transmission line from the existing 954

kcmil 45/7 Aluminum Conductor Steel Reinforced ("ACSR") to 954 kcmil 54/7 Aluminum Conductor Steel Supported ("ACSS"). ACSS is a high-temperature, sag-resistant overhead conductor consisting of annealed aluminum wires stranded around a steel core. The ACSS conductor provides for increased current capacity over the existing ACSR conductor.

4906-6-05 (B)(3): Location of the Project Relative to Existing or Proposed Lines

The location of the Project relative to existing or proposed lines is shown in the ATSI Transmission Network Map, included as part of the confidential portion of the FirstEnergy Corp. 2026 Long-Term Forecast Report. This map was submitted to the Public Utilities Commission of Ohio in Case No. 26-0504-EL-FOR under Adm.Code 4901:5-5:04 (C)(2)(b). The map is incorporated by reference only. The Bayshore-Davis Besse 345 kV Transmission Line Partial Rebuild Project is referenced and included on Page 114 in the Long Term Forecast Report ("LTFR") filed in 2026. The general location and layout of the Project area is shown in **Exhibits 1** and **2**.

4906-6-05 (B)(4): Alternatives Considered

The only viable alternative is to inspect and maintain the existing system configuration as needed. Because of the condition of the line, maintaining it would elevate the risk of customer outages at Bayshore, increase risk of outages at Davis Besse under maintenance conditions and increase the potential loss of a critical transmission line out of David Besse.

4906-6-05 (B)(5): Public Information Program

ATSI will publish notice of the Project in the Sandusky Register, which covers the entire Project area including Carroll Township in Ottawa County, within 7 days of filing this Letter of Notification application. The notice will comply with Adm.Code 4906-6-08(A)(1)-(6). In addition to the public notice, ATSI will mail letters in accordance with Adm.Code 4906-6-08(B) explaining the Project to affected property owners and tenants within and contiguous to the planned Project area. ATSI has also established a Project website:

https://www.firstenergycorp.com/about/transmission_projects/ohio.html. ATSI's Local Engagement Specialist will advise local officials of features and the status of the proposed Project, as necessary.

Finally, during all phases of this Project, ATSI will maintain the transmission projects hotline at 1-888-311-4737 and respond to questions submitted via email at: transmissionprojects@firstenergycorp.com. The public may use either the hotline or email to ask questions or leave comments on the Project for ATSI.

4906-6-05 (B)(6): Construction Schedule

The construction schedule for this Project is expected to begin as early as March 1, 2027, and to be completed by April 21, 2028.

4906-6-05 (B)(7): Area Map

Exhibit 1 depicts the general location of the Project. This Exhibit provides a partial copy of the United States Geologic Survey, Ottawa County OH, Quad Map. **Exhibit 2** is a copy of ESRI aerial imagery of the Project area.

4906-6-05 (B)(8): Property Owner List

The Project will be located along the same centerline and within the same right-of-way as the existing line. No new easements or right-of-way will need to be acquired. **Exhibit 5** contains a list of properties affected by the Project.

4906-6-05 (B)(9): TECHNICAL FEATURES OF THE PROJECT

4906-6-05 (B)(9)(a): Operating Characteristics

The transmission line construction will have the following characteristics:

Voltage:	345 kV
Conductors:	954 kcmil 54/7 ACSS twin bundled
Static Wire:	7#6Alumoweld

Insulators: Porcelain/Glass

ROW Width: 150’

Structure Types: **Exhibit 6**: 345 kV Steel Pole DC Suspension Structure, (Qty. 13)
Exhibit 7: 345 kV Steel Pole DC Deadend Structure, (Qty. 4)

4906-6-05 (B)(9)(b): Electric and Magnetic Fields

There is one (1) occupied residence or institution within 100 feet from the edge of right-of-way containing the Bayshore-Davis Besse 345 kV Transmission Line. The closest occupied residence or institution is approximately 57 feet from the edge of the right-of-way containing the proposed Project. Therefore, Electric and Magnetic Field (“EMF”) calculations are provided below.

4906-6-05(B)(9)(b)(i): Calculated Electric and Magnetic Fields Strength Levels

The Project is situated within a 150-foot-wide transmission line corridor.

Table 1 itemizes the line loading of the Bayshore-Davis Besse 345 kV Transmission Line. The normal line loading represents FirstEnergy’s peak system load for the transmission lines. The emergency line loading represents the maximum line loading under contingency operation. The winter rating is based on the continuous maximum conductor rating (“MCR”) of the circuits.

Table 1: Transmission Line Loading

Line Name	Normal Loading Amps	Emergency Loading Amps	Winter Rating Amps
Bayshore-Davis Besse 345 kV Transmission Line	774	879.4	3723.6

Table 2 provides an approximation of the magnetic and electric fields strengths within the right-of-way containing the Bayshore-Davis Besse 345 kV Transmission Line for the structural configuration found in the Project. The configuration is tangent structure to tangent structure. The configuration is calculated in a 150-foot-wide right-of-way average. The calculations provide an approximation of the electric and magnetic fields levels based on specific assumptions utilizing the EPRI EMF Workstation 2015 program software. This

program software assumes the input transmission line configuration is located on flat terrain. Also, a balanced, three-phase circuit loading is assumed for the transmission circuit. The model utilizes the normal, emergency, and winter rating of the transmission lines.

Table 2: EMF Calculations for Bayshore-Davis Besse 345 kV Transmission Line

Bayshore-Davis Besse 345 kV Transmission Line: Tangent Structure to Tangent Structure		Electric Field (kV/m)	Magnetic Field (mG)
Normal Loading	Under Lowest Conductors	1.27	21.17
	At Right-of-Way Edges	0.16 / 0.74	12.42 / 22.25
Emergency Loading	Under Lowest Conductors	1.27	30.87
	At Right-of-Way Edges	0.16 / 0.74	14.11 / 25.12
Winter Rating	Under Lowest Conductors	1.27	130.72
	At Right-of-Way Edges	0.16 / 0.74	59.74 / 105.84

4906-6-05(B)(9)(b)(ii): Alternative Design Consideration for Electric and Magnetic Fields

The strength of EMFs can potentially be reduced by installing the transmission line conductors in a compact configuration and, for multiple circuit transmission lines, by selecting conductor phasing that reduces the field strengths. ATSI designs its facilities according to the requirements of the National Electrical Safety Code ("NESC"). The pole heights and configuration were chosen based on NESC specifications, engineering parameters, and cost. In this Project, ATSI proposes to replace 345 kV transmission lines primarily on lattice tower and single-circuit H-frame structures with a more compact design of 345 kV double circuit steel pole tangent structures supported on suspension insulators.

4906-6-05 (B)(9)(c): Estimated Cost

The estimated cost for the proposed Project is $19,716,000. Although not statutorily required for approval, at the request of OPSB Staff, the estimated cost is a Class 3 estimate and ATSI confirms that ATSI's costs will be captured and allocated via FERC formula rates for the ATSI Transmission Zone, Attachment H-21 in the PJM OATT.

4906-6-05 (B)(10): SOCIAL AND ECOLOGICAL IMPACTS

4906-6-05 (B)(10)(a): Land Uses

The Project is in Carroll Township, Ottawa County, Ohio. The main land use around the Project area is zoned as farmland. Because the proposed Project involves reconductoring the existing transmission line and replacing twenty-three (23) structures within the existing transmission corridor with seventeen (17) structures, no significant changes or impacts to the current land use are anticipated. Impacts are reduced by reducing the number of structures and using steel monopoles, which have a smaller footprint than lattice towers and H-frame wood structures.

4906-6-05 (B)(10)(b): Agricultural Land

Agricultural land exists within the Project's Area of Potential Effect ("APE"). Also, lands enrolled in an Agricultural District exist within the Project's Area of Potential Effect ("APE"). Agricultural District enrollment information is included in **Exhibit 5**.

4906-6-05 (B)(10)(c): Archaeological or Cultural Resources

As part of the investigation for this Letter of Notification application, TRC Companies, Inc. ('TRC') submitted a request to the Ohio Historic Preservation Office ("SHPO") on behalf of ATSI to review the Project Study Area (Area of Potential Effects or "APE") within a one (1)-mile search radius. SHPO responded on May 11, 2026, with a Phase I Archaeological Survey request, and in response to the request, in July 2026 TRC conducted Phase I Archaeological Survey and provided results to SHPO. The results of the field investigations did not identify any below ground or above-ground resources within the APE. On August 28, 2026, SHPO concurred that as proposed, the Project will have no effect on historic properties and that no further coordination is required for this Project. SHPO's responses are attached as **Exhibit 8**.

The SHPO database also includes the Ohio Historic Inventory ("OHI"), the Ohio Archaeological Inventory ("OAI"), previous cultural resource surveys, and the Ohio Genealogical Society ("OGS") cemetery inventory. The SHPO database includes all Ohio

listings on the National Register of Historic Places ("NRHP"), including districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture. The Online Mapping System review revealed that there are no NRHP-listed or eligible above-ground historic resources or OHC Determination of Eligibility ("DOE") recorded within one (1)-mi of the proposed Project.

Five (5) archaeological surveys have been conducted within one (1)-mi of the proposed Project. None of the surveys overlap with the Project Study Area. Twenty-two (22) recorded archaeological sites are mapped within one (1)-mile, all of which are within previously surveyed locations. The sites include sixteen (16) precontact sites, three (3) historic sites, and three (3) multi-component precontact and historic sites. Several of the precontact and precontact component sites have yielded diagnostic artifacts that affiliate the sites to the Early Archaic, Late Woodland, and Late Prehistoric Periods. The historic and historic component sites date to the nineteenth through twentieth centuries. The nearest of these sites are situated 0.38 mi to the north. In addition, three (3) newly recorded sites, denoted as OAI Submissions, are recorded 0.21 mi, 0.34 mi, and 0.42 mi to the north of the Project Study Area. The full recording and documentation of these resources has not yet been completed.

The Project Study Area consists of existing, maintained, utility right-of-way ("ROW") located within areas of agricultural and residential land use and the floodplain of Turtle Creek. Currently, as proposed, no new tree clearing is anticipated within or outside the Project Study Area. The proposed Project will not have any adverse effects on known historic properties.

The Project will not impact the viewshed of any potential historic properties. The new structures will be of a similar type and height and will therefore not create new visual impacts. All work, including ground disturbance locations, will be within the existing, disturbed alignment.

4906-6-05 (B)(10)(d): Local, State, and Federal Requirements

Coordination with the Ottawa County Engineer's Office will be completed to obtain necessary ROW and driveway permits for work within the ROW along county roads and for the installation of temporary construction entrances along county roads. Moving permits are required for vehicle operations that exceed weight limits on county roads. Ottawa County administers road permits for work along roadways within Carroll Township. Coordination with the Ohio Department of Transportation ("ODOT") will be completed to obtain necessary permits for work within the state route ROW. If more than one (1) acre of earth disturbance is proposed in the Project scope, then submittal of a Notice of Intent (NOI) application to the Ohio Environmental Protection Agency ("EPA") will be required for coverage under the general construction stormwater permit (OHC000006) and the Storm Water Pollution Prevention Plan ("SWPPP"). The Project is not within the Ottawa County Municipal Separate Storm Sewer System (MS4). Therefore, it does not require a SWPPP review. The Project scope is proposed within a 100-year FEMA floodplain; however, a Floodplain Hazard Development Permit is not required in Carroll Township, Ottawa County, Ohio. The Project Study Area is within an unincorporated area within Ottawa County; therefore, coordination with the Ottawa County Regional Planning Commission will be completed. All permitting and/or coordination necessary to comply with local, state, and federal agencies with jurisdiction regarding this Project will be completed prior to the commencement of construction. A list of potential government agency requirements is provided in **Table 3** below.

Table 3. List of Government Agency Requirements

Agency	Requirement
Ohio EPA	General NPDES Construction Storm Water Permit OHC000006
ODOT	ROW Permits
Ottawa County Engineer's Office	ROW Permits Driveway Permits Moving Permits
Ottawa County Regional Planning Commission	Floodplain Hazard Development Permit

4906-6-05 (B)(10)(e): Endangered, Threatened, and Rare Species Investigation

As part of the investigation, ATSI retained TRC to conduct necessary surveys. TRC submitted a request to the Ohio Department of Natural Resources ("ODNR") Office of Real Estate to conduct an Environmental Review. As part of the Environmental Review, the ODNR Office of Real Estate conducted a search of the ODNR Division of Wildlife's Natural Heritage Database to research the presence of any endangered, threatened, or rare species within one (1) mile of the Project Study Area. The ODNR's Office of Real Estate's response on November 21, 2024, indicated that there are twelve (12) records of state listed species within a one (1) mile radius of the Project Study Area. The response noted that of these listed species, the Trumpeter Swan is recorded within the boundaries of the specified Project Study Area. Additionally, the Project is within the range of twenty-one (21) state and/or federally listed animal species. A copy of ODNR's Office of Real Estate's response is included as **Exhibit 9**.

In addition, the ODNR-Department of Water ("DOW") stated that the Project is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species; the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally endangered species; the little brown bat (*Myotis lucifugus*), a state endangered species; and the tricolored bat (*Perimyotis subflavus*), a state endangered and federally proposed endangered species. These bat species predominantly roost in trees behind loose, exfoliating bark, in crevices, and cavities, or in the leaves. These species are dependent on the forest structure surrounding the roost trees. The DOW recommended a desktop bat hibernaculum assessment be completed for the Project, which TRC completed for ATSI and submitted to ODNR for concurrence on December 13, 2024. ODNR responded on December 17, 2024, attached as **Exhibit 9A**, concurring that no caves, cliffs, or mine openings occur in the Project Area, therefore, the Project is not likely to impact hibernating bats. In assessing compliance with Nationwide Permit General Condition 18, TRC determined that tree clearing is not anticipated within the Project Study Area. If minor tree clearing is needed as a result of this Project, it will take place within the United States Fish and Wildlife Service ("USFWS") recommended tree clearing dates (October 1 – March

31); therefore, no impacts to bat species are anticipated as a result of the construction of this Project.

The Project is within the range of the following aquatic species; the state threatened eastern pondmussel (*Ligumia nasuta*) and salamander mussel (*Simpsonaias ambigua*); the state endangered lake sturgeon (*Acipenser fulvescens*), pugnose minnow (*Opsopoeodus emiliae*), cisco (*Coregonus artedi*), spotted gar (*Lepisosteus oculatus*), longnose sucker (*Catostomus catostomus*), and western banded killifish (*Fundulus diaphanus menona*); and the state threatened American eel (*Anguilla rostrata*), greater redhorse (*Moxostoma valenciennesi*), and channel darter (*Percina copelandi*). The DOW recommends no in-water work in perennial streams from March 15 to June 30 to reduce impacts to indigenous aquatic species and their habitat. Since no in-water work is proposed in a perennial stream, this Project will not impact these or other aquatic species.

The Project is within the range of the black-crowned night-heron (*Nycticorax nycticorax*), a state-threatened bird. Night-herons are so named because they are nocturnal, conducting most of their foraging in the evening hours or at night, and roost in trees near wetlands and waterbodies during the day. Night herons are migratory and are typically found in Ohio from April 1 through December 1 but can be found in more urbanized areas with reliable food sources year-round. Black-crowned night-herons primarily forage in wetlands and other shallow aquatic habitats, and roost in trees nearby. These night-herons nest in small trees, saplings, shrubs, or sometimes on the ground, near bodies of water and wetlands. The DOW recommends that if this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. Construction will be avoided during the nesting period dates; therefore, the Project is not likely to impact this species.

The Project is within the range of the least bittern (*Ixobrychus exilis*), a state threatened bird. This secretive marsh species prefers dense emergent wetlands with dense, tall growths of aquatic or semiaquatic vegetation (particularly cattail, sedge, rushes, arrowheads, or sawgrass) interspersed with clumps of woody vegetation and open water. Nests are made from dried vegetation suspended 0.5 to 2.5 feet above the water. The DOW recommends

that if this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. Construction will be avoided during the nesting period dates; therefore, the Project is not likely to impact this species.

The Project is within the range of the northern harrier (*Circus hudsonius*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. The DOW recommends that if this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. Construction will be avoided during the nesting period dates; therefore, the Project is not likely to impact this species.

The Project is within the range of the sandhill crane (*Antigone canadensis*), a state threatened species. Sandhill cranes are primarily a wetland-dependent species. On their wintering grounds, they will utilize agricultural fields; however, they roost in shallow, standing water or moist bottomlands. On breeding grounds, they require a rather large tract of wet meadow, shallow marsh, or bog for nesting. The DOW recommends that if grassland, prairie, or wetland habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 through August 31. Construction will be avoided during the nesting period dates; therefore, the Project is not likely to impact this species.

The Project is within the range of the eastern massasauga (*Sistrurus catenatus*), a state endangered and a federally threatened snake species. The eastern massasauga uses a range of habitats including wet prairies, fens, and other wetlands, as well as drier upland habitat. Due to the location, the type of habitat within the Project Study Area, and the type of work proposed, this Project is not likely to impact this species.

The Project is within the range of the Blanding's turtle (*Emydoidea blandingii*), a state threatened species. This species inhabits marshes, ponds, lakes, streams, wet meadows, and swampy forests. Although essentially aquatic, the Blanding's turtle will travel over land as it moves from one wetland to the next. The DOW recommended that an ODNR approved

herpetologist conduct a habitat suitability survey to determine if suitable habitat is present within the Project Study Area. A site visit took place on May 7, 2025, by ODNR approved herpetologist, Jeffrey Davis, within the Project Study Area. Findings in the Blanding's Turtle Habitat Suitability Survey Report dated May 9, 2025, state that because the Blanding's turtle has been found near the Project Study Area and because the species is known to inhabit Turtle Creek, it is suggested to assume presence in the area where the transmission line crosses the creek and understand that turtles might move over land in the segment between Structures 19 and 20-1. Construction will be avoided at Structures 19 and 20-1 from March 15 to October 16; therefore, it will not be necessary to have a herpetologist on site to monitor Blanding's Turtle activity.

Based on the May 7, 2025, Blanding's turtle survey site visit and Blanding's Turtle Habitat Suitability Survey Report, it was recommended by ODNR approved herpetologist, Jeffrey Davis, that a Presence-Absence Survey for Kirtland's snake (*Clonophis kirtlandii*) be considered along the ROW between Structure 19-1 west to Structure 21. While ODNR did not have a record of the Kirtland's snake in Ottawa County/Carroll Township, ODNR does have recent records in the adjacent Lucas County and Jerusalem Township, close to the Project Study Area; therefore, the herpetologist (Jeffrey Davis) notified ODNR and recommended a Kirtland's snake Presence/Absence survey for this Project. A Kirtland's snake Presence/Absence survey was completed between August 2025 and May 2026. During the survey, no Kirtland's snakes were found, and the Kirtland's Snake Presence-Absence Survey Report was provided to ODNR. Concurrence was received from ODNR on the results of the Kirtland's Snake Presence-Absence Survey Report on May 19th, 2026, and since there were no encounters with Kirtland's snakes during the Presence/Absence Survey, the DOW approves the start of construction activities for the Bayshore-Davis Besse 345 kV Transmission Line Rebuild Project (**Exhibit 9B**).

An Ohio Coastal Management Program Consistency Certification Statement was submitted to the U.S. Army Corps of Engineers ("USACE") Buffalo District on June 5, 2026. The Office of Coastal Management responded that, pursuant to the Coastal Zone Management Act of 1972 and its corresponding federal regulations, a United States Army

Corps of Engineers ("USACE") permit may not be issued in Ohio's designated Coastal Area until a Federal Consistency concurrence is issued by ODNR. Projects in Lake Erie frequently require an ODNR Shore Structure Permit and Submerged Lands Lease, as well as other authorizations, prior to a Federal Consistency concurrence being issued.

As part of the investigation, TRC submitted a request to the US Fish and Wildlife Service ("USFWS") for an Ecological Review to research the presence of any endangered, threatened, rare, or designated species within the Project Study Area. A copy of the USFWS Ecological Review response, dated November 20, 2024, is included as **Exhibit 10**. The response included recommendations for seasonal tree clearing regarding Federally listed bat species. Should the proposed Project site contain trees with a minimum diameter at breast height ("DBH") of three (3) inches, it is recommended by USFWS to avoid tree removal wherever possible. If no caves or abandoned mines are present, and trees with this DBH cannot be avoided, it is recommended that removal of any trees with a DBH of three (3) inches or larger only occur between October 1 and March 31. Due to the Project, type, size, and location, USFWS does not anticipate adverse effects to any other federally endangered, threatened, or proposed species or proposed or designated critical habitat.

A list of all endangered, threatened, and rare species, as identified by ODNR, within the range of the Project is provided in **Table 4**.

Table 4. List of Endangered and Threatened Species within range of Project Study Area

Common Name	Scientific Name	Federal Listed Status	State Listed Status	Affected Habitat
Birds				
Black-crowned night-heron	*Nycticorax nycticorax*	N/A	Threatened	Nest in small trees, saplings, shrubs, or sometimes on the ground, near bodies of water and wetlands.
Least bittern	*Ixobrychus exilis*	N/A	Threatened	Prefers dense emergent wetlands with dense, tall growths of aquatic or semiaquatic vegetation interspersed with clumps of woody

Common Name	Scientific Name	Federal Listed Status	State Listed Status	Affected Habitat
				vegetation and open water.
Northern harrier	*Circus hudsonius*	N/A	Endangered	Marshes and grasslands.
Sandhill crane	*Antigone canadensis*	N/A	Threatened	Grassland, prairie, or wetland habitat
Fish				
American eel	*Anguilla rostrata*	N/A	Threatened	Perennial streams.
Channel darter	*Percina copelandi*	N/A	Threatened	Perennial streams.
Cisco	*Coregonus artedi*	N/A	Endangered	Perennial streams.
Greater redhorse	*Moxostoma valenciennesi*	N/A	Threatened	Perennial streams.
Lake sturgeon	*Acipenser fulvescens*	N/A	Endangered	Perennial streams.
Longnose sucker	*Catostomus catostomus*	N/A	Endangered	Perennial streams.
Pugnose minnow	*Opsopoeodus emiliae*	N/A	Endangered	Perennial streams.
Spotted gar	*Lepisosteus oculatus*	N/A	Endangered	Perennial streams.
Western banded killifish	*Fundulus diaphanus menona*	N/A	Endangered	Perennial streams.
Mammals				
Indiana bat	*Myotis sodalis*	Endangered	Endangered	Trees, forests, caves, and caverns.
Little brown bat	*Myotis lucifugus*	N/A	Endangered	Trees, forests, caves, and caverns.
Northern long-eared bat	*Myotis septentrionalis*	Endangered	Endangered	Trees, forests, caves, and caverns.
Tricolored bat	*Perimyotis subflavus*	Proposed Endangered	Endangered	Trees, forests, caves, and caverns.
Mussels				
Eastern pondmussel	*Ligumia nasuta*	N/A	Threatened	Perennial streams.
Salamander mussel	*Simpsonaias ambigua*	N/A	Threatened	Perennial streams.
Reptiles				
Blanding's turtle	*Emydoidea blandingii*	N/A	Threatened	Marshes, ponds, lakes, streams, wet meadows, and swampy forests.
Eastern massasauga	*Sistrurus catenatus*	Threatened	Endangered	Wet prairies, fens, and other wetlands, as well as drier upland habitat.

4906-6-05 (B)(10)(f): Areas of Ecological Concern

TRC conducted field investigations to identify and delineate wetlands and waterbodies located within the 70.18-acre Project Study area on November 19 and 20, 2024, and March 23, 2026. During field investigations, a total of five (5) wetlands and one (1) perennial stream were identified and delineated within the Project Study Area. A Surface Water Delineation Report is included in **Exhibit 11**.

The Project Study Area consists of an existing, utility ROW within agricultural and residential land use. TRC did not observe the presence of any of the ODNR or federally listed species during field investigations. Due to the highly maintained nature of the utility ROW and recommendations by ODNR approved herpetologist Jeffrey Davis, impacts to the Blandings turtle, Kirtland's snake, or any of the listed species detailed in the ODNR correspondence, are not anticipated.

The Limits of Disturbance ("LOD") will be completely within the Project Study Area and will predominantly include using the existing utility ROW for the proposed construction. NWP 57 (effective March 15, 2026, valid through March 15, 2031), authorizes the construction of access roads for the construction and maintenance of electric utility lines or telecommunication lines, including overhead lines and substations, in nontidal waters of the United States, provided the activity does not cause the loss of greater than 0.5-acre of waters of the United States. Nationwide Permit Regional General Conditions were reviewed regarding this Project. This Project is in Carroll Township, Ottawa County, Ohio, which is within the USACE Buffalo Regulatory District. Carroll Township in Ottawa County is listed in Table 1 of General Condition 18 (Endangered Species) and Regional General Condition 6a (Threatened and Endangered Species), triggering the need for a Section 404 Pre-Construction Notification. A Section 404 Pre-Construction Notification was submitted to the USACE Buffalo Regulatory District on May 5, 2026. USACE's response is provided in **Exhibit 11A**.

A review of the United States Geological Survey (USGS) Protected Areas Database (www.usgs.gov/programs/gap-analysis-project/science/protected-areas) revealed no conservation easements within the Project Study Area.

4906-6-05(B)(10)(g): Other Information

Construction and operation of the proposed Project will be in accordance with the requirements specified in the latest revision of the NESC as adopted by the PUCO and will meet all applicable safety standards established by the Occupational Safety and Health Administration.

No other or unusual conditions are expected that will result in significant environmental, social, health, or safety impacts.

4906-6-07: Documentation of Letter of Notification Transmittal and Availability for Public Review

This Letter of Notification application is being provided concurrently to the following officials in Carroll Township and Ottawa County, Ohio.

Ottawa County

Commissioner Donald A. Douglas
Ottawa County Board of Commissioners
315 Madison Street, Room 103
Port Clinton, OH 43452
mcoppeler@co.ottawa.oh.us

Commissioner Mark E. Coppeler
Ottawa County Board of Commissioners
315 Madison Street, Room 103
Port Clinton, OH 43452
ddouglas@co.ottawa.oh.us

Commissioner Mark W. Stahl,
Ottawa County Board of Commissioners
315 Madison Street, Room 103
Port Clinton, OH 43452
mstahl@co.ottawa.oh.us

Ms. Callie McConahay
Ottawa County Administrator
315 Madison Street
Port Clinton, OH 43452
cmcconahay@co.ottawa.oh.us

Mr. Daniel Toris Jr. P.E., P.S.,
Ottawa County Engineer
8247 West State Route 163
Oak Harbor, OH 43449
OttawaCoEng@co.ottawa.oh.us

Mr. Mark Messa, Director
Ottawa County
Regional Planning Commission
315 Madison Street
Port Clinton, OH 43452
mmessa@co.ottawa.oh.us

Carroll Township

Mr. James Meek, Trustee
Carroll Township
11080 West Toussaint East Road
Oak Harbor, OH 43449
jmeek@carrolltownship.net

Mr. Joshua Behnke, Trustee
Carroll Township
11080 West Toussaint East Road
Oak Harbor, OH 43449
jmoore@carrolltownship.net

Ms. Sandra Shearon, Trustee
Carroll Township
11080 West Toussaint East Road
Oak Harbor, OH 43449
sshearon@carrolltownship.net

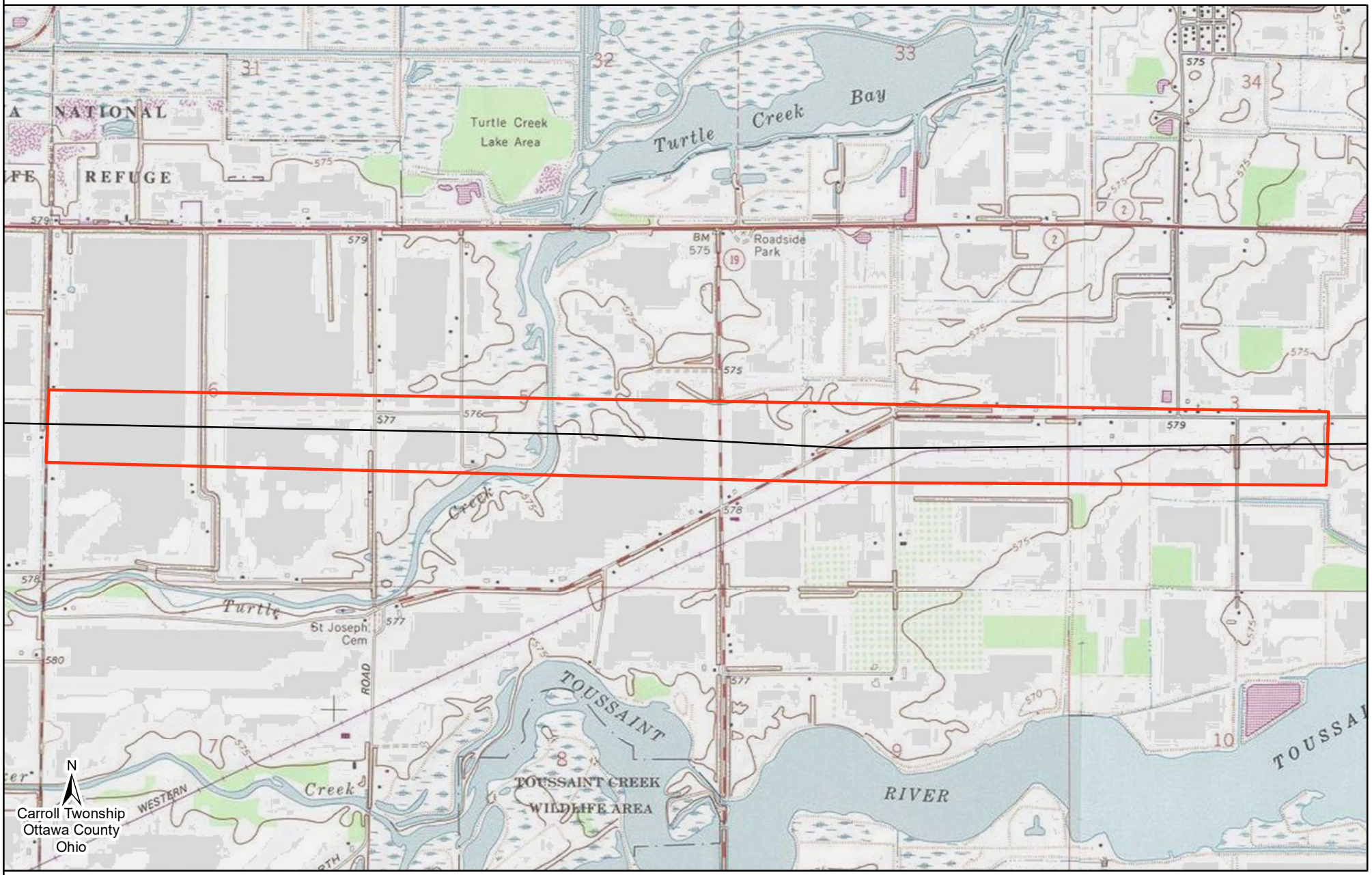
Ms. Tina Biggert, Fiscal Officer
Carroll Township
11080 West Toussaint East Road
Oak Harbor, OH 43449
fiscalofficer@carrolltownship.net

Library

Ms. Lina Hall, Director
Oak Harbor Library
147 West Main Street,
Oak Harbor, OH 43449
lhall@seolibraries.org

Per Adm.Code 4906-6-07(B), exemplar copies of the notice letters sent to local government officials and to the library have been included with this application as proof of compliance with requirements of Adm.Code 4906-6-07(A)(1) and 4906-6-07(A)(2).

Information is posted at www.firstenergycorp.com/about/transmission_project/ohio.html on how to request an electronic or paper copy of this Letter of Notification application. The link to this website is being provided in accordance with Adm.Code 4906-6-07(B), which requires ATSI to provide the OPSB with proof of compliance with Adm.Code 4906-6-07(A)(3) within seven days of filing the application.



LEGEND:

345 kV Transmission Line

Project area

0 1,000 2,000 4,000

Feet

Reference:
USGS Topographical Overlay

Coordinate System:
NAD_1983_StatePlane_Ohio_North_FIPS_3401_Feet
WKID: 3734 Authority: EPSG

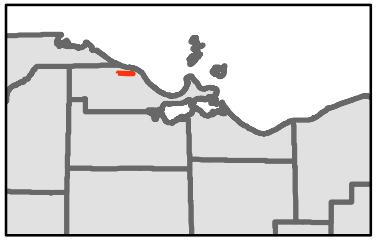
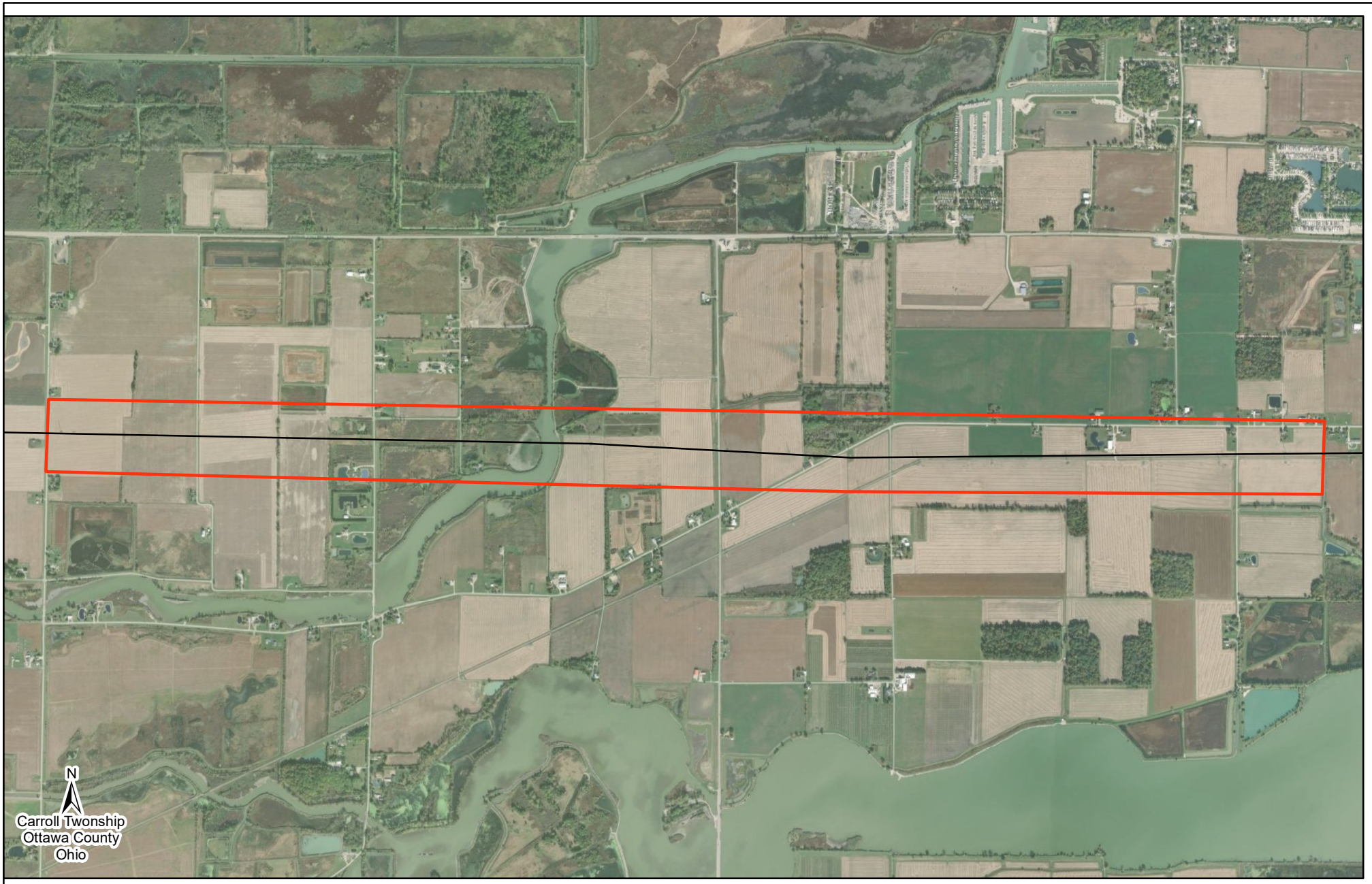


EXHIBIT 1

ATSI®
American Transmission Systems, Inc.
a subsidiary of FirstEnergy Corp.

Bayshore-Davis Besse 345 kV Transmission Line Partial Rebuild Project



LEGEND:

345 kV Transmission Line

Project area

0 1,000 2,000 4,000

Feet

Reference:
ESRI Image

Coordinate System:
NAD_1983_StatePlane_Ohio_North_FIPS_3401_Feet
WKID: 3734 Authority: EPSG

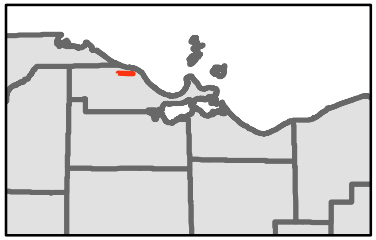


EXHIBIT 2

ATSI®
American Transmission Systems, Inc.
a subsidiary of FirstEnergy Corp.

Bayshore-Davis Besse 345 kV Transmission Line Partial Rebuild Project

OTTAWA CO. OH

W DUFF WASHA RD

BAYSHORE-DAVIS BESSE 345 kV

#12 #12 #11 #10-1 #11 #10 #10 #9-1 #9 #9

DAVIS BESSE SUB

#8 #7

E E E

OTTAWA CO. OH

BAYSHORE SUB

#22

#21-1

#21

N LEMON RD

N BODI RD

#20-1

#20

#19-1

#19

TURTLE CREEK

BAYSHORE-DAVIS BESSE 345 kV

#19

#18

#18 TOWER

#17

#17 TOWER

DAVIS BESSE SUB

OTTAWA CO. OH

BAYSHORE SUB

E

#27

E

E

#26

E

BAYSHORE-DAVIS BESSE 345 kV

E

N BENTON CARROLL RD

#25

#25 TOWER

#24-1

#24

#24

#23

DARSCH RD

#23

#22-1

#22

#22

#21-1

DAVIS BESSE SUB

LEGEND

- 345kV TRANSMISSION LINE
E - EXISTING TRANSMISSION LINE
- RAILROAD
- NEW STEEL STRUCTURE
TBR - EXISTING STR TO BE REMOVED
- EXISTING TOWER

PAPER SIZE: 17X11

ATSI
American Transmission Systems, Inc.
a subsidiary of FirstEnergy Corp.

BAYSHORE-DAVIS BESSE 345 kV
TRANSMISSION LINE PARTIAL REBUILD PROJECT

GENERAL LAYOUT

EXHIBIT 3-2

EXHIBIT 4

ATSI Transmission Zone M-3 Process
Bayshore – Davis Besse 345 kV Line

Need Numbers: ATSI-2024-019

Process Stage: Need Meeting 04/02/2024

Project Driver:

Equipment Material Condition, Performance and Risk

Specific Assumption Reference:

System Performance Global Factors

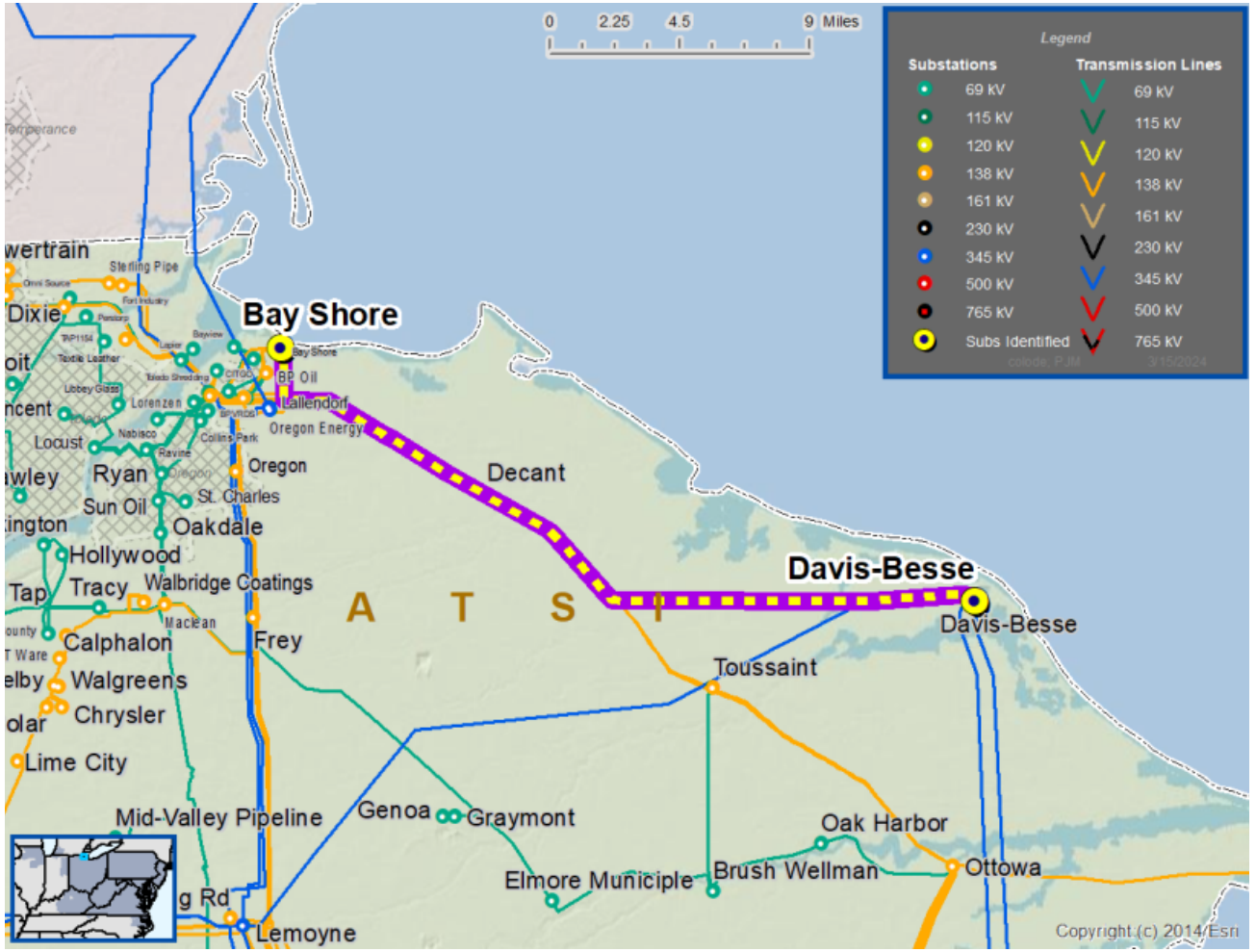
- Past system reliability/performance
- Substation/Line equipment limits

Line Condition Rebuild/Replacement

- Age/condition of wood pole transmission line structures

Problem Statement:

- The Bayshore – Davis Besse 345 kV Line was constructed approximately 54 years ago. It is approximately 21 miles long with a total of 110 structures with 17 wooden H-frame structures.
- Recent inspections have indicated that a four-mile section of the line comprised of 17 wood pole H-frame structures is exhibiting deterioration. Inspection findings include cracked wood poles, rotten braces, corona damage and broken down grounds.
  - 14 structures require repair due to deterioration.
  - 4 structures are phase-raised.
- The line has not had any unscheduled sustained outages over the last five years.
- Existing Transmission Line Rating:
  - 1411 / 1683 / 1723 / 1925 MVA (SN/SE/WN/WE)



ATSI Transmission Zone M-3 Process
Bayshore – Davis Besse 345 kV Line

Need Number: ATSI-2024-019
Process Stage: Solution Meeting - 07/08/2025
Previously Presented: Need Meeting - 04/02/2024

Project Driver(s):

Equipment Material Condition, Performance and Risk

Specific Assumption Reference:

System Performance Global Factors

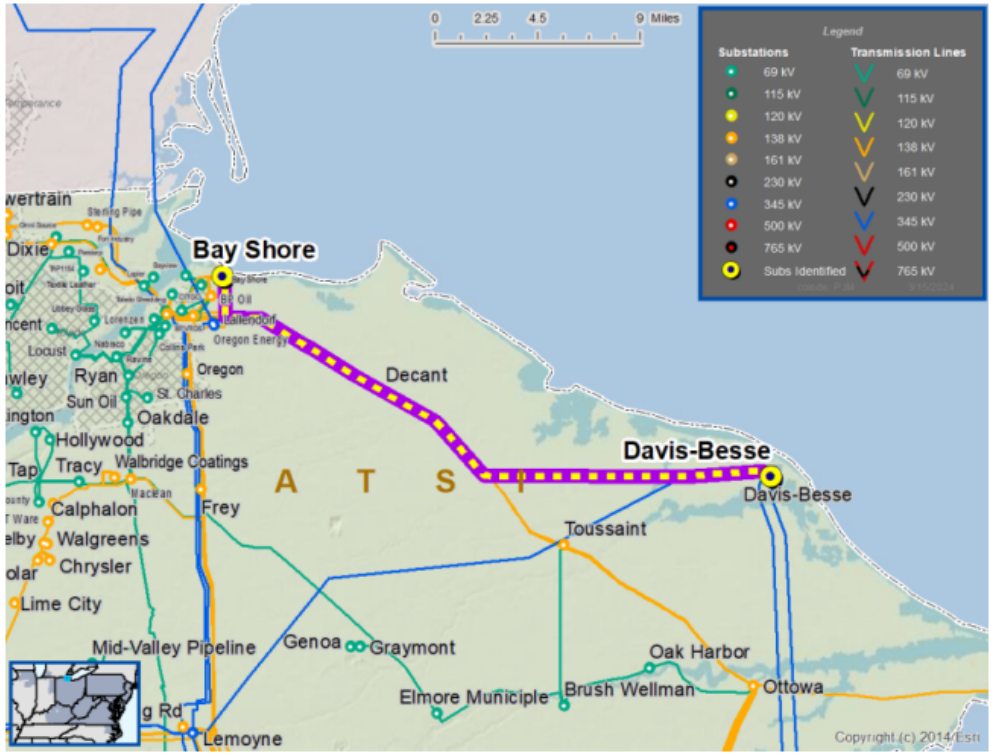
- Past system reliability/performance
- Substation/Line equipment limits

Line Condition Rebuild/Replacement

- Age/condition of wood pole transmission line structures

Problem Statement:

- The Bayshore – Davis Besse 345 kV Line was constructed approximately 55 years ago. It is approximately 21 miles long with a total of 110 structures with 17 wooden H-frame structures.
- Recent inspections have indicated that a four-mile section of the line comprised of 17 wood pole H-frame structures is exhibiting deterioration. Inspection findings include cracked wood poles, rotten braces, corona damage and broken down grounds.
  - 14 structures require repair due to deterioration.
  - 4 structures are phase-raised.
- The line has not had any unscheduled sustained outages over the last five years.
- Existing Transmission Line Rating:
  - 1411 / 1683 / 1723/ 1925 MVA (SN/SE/WN/WE)



ATSI Transmission Zone M-3 Process
Bayshore – Davis Besse 345 kV Line

Need Number: ATSI-2024-019
Process Stage: Solution Meeting - 07/08/2025

Proposed Solution:

Bayshore – Davis Besse 345 kV Line

- Replace 17 deteriorated wood pole and phase-raised structures on the four-mile section from Structure 9 to Structure 25 and install new conductor.

At Bayshore and Davis Besse substations:

- Replace line relaying



Transmission Line Ratings:

Bayshore – Davis Besse 345 kV Line:

- Before Proposed Solution: 1411 / 1683 / 1723 / 1925 MVA (SN/SE/WN/WE)
- After Proposed Solution: 1411 / 1683 / 1723 / 1925 MVA (SN/SE/WN/WE)

Alternatives Considered:

Maintain line in existing condition with elevated risk of failure due to deteriorating wood pole structures.

Estimated Project Cost: $21.12M

Projected In-Service: 05/28/2027

Project Status: Conceptual

Model: 2024 RTEP model for 2029 Summer (50/50)

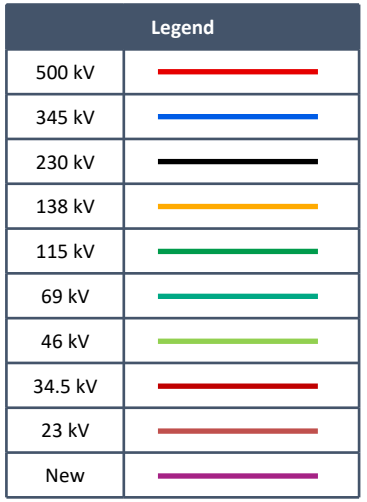
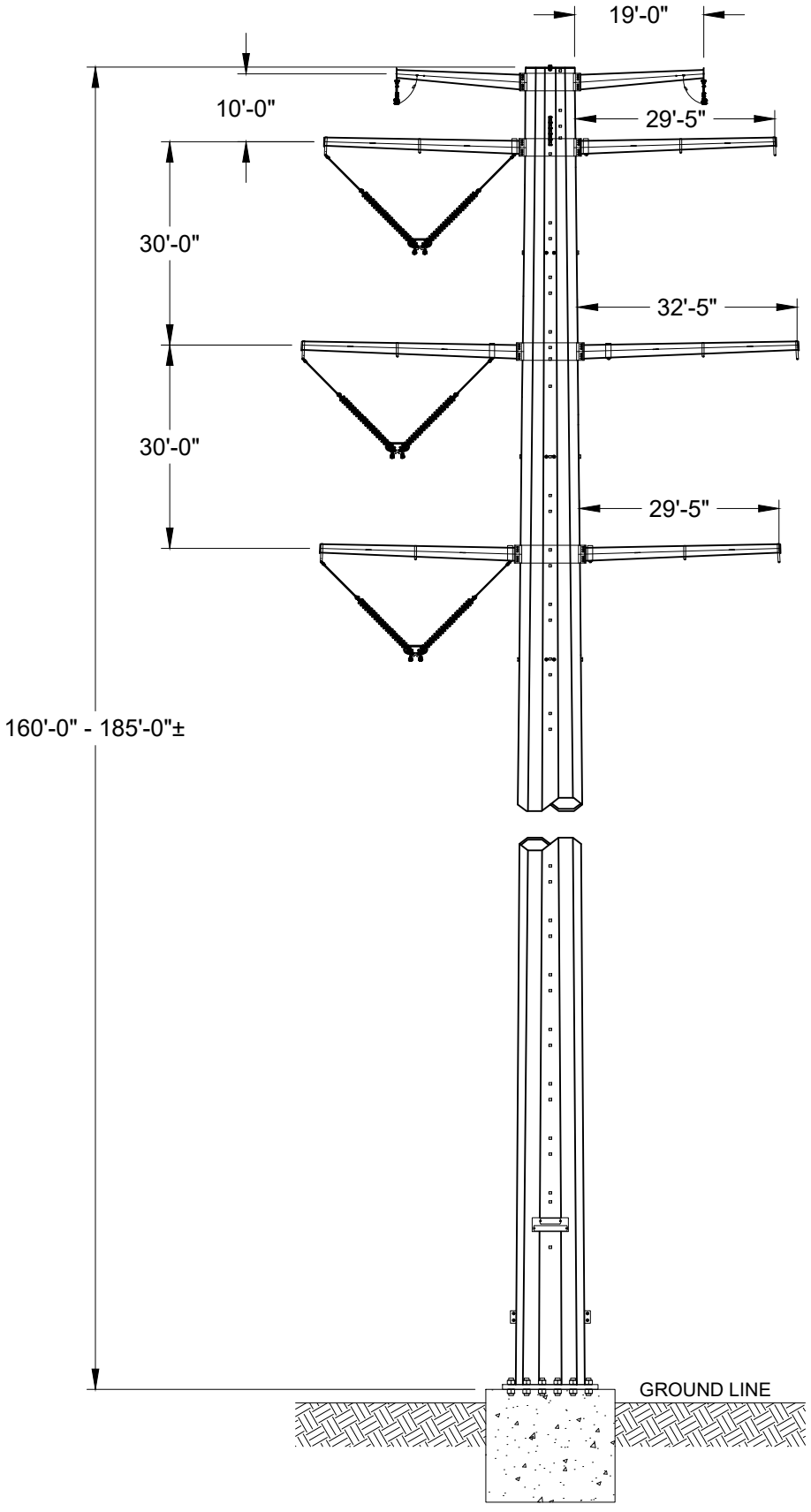


EXHIBIT 5

Bayshore-Davis Besse 345 kV Transmission Line Partial Rebuild Project
OPSB Case No. 26-0449-EL-BLN

Parcel Number(s)	Easement Status	Agricultural District (Y/N)	Exp. Year
0040095801189000	Existing	Yes	2027
0041128901175000	Existing	Yes	2027
0080943612603000	Existing	No	N/A
0080943416551000	Existing	No	N/A
0080942512581000; 0080939027218000	Existing	No	N/A
0080941112588005	Existing	No	N/A
0080941112554000; 0080515907410000	Existing	No	N/A
0080935712515000	Existing	Yes	2027
0081940627269000	Existing	No	N/A
0080778115558000	Existing	No	N/A
0080933412450000	Existing	No	N/A
0082123035009000	Existing	No	N/A
0080935112477000	Existing	No	N/A
0080930812480000; 0080930812422001; 0080930812422000; 0081907431206002	Existing	Yes No Yes Yes	2027 N/A 2027 2027
0081907431207001	Owned in Fee	No	N/A
0080931912454000; 0080931912426000	Existing	No	N/A
0080931012417000	Existing	No	N/A
0080924212371000	Existing	No	N/A



ATSI
American Transmission Systems, Inc.
a subsidiary of FirstEnergy Corp.

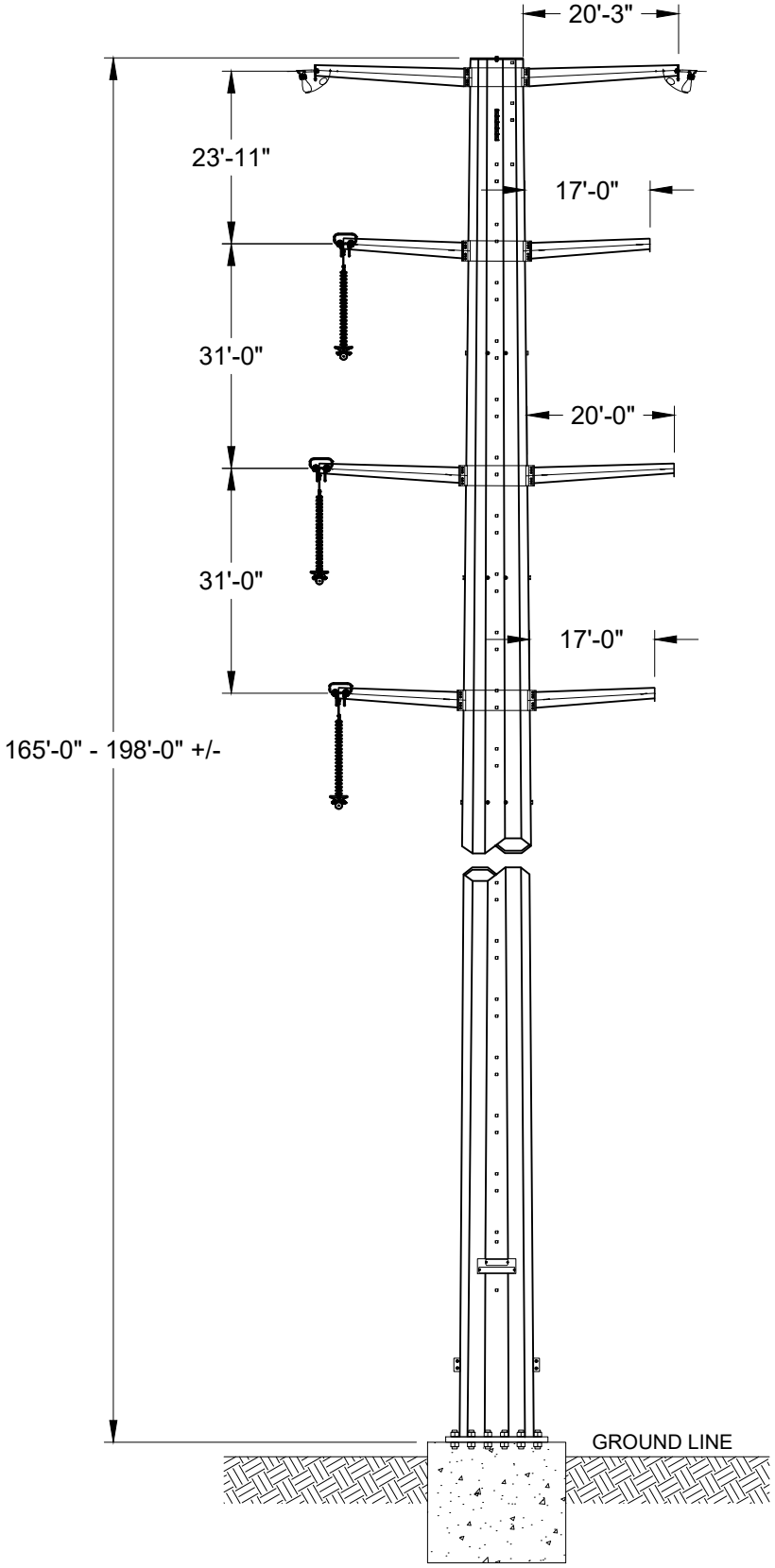
BAYSHORE-DAVIS BESSE 345 kV
TRANSMISSION LINE PARTIAL REBUILD PROJECT

DOUBLE CIRCUIT TUBULAR STEEL STRUCTURE
SUSPENSION SINGLE POLE

EXHIBIT 6

SCALE: NTS

PAPER SIZE: 8.5X11



ATSI
American Transmission Systems, Inc.
a subsidiary of FirstEnergy Corp.

BAYSHORE-DAVIS BESSE 345 kV
TRANSMISSION LINE PARTIAL REBUILD PROJECT

DOUBLE CIRCUIT TUBULAR STEEL STRUCTURE
DEADEND SINGLE POLE

EXHIBIT 7

PAPER SIZE: 8.5X11

SCALE: NTS

EXHIBIT 8

In reply refer to:
2026-OTT-68087

August 28, 2026

Justin McKissick, MA, RPA
Senior Archaeologist/Project Manager
TRC Environmental Corporation
317 E Carson Street, Suite 113
Pittsburgh, PA 15219
Email: JMcKissick@trccompanies.com

RE: Section 106 Review: Bayshore-Davis Besse 345kV Rebuild Project, Carroll Township, Ottawa County, Ohio

Dear Mr. McKissick:

This letter is in response to the receipt on July 31, 2026, of *Phase I Archaeological Survey Report Bayshore-Davis Besse 345kV Rebuild Project, Carroll Township, Ottawa County, Ohio* (TRC Environmental Corporation, 2026). We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code requesting cooperation among state agencies in the preservation of historic properties, Ohio Administrative Code Chapters 4906-4, as administered by the Ohio Power Siting Board (OPSB). The comments of the Ohio SHPO are also submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]). The OPSB is the lead agency for the undertaking.

The proposed undertaking involves the rebuild of approximately 3.7-miles of the existing transmission line. The above-referenced survey involved a literature review, visual inspection, surface collection, and subsurface shovel test unit excavations within the defined Area of Potential Effect (APE). The literature review determined no historic properties, districts, above-ground resources, previously recorded archaeological sites, or previous cultural resource surveys are within or immediately adjacent to the APE. The results of the field investigations did not identify any below ground or above-ground resources within the APE. Therefore, the SHPO agrees that as proposed, no additional cultural resource investigations are warranted. Furthermore, it is the SHPO's opinion that the project, as proposed, will have no effect on historic properties. No further coordination is required unless the scope of the project changes, or archaeological deposits are encountered during project construction. In such a situation, this office should be contacted as required under 36 CFR § 800.13. If you have any questions concerning this review, please contact me by email at sbiehl@ohiohistory.org. Thank you for your cooperation.

Sincerely,

Stephen M. Biehl

Stephen M. Biehl, Project Reviews Manager-Archaeology
Resource Protection and Review
State Historic Preservation Office

RPR Serial No. 1115074

In reply refer to:
2026-OTT-68087

May 11, 2026

Justin McKissick, MA, RPA
Senior Archaeologist/Project Manager
TRC Environmental Corporation
317 E. Carson Street, Suite 113
Pittsburgh, PA 15219
Email: jmckissick@trccompanies.com

RE: Section 106 Review: Bayshore-Davis Besse 345kV Rebuild Project, Carroll Township, Ottawa County, Ohio

Dear Mr. McKissick:

This letter is in response to the correspondence received on April 13, 2026, regarding the above-referenced project in Ottawa County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code (O.R.C.) and the Ohio Power Siting Board (OPSB) rules for permitting this project in accordance with the Ohio Administrative Code (OAC 4906). The comments of the Ohio SHPO are also submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

According to the information submitted, the project will involve the rebuild of approximately 3.7-miles of existing transmission line. The direct Area of Potential Effect (APE) includes the transmission line corridor and all access and staging areas required to accomplish the project goals. The APE is comprised of open agricultural fields, residential land, and a segment of the Turtle Creek. A check of our records indicates no historic properties, districts, above-ground resources, or previous cultural resource surveys within the APE. However, several cultural resources and surveys are documented in the immediate vicinity.

After careful review, the SHPO recommends a Phase I cultural resource survey (archaeological and history/architecture) for the entire direct and indirect APE. Any buildings 50 years or older within the APE or within the indirect APE should be documented and evaluated for the National Register of Historic Places. The survey results will allow for a more informed decision concerning the effects the project may have on potential historic properties. A copy of the results of the survey must be submitted to the SHPO for review following our submission standards. If you have any questions concerning this review, please contact me by email at sbiehl@ohiohistory.org. Thank you for your consideration.

Sincerely,

Stephen M. Biehl

Stephen M. Biehl, Project Reviews Manager (archaeology)
Resource Protection and Review
State Historic Preservation Office

RPR Serial No. 1113625

EXHIBIT 9

Department of Natural Resources
ohiodnr.gov

Mike DeWine, *Governor*
Jon Husted, *Lt. Governor*
Mary Mertz, *Director*

Office of Real Estate & Land Management
Tara Paciorek - Chief
2045 Morse Road – E-2
Columbus, Ohio 43229-6693

November 21, 2024

Jenna Slabe
TRC Companies, Inc.
1382 West 9th Street, Suite 400
Cleveland, Ohio 44113

Re: 24-1655 - Bayshore-Davis Besse 345kV Rebuild

Project: The proposed project involves the rebuild of approximately 3.7 miles of the existing Bayshore-Davis Besse 345kV transmission line.

Location: The proposed project is located in Carroll Township, Ottawa 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 data at or within one mile of the project area:

Wapato (*Sagittaria cuneata*), E
Redhead (*Aythya americana*), SI
Black Tern (*Chlidonias niger*), E
Trumpeter Swan (*Cygnus buccinator*), T
Blanding's Turtle (*Emydoidea blandingii*), T
Gadwall (*Mareca strepera*), SI
Eastern Foxsnake (*Pantherophis vulpinus*), SC
Sora Rail (*Porzana carolina*), SC
Northern Shoveler (*Spatula clypeata*), SI
Common Tern (*Sterna hirundo*), E
Western Meadowlark (*Sturnella neglecta*), SI
Eastern Gartersnake - melanistic (*Thamnophis sirtalis*), SC

Conservation status abbreviations are as follows: E = state endangered; T = state threatened; P = state potentially threatened; SC = state species of concern; SI = state special interest; U = state status under

review; X = presumed extirpated in Ohio; FE = federally endangered, and FT = federally threatened. The review was performed on the specified project area as well as an additional one-mile radius. Records searched date from 1980. Features searched include locations of rare and endangered plants and animals determined to be of value to the conservation of their species, high quality plant communities, animal breeding assemblages, and outstanding geological features.

Of the species listed above, Trumpeter Swan is recorded within the boundaries of the specified project area. Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for an area is not a statement that rare species or unique features are absent from that area.

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

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

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

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

The project is within the range of the following listed mussel species.

State Threatened
eastern pondmussel *(Ligumia nasuta*)
salamander Mussel (*Simpsonaias ambigua*)

This project must not have an impact on native mussels. This applies to both listed and non-listed species, as all species of mussel are protected in Ohio. Per the Ohio Mussel Survey Protocol (2022), all Group 2, 3, and 4 streams (Appendix A) require a mussel survey. Per the Ohio Mussel Survey Protocol, Group 1 streams (Appendix A) and unlisted streams with a watershed of 5 square miles or larger above the point of impact should be assessed using the Reconnaissance Survey for Unionid Mussels (Appendix B) to determine if mussels are present. Mussel surveys may be recommended for these streams as well. Therefore, if in-water work is planned in any stream that meets any of the above criteria, the DOW recommends the applicant provide information to indicate no mussel impacts will occur. If this is not possible, the DOW recommends a professional malacologist conduct a mussel survey in the project area. If mussels that cannot be avoided are found in the project area, the DOW recommends a professional malacologist collect and relocate the mussels to suitable and similar habitat upstream of the project site. Mussel surveys and any subsequent mussel relocation should be done in accordance with the Ohio Mussel Survey Protocol. If there is no in-water work proposed, impacts to mussels are not likely.

The project is within the range of the following listed fish species.

State Endangered
lake sturgeon (*Acipenser fulvescens*)
pugnose minnow (*Opsopoeodus emiliae*)
cisco (*Coregonus artedi*)
spotted gar (*Lepisosteus oculatus*)
longnose sucker (*Catostomus catostomus*)
western banded killifish (*Fundulus diaphanus menona*)

State Threatened
American eel (*Anguilla rostrata*)
greater redhorse (*Moxostoma valenciennesi*)
channel darter (*Percina copelandi*)

The DOW recommends no in-water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species.

The project is within the range of the eastern massasauga (*Sistrurus catenatus*), a state endangered and a federally threatened snake species. The eastern massasauga uses a range of habitats including wet prairies, fens, and other wetlands, as well as drier upland habitat. Due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the Blanding's turtle (*Emydoidea blandingii*), a state threatened species. This species inhabits marshes, ponds, lakes, streams, wet meadows, and swampy forests. Although essentially aquatic, the Blanding's turtle will travel over land as it moves from one wetland to

the next. The DOW recommends that an approved herpetologist conducts a habitat suitability survey to determine if suitable habitat is present within the project area. If suitable habitat is determined to be present; the DOW recommends that a presence/absence survey be conducted, or an avoidance/minimization plan be developed and implemented by the approved herpetologist. A list of approved herpetologists has been provided for your convenience.

The project is within the range of the black-crowned night-heron *(Nycticorax nycticorax*), a state-threatened bird. Night-herons are so named because they are nocturnal, conducting most of their foraging in the evening hours or at night, and roost in trees near wetlands and waterbodies during the day. Night herons are migratory and are typically found in Ohio from April 1 through December 1 but can be found in more urbanized areas with reliable food sources year-round. Black-crowned night-herons primarily forage in wetlands and other shallow aquatic habitats, and roost in trees nearby. These night-herons nest in small trees, saplings, shrubs, or sometimes on the ground, near bodies of water and wetlands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the least bittern (Ixobrychus exilis), a state threatened bird. This secretive marsh species prefers dense emergent wetlands with dense, tall growths of aquatic or semiaquatic vegetation (particularly cattail, sedge, rushes, arrowheads, or sawgrass) interspersed with clumps of woody vegetation and open water. Nests are made from dried vegetation suspended .5 to 2.5 feet above the water. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the northern harrier (*Circus hudsonius*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the sandhill crane (*Antigone canadensis*), a state threatened species. Sandhill cranes are primarily a wetland-dependent species. On their wintering grounds, they will utilize agricultural fields; however, they roost in shallow, standing water or moist bottomlands. On breeding grounds, they require a rather large tract of wet meadow, shallow marsh, or bog for nesting. If grassland, prairie, or wetland habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 through August 31. If this habitat will not be impacted, this project is not likely to have an impact on this species.

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

Geological Survey: The Division of Geological Survey has the following comments.

Impacts on Public and Private Water Supplies

The proposed project area is in Carroll Township, Ottawa County. The construction of this facility is not expected to have significant impacts on public or private well yields. The Groundwater Vulnerability Index for the proposed project area ranges from 134 to 171 (Nelson and Others, 2022), which equates to a low to high groundwater vulnerability (OEPA, 2014). The construction of the facility is not expected to pose a significant groundwater contamination risk.

Groundwater Inventory

Groundwater resources vary throughout the project area. Wells developed in the Silurian limestone bedrock are likely to yield up to 100 gallons per minute (Schmidt, 1986 and Ohio Department of Natural Resources, Division of Water, Bedrock Aquifer Map, 2000). Wells developed in glacial material are likely to yield up to 5 gallons per minute. Wells may be developed in sand and gravel lenses within the Lake Maumee Lacustrine Aquifer (Ohio Department of Natural Resources, Division of Water, Statewide Unconsolidated Aquifer Map, 2000).

ODNR has record of 53 water wells drilled within one mile of the project area. These wells range in depth from 25 to 204 feet, with an average depth of 84 feet. The most common aquifer listed is limestone. Sustainable yields of 30 to 205 gallons per minute has been reported for 4 wells within one mile of the project area, with the average sustainable yield being 94 gallons per minute (Ohio Department of Natural Resources, Division of Geological Survey, Ohio Water Wells).

Oil, Gas and Mining

ODNR has record of twelve oil and gas wells within one mile of the proposed project area. There are ten plugged and abandoned oil and gas wells within one mile of the proposed project area. One well is listed with an expired permit, and one well is currently producing within one mile of the proposed project area (Ohio Department of Natural Resources, Division of Oil and Gas, Ohio Oil and Gas Wells Locator).

ODNR does not have record of any mining operations within the project area. ODNR has no record of any mines within one mile of the proposed project area. The nearest mine is a limestone mine owned by Rocky Ridge Development LLC which is located 3 miles to the southwest (Ohio Department of Natural Resources, Division of Mineral Resources, Mines of Ohio).

Geohazards

ODNR has record of several earthquakes recorded within 15-miles of the project area. A table of these earthquakes has been included below (Ohio Department of Natural Resources, Division of Geological Survey, Ohio Earthquake Epicenters).

Date	Magnitude	Distance to Site Boundary (miles)	County	Township
January 14, 1984	2.6	14.8	Lucas	Oregon
April 12, 2007	2.5	12.3	Ottawa	
February 7, 2016	2.5	11.8	Ottawa	

Karst

ODNR does not have record of any karst features within one mile of the proposed project area. Karst features usually form in areas that are covered by thin or no glacial drift and the bedrock is limestone or dolomite. The nearest verified sinkhole is located over 11 miles to the southwest. Substantial glacial deposits within the project area makes sinkhole formation unlikely (Ohio Department of Natural Resources, Division of Geological Survey, Ohio Karst).

Drift Thickness and Bedrock Geology

Drift thickness is variable throughout the project area. Drift is thickest on the west side (68 feet). Drift is thinnest on the east side (30 feet) (Powers and Swinford, 2004). The uppermost bedrock units under the project area are Tymochtee dolomite and Greenfield dolomite (Ohio Department of Natural Resources, Division of Geological Survey, Bedrock Geology Map of Ohio).

Soils

The project area consists primarily of soils derived from till and glaciolacustrine deposits. Toledo, Nappanee, and Bono are the most common soil series found within the boundaries of the project area. These soils have a clay to silty clay loam texture and together cover the entire project area. The Bono and Toledo soils which makes up approximately 77% of the project area are hydric soils which are frequently ponded from December through May. (USDA Web Soil Survey).

Coastal Management: The Office of Coastal Management has the following comment.

Pursuant to the Coastal Zone Management Act of 1972 and its corresponding federal regulations, a U.S. Army Corps of Engineers permit may not be issued in Ohio's designated Coastal Area until a Federal Consistency concurrence is issued by ODNR. Projects in Lake Erie frequently require an ODNR Shore Structure Permit and Submerged Lands Lease, as well as other authorizations, prior to a Federal Consistency concurrence being issued. For additional information, refer to the Ohio Federal Consistency website.

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.

ODNR appreciates the opportunity to provide these comments. Please contact Mike Pettegrew (Environmental Services Administrator) at mike.pettegrew@dnr.ohio.gov if you have questions about these comments or need additional information.

Expiration: *ODNR Environmental Reviews are typically valid for 2 years from the issuance date. If the scope of work, project area, construction limits, and/or anticipated impacts to natural resources have changed significantly from the original project submittal, then a new Environmental Review request should be submitted.*

EXHIBIT 9A

From: Eileen.Wyza@dnr.ohio.gov
To: Molnar, Maggie
Cc: Falkinburg, Brad
Subject: RE: [EXTERNAL] RE: 24-1655_TRC - Bayshore-Davis Besse 345kV Rebuild Project - ODNR Comments: Desktop Hibernacula Assessment
Date: Tuesday, December 17, 2024 7:38:32 AM
Attachments: image003.png
image005.png
image006.png
image007.png
image008.png
image009.png
image004.png
image010.png

This is an **External** email. Do not click links or open attachments unless you validate the sender and know the content is safe.

ALWAYS hover over the link to preview the actual URL/site and confirm its legitimacy.

Thank you for the information, Maggie! Per review of the desktop survey provided for the Bayshore-Davis Besse 345kV Rebuild Project, the Ohio Division of Wildlife concurs with your assessment that no caves, cliffs, or mine openings occur in the project area. Additionally, because the project does not involve blasting or impacting the bedrock, the project is not likely to impact hibernating bats that may be present in the nearby underground mines.

Should any reported conditions change before or during construction, please contact me for additional guidance.

Thank you,

Eileen Wyza, Ph.D.
(she/her/hers)
Wildlife Biologist
Ohio Division of Wildlife
Phone: 614-265-6764
Email: Eileen.Wyza@dnr.ohio.gov

Support Ohio's wildlife. Buy a license at wildohio.gov.

This message is intended solely for the addressee(s). Should you receive this message by mistake, we would be grateful if you informed us that the message has been sent to you in error. In this case, we also ask that you delete this message and any attachments from your mailbox, and do not forward it or any part of it to anyone else. Thank you for your cooperation and understanding.
Please consider the environment before printing this email.

From: Molnar, Maggie <MMolnar@trccompanies.com>
Sent: Monday, December 16, 2024 4:57 PM
To: Wyza, Eileen <Eileen.Wyza@dnr.ohio.gov>
Cc: Falkinburg, Brad <BFalkinburg@trccompanies.com>
Subject: RE: [EXTERNAL] RE: 24-1655_TRC - Bayshore-Davis Besse 345kV Rebuild Project - ODNR Comments: Desktop Hibernacula Assessment

Eileen,

Bedrock will not be impacted as a result of this proposed Project. Poles will be placed in the ground, but if bedrock is met, no disturbance to the bedrock will be required.

Thank you,

Maggie Molnar, PWS
Ecologist

781 Science Boulevard, Suite 200, Gahanna, Ohio 43230
D 614.423.6342| **C** 614.949.2437
LinkedIn | Twitter | Blog | TRCcompanies.com

Please note that our address has changed.

From: Molnar, Maggie
Sent: Monday, December 16, 2024 3:45 PM
To: Eileen.Wyza@dnr.ohio.gov
Cc: Falkinburg, Brad <BFalkinburg@trccompanies.com>
Subject: RE: [EXTERNAL] RE: 24-1655_TRC - Bayshore-Davis Besse 345kV Rebuild Project - ODNR Comments: Desktop Hibernacula Assessment

Thank you, Eileen. We are looking into this question and will respond ASAP.

Thank you,

Maggie Molnar, PWS
Ecologist

781 Science Boulevard, Suite 200, Gahanna, Ohio 43230
D 614.423.6342| **C** 614.949.2437
LinkedIn | Twitter | Blog | TRCcompanies.com

Please note that our address has changed.

From: Eileen.Wyza@dnr.ohio.gov <Eileen.Wyza@dnr.ohio.gov>
Sent: Monday, December 16, 2024 2:15 PM
To: Molnar, Maggie <MMolnar@trccompanies.com>
Cc: Falkinburg, Brad <BFalkinburg@trccompanies.com>
Subject: [EXTERNAL] RE: 24-1655_TRC - Bayshore-Davis Besse 345kV Rebuild Project - ODNR Comments: Desktop Hibernacula Assessment

This is an **External** email. Do not click links or open attachments unless you validate the sender and know the content is safe.

ALWAYS hover over the link to preview the actual URL/site and confirm its legitimacy.

Hello Maggie,

Do you know if any subsurface disturbance that would impact the bedrock will occur for this project?

Thank you,

Eileen Wyza, Ph.D.
(she/her/hers)
Wildlife Biologist
Ohio Division of Wildlife
Phone: 614-265-6764
Email: Eileen.Wyza@dnr.ohio.gov

Support Ohio's wildlife. Buy a license at wildohio.gov.



This message is intended solely for the addressee(s). Should you receive this message by mistake, we would be grateful if you informed us that the message has been sent to you in error. In this case, we also ask that you delete this message and any attachments from your mailbox, and do not forward it or any part of it to anyone else. Thank you for your cooperation and understanding.
Please consider the environment before printing this email.

From: Molnar, Maggie <MMolnar@trccompanies.com>
Sent: Friday, December 13, 2024 12:25 PM
To: Wyza, Eileen <Eileen.Wyza@dnr.ohio.gov>
Cc: Falkinburg, Brad <BFalkinburg@trccompanies.com>
Subject: 24-1655_TRC - Bayshore-Davis Besse 345kV Rebuild Project - ODNR Comments: Desktop Hibernacula Assessment

Eileen,

In response to ODNR's DOW recommendations (attached), TRC completed a desktop habitat assessment to determine if potential hibernaculum is present within FirstEnergy's proposed Bayshore-Davis Besse 345kV Rebuild Project located in Carroll Township, Ottawa County, Ohio.

Please let us know if you have any questions on the provided desktop assessment.

Thank you,

Maggie Molnar, PWS
Ecologist



781 Science Boulevard, Suite 200, Gahanna, Ohio 43230
D 614.423.6342| **C** 614.949.2437
LinkedIn | Twitter | Blog | TRCcompanies.com

Please note that our address has changed.

EXHIBIT 9B

Bryksenkova, Nataliya

From: Ruggiero, Augustine
Sent: Tuesday, May 19, 2026 12:01 PM
To: Bryksenkova, Nataliya
Cc: Salcewicz, Kim (Burns & McDonnell)
Subject: FW: [EXTERNAL] Fwd: Davis-Besse KSnake Report

Nataliya,

Please see below for concurrence for Kirtland's snake from ODNR. Any questions, please let me know.

Thanks
Auggie

Auggie Ruggiero
Transmission Permitting
office: 330-315-6781 (8506781) | cell: 330-803-4304
aruggiero@firstenergycorp.com
341 White Pond Drive, Akron, OH 44320 | mailstop: AK-West Akron Campus

Upcoming PTO: May 26-29

---------- Forwarded message ---------
From: **Matthew.Stooksbury@dnr.ohio.gov** <Matthew.Stooksbury@dnr.ohio.gov>
Date: Tue, May 19, 2026 at 11:20 AM
Subject: RE: Davis-Besse KSnake Report
To: Jeffrey Davis <ohiofrogs@gmail.com>

Hello Jeff,

Since there were no encounters with Kirtland's snakes during the Presence/Absence Survey, the DOW approves the start of construction activities for the FirstEnergy Bayshore-Davis Besse 345 kV Rebuild Project. Voluntary actions can be made by the applicant in order to protect the melanistic Eastern Gartersnake and the Eastern Foxsnake.

-Matt

From: Jeffrey Davis <ohiofrogs@gmail.com>
Sent: Monday, May 18, 2026 12:01 PM
To: Stooksbury, Matthew <Matthew.Stooksbury@dnr.ohio.gov>
Subject: Fwd: Davis-Besse KSnake Report

Matt

The forwarded attachment is the report for survey we discussed that has the melanistic gartersnakes and Foxsnakes. They would like your official concurrence.

Thanks

Jeff

Jeffrey G Davis
513 470-8748
ohiofrogs@gmail.com

---------- Forwarded message ---------
From: **Jeffrey Davis** <ohiofrogs@gmail.com>
Date: Fri, May 15, 2026 at 5:52 PM
Subject: Davis-Besse KSnake Report
To: Falkinburg, Brad <BFalkinburg@trccompanies.com>

Workbook last saved

Brad,

The report is attached.

Jeff

--
Jeffrey G Davis
513 470-8748
ohiofrogs@gmail.com

CAUTION: This is an external email and may not be safe. If the email looks suspicious, please do not click links or open attachments and forward the email to csc@ohio.gov or click the Phish Alert Button if available.

EXHIBIT 10

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
4625 Morse Road, Suite 104
Columbus, Ohio 43230
(614) 416-8993 / FAX (614) 416-8994

November 20, 2024

Project Code: 2025-0008273

Dear Jenna Slabe:

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

Federally Threatened and Endangered Species: Due to the project type, size, location, and the proposed implementation of seasonal tree cutting (clearing of trees ≥3 inches diameter at breast height between October 1 and March 31) to avoid impacts to the endangered Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*), and the proposed endangered tricolored bat (*Perimyotis subflavus*) we do not anticipate adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat. Should the project design change, or additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, coordination with the Service should be initiated to assess any potential impacts.

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

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

species. In addition, prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

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

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

Sincerely,

Erin Knoll
Field Office Supervisor

EXHIBIT 11

Surface Water Delineation Report

Bayshore-Davis Besse 345kV Rebuild Project

Carroll Township, Ottawa County, Ohio

April 2026

Prepared For:

FirstEnergy

FirstEnergy Corporation
341 White Pond Drive, Building B3
Akron, Ohio 44320

Prepared By:
TRC Environmental Corporation
1382 West Ninth Street, Suite 400
Cleveland, Ohio 44113

Project Manager: Brad Falkinburg, PWS
Phone: (440) 666-2890
Email: BFalkinburg@trccompanies.com

TRC Project Number: 629846.0000



TABLE OF CONTENTS

1.0 INTRODUCTION 1
1.1 Statement of Qualifications 1
2.0 METHODOLOGY 2
2.1 Wetland Parameters 2
2.1.1 Hydrology 3
2.1.2 Hydric Soils 3
2.1.3 Hydrophytic Vegetation 3
2.2 USACE Wetland Delineation 3
2.3 Ohio Environmental Protection Agency's Ohio Rapid Assessment Method 5
2.4 USACE Waterbody Identification 5
2.5 OEPA Waterbody Quality Quantification 6
2.5.1 Qualitative Habitat Evaluation Index 6
2.5.2 Headwater Habitat Evaluation Index 6
3.0 RESULTS 6
3.1 Site Description 6
3.2 Surface Water Resource Field Delineations 8
3.2.1 Wetlands 8
3.2.2 Streams and Waterbodies 11
4.0 PERMITTING CONSIDERATIONS 13
4.1 USACE Verification 13
5.0 LIMITATIONS 13
6.0 REFERENCES 14

TABLES

Table 1. USACE APT Weather Station Data 7
Table 2. Soils Type Summary 8
Table 3. Delineated Wetland Features Summary 9
Table 4. Delineated Stream Feature Summary 12

APPENDICES

Appendix A Figures
Appendix B Antecedent Precipitation Tables
Appendix C Photographic Record
Appendix D Data Forms

ACRONYMS AND DEFINITIONS

1987 Manual	United States Army Corps of Engineers 1987 Wetland Delineation Manual
APT	Antecedent Precipitation Tool
AWS	Agricultural Water Supply
CFR	Code of Federal Regulations
EPA	Environmental Protection Agency
FAC	Facultative
FACU	Facultative Upland
FACW	Facultative Wetland
FEMA	Federal Emergency Management Agency
FirstEnergy	FirstEnergy Corporation
GPS	Global Positioning System
HHEI	Headwater Habitat Evaluation Index
HUC	Hydrologic Unit Code
IWS	Industrial Water Supply
NHD	National Hydrography Dataset
NWI	National Wetlands Inventory
NWP	Nationwide Permit
OAC	Ohio Administrative Code
OBL	Obligate Wetland
OEPA	Ohio Environmental Protection Agency
OHWM	Ordinary High-Water Mark
ORAM	Ohio Rapid Assessment Method
PCR	Primary Contact Recreation
PEM	Palustrine Emergent
PFO	Palustrine Forested
Project	Bayshore-Davis Besse 345kV Rebuild Project
Project Study Area	70.18 acres, located in Carroll Township, Ottawa County, Ohio
PWS	Professional Wetland Scientist
QHEI	Qualitative Habitat Evaluation Index
Redox	Redoximorphic
Regional Supplements	Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)
Report	Surface Water Delineation Report
ROW	Right-Of-Way
TNW	Traditional Navigable Waterway
TRC	TRC Environmental Corporation
UNT	Unnamed Tributary
UPL	Obligate Upland
USACE	United States Army Corps of Engineers

USDA-NRCS	United States Department of Agriculture – Natural Resources Conservation Service
USGS	United Stated Geological Survey
USFWS	United States Fish and Wildlife Service
WWH	Warmwater Habitat

1.0 Introduction

On behalf of FirstEnergy Corporation (FirstEnergy), TRC Environmental Corporation (TRC) performed a surface water delineation for the Bayshore-Davis Besse 345kV Rebuild Project (Project). The proposed Project Study Area is 70.18 acres and is located in Carroll Township, Ottawa County, Ohio. The proposed Project involves the rebuild of approximately 3.7 miles of the existing Bayshore-Davis Besse 345kV transmission line. On behalf of FirstEnergy, TRC has prepared this Surface Water Delineation Report (Report) for the Project. A site location map of the Project Study Area can be found in **Appendix A, Figure 1.**

TRC personnel performed field investigations to evaluate and delineate surface water resources (i.e., wetlands and streams) located within the Project Study Area on November 19 and 20, 2024, and March 23, 2026. The delineations were conducted by qualified wetland scientists in accordance with the United States Army Corps of Engineers (USACE) parameters. The objective was to evaluate and delineate potential surface water resources within the Project Study Area, such that the resources could be considered during each phase of the Project. This Report describes the surface water delineation methodology implemented and the existing surface water resources identified within the Project Study Area during field investigations.

The Project Study Area is located between the approximate coordinates: 41.595271, -83.182582 (western terminus) and 41.594772, -83.111299 (eastern terminus); in Carroll Township, Ottawa County, Ohio.

The Project Study Area is comprised of an existing utility right-of-way (ROW) located within agricultural and residential land use. Based upon review of available historic aerial imagery (1997-2024), land use surrounding the Project Study Area in years prior to the field investigation was dominated by agricultural and residential land use. The existing, maintained utility ROW is observed in 1997 historical aerial mapping. The Project Study Area is accessed along the roadway ROW, through approved private land-owner property, and via existing, maintained gravel farm roads. **Appendix A, Figure 1** and **Figure 2,** provide further information on the location of the proposed Project Study Area.

1.1 Statement of Qualifications

TRC has extensive experience managing and conducting wetland delineations and threatened and endangered species habitat surveys across the United States. TRC's biologists and ecologists have been trained to properly and consistently apply the methods set forth in the 1987 Corps of Engineers *Wetland Delineation Manual (1987 Manual)* (USACE, 1987) and applicable regional supplements. They have direct experience identifying and documenting indicators of hydrophytic vegetation, wetland hydrology, and hydric soil and are experienced in dealing with naturally problematic and disturbed conditions. Additionally, they are experienced in reviewing and identifying appropriate habitat conditions for threatened and endangered species.

Emma Given, Ph.D., PWS is an Ecologist with over 10 years of experience in natural resources. Dr. Given authored this delineation report. She holds her Professional Wetland Scientist (PWS) credential and has authored numerous surface water delineation reports, threatened and endangered pre- and post- construction monitoring reports, habitat conservation plans, and noise studies. She is experienced in aquatic resources delineation, threatened and endangered species quantitative modeling, including bird and bat mortality estimates, Eagle Risk Assessment, and Evidence of Absence study design. She has served as a lead delineator for numerous transmission line, transportation, and commercial development projects. Her research background is in stream and wetland ecosystem function and disturbance dynamics.

Erin Van Nort, PWS is a Senior Wetland Scientist with over 20 years of experience working in natural resources and was the principal investigator for this Project. Her credentials include PWS (3406) and Pre-Qualified Consultant with the Ohio Department of Transportation for Waterway Permitting and Ecological Services. She is adept at determining wetland and stream quality using the Ohio Environmental Protection Agency (OEPA) methodologies and has negotiated hundreds of permit approvals for Federal §404 Individual, Nationwide Permits, and Ohio §401 permits. She has served as a lead wetland delineator and biologist on a broad array of projects, including solar, gas, transmission line, transportation, and commercial and residential developments, and has authored numerous wetland reports, watershed plans, and grant applications.

2.0 Methodology

To complete the surface water delineation and evaluation of the Project Study Area, TRC followed the guidelines and methods outlined by the USACE and OEPA, as described within this section.

2.1 Wetland Parameters

Delineations were completed following the *1987 Manual* (USACE, 1987) Level 2 Routine Approach *(Part IV, Section D., Subsection 2 - Onsite Inspection Necessary)* for areas equal to or less than 5 acres in size, the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (USACE, 2012)

Furthermore, the March 6, 1992, guidance memorandum (Williams, 1992) emphasizes a three-parameter approach to wetland boundary determination in the field. This approach involves the following:

i. Evidence of wetland hydrology;
ii. Presence of hydric soils; and
iii. Predominance of hydrophytic vegetation as defined by the *2022 National Wetland Plant List* (USACE, 2023).

Positive indicators of all three parameters are normally present in wetlands and serve to distinguish between both dry land and transitional plant communities.

2.1.1 Hydrology

The *1987 Manual* and *Regional Supplements* provide guidelines for determining the presence of wetland hydrology. Criteria for wetland hydrology are met if the area is inundated or saturated at the soil surface during the growing season for a time sufficient to develop hydric soils and to support hydrophytic vegetation.

2.1.2 Hydric Soils

Hydric soils are defined as soils "that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part of the soil" (Federal Register, 1994). Hydric soil indicators described in the United States Department of Agriculture – Natural Resources Conservation Service's (USDA-NRCS) *Field Indicators of Hydric Soils in the United States: A Guide for Identifying and Delineating Hydric Soils Version 9.2* (USDA, NRCS, 2025) were used to identify and document hydric soils per the *Regional Supplements*.

2.1.3 Hydrophytic Vegetation

To determine the presence of hydrophytic vegetation, the dominant and non-dominant species in each major vegetative stratum (e.g., tree, shrub/sapling, herbaceous, and woody vine) were identified and recorded.

Plants are placed into indicator status categories depending on their probability of occurring in a wetland in accordance with the USACE's *The National Wetland Plant List: 2022 wetland ratings* (USACE, 2023). There are five indicator status categories for plants:

1. Obligate wetland plants (OBL): plants that occur almost always (>99%) in wetlands in natural conditions, but which may also occur rarely (<1%) in non-wetlands;
2. Facultative wetland plants (FACW): plants that occur usually (>67-99%) in wetlands but also occur (1-33%) in non-wetlands;
3. Facultative plants (FAC): plants with a similar likelihood (33-67%) of occurring in both wetlands and non-wetlands;
4. Facultative upland plants (FACU): plants that occur sometimes (1-<33%) in wetlands, but occur more often (>67-99%) in non-wetlands; and
5. Obligate upland plants (UPL): plants that occur rarely (<1%) in wetlands but occur almost always (>99%) in non-wetlands under natural conditions.

A prevalence of dominant species that are FAC, FACW, and/or OBL indicates the presence of hydrophytic vegetation.

2.2 USACE Wetland Delineation

Qualified wetland scientists from TRC conducted surface water field investigations on November 19 and 20, 2024 and March 23, 2026. The surface water field investigations were conducted within the predetermined Project Study Area (**Appendix A, Figure 1**) that was developed in

accordance with the Project location information provided by FirstEnergy. Surface water delineations were conducted using the Level 2 Federal Routine Determination Method presented in the *1987 Manual* and *Regional Supplements*, including clarifications and interpretations provided in the March 6, 1992 guidance memorandum (Williams, 1992), and the USACE and Environmental Protection Agency (EPA) guidance on jurisdictional forms (USACE, 2008). USACE Wetland Determination Data Sheets – Northcentral and Northeast Region are provided within **Appendix D**.

Hydrology was determined based on a number of indicators that are divided into two categories, primary and secondary. The *1987 Manual* defines hydrology as present when at least one primary indicator or two secondary indicators are identified. One primary indicator is sufficient to determine if hydrology is present; however, if these are absent then two or more of the secondary indicators are required to determine hydrology. If other probable hydrologic evidence was found, then this was subsequently documented on the data sheet.

Soils were examined in the field by using a tile spade and/or auger, generally to a depth of at least 22 inches below the soil surface, until refusal, or positive hydric soil indicators were met above 22 inches, whichever was shallower. Soil coloration was identified using a Munsell Soil Color Chart (Munsell Color Company, 2009). Other characteristics, such as the presence of redoximorphic (Redox) concentrations and depletions and soil texture were also recorded. Redox concentrations and depletions are created when the soil is saturated and has anaerobic conditions (without oxygen gas) which leads to changes in the chemical processes in the soil that produce visible color changes in the soil. Hydric characteristics such as organic soil layers, depleted matrix, gleying, and hydrogen sulfide odor, were noted when observed. Soils at both wetland (if present) and dry land data plot locations were characterized and recorded on the data sheet.

The presence of hydrophytic vegetation was determined using the procedures described in the *Regional Supplements* and recorded on the data sheet. Vegetation in both dry land and wetland communities was characterized using a real dominance method, with a radius of 30-feet around the soil sample location for trees and woody vines, 15-foot radius for saplings and shrubs, and a 5-foot radius for herbaceous plants. Plant communities meeting the “50/20” Rule or meeting one of the other indicators set forth in the *1987 Manual, Regional Supplements,* and guidance memorandums are considered hydrophytic for the purposes of the wetland classification criteria. In areas where the vegetation was disturbed or not identifiable due to seasonal conditions, soil and hydrology characteristics, and professional judgment/experience were utilized in assessing the primary determining factors for classification as wetlands.

If the soils, hydrology, and vegetation characteristics at a survey point indicated that it was within a wetland, the boundary of the wetland was determined, and the approximate boundary was flagged using wetland flagging and recorded using a handheld Juniper Systems Geode and Trimble R1 with sub-meter accuracy. Areas observed to have problematic or difficult situations were delineated utilizing the procedures identified in the *Regional Supplements*, Section 5 – “Difficult Wetland Situations in the Northcentral and Northeast Region”. Data from the Global Positioning System (GPS) survey was downloaded and integrated into a Geographic Information System database for the proposed work areas and used to make the accompanying figures.

Identified wetlands were classified according to Cowardin et al. (Cowardin, Carter, Golet, & LaRoe, 1979). Photographs are included in **Appendix C**.

2.3 Ohio Environmental Protection Agency's Ohio Rapid Assessment Method

According to the Ohio Wetland Water Quality Standards, a wetland quality category (Category 1, Category 2, or Category 3) must be assigned for each wetland if a project will require discharge of dredged or fill material into jurisdictional wetlands. In general, Category 1 wetlands are considered to be of "low quality", Category 2 wetlands are considered to be of "moderate quality," and Category 3 wetlands are considered to be of "high quality."

The OEPA has developed the Ohio Rapid Assessment Method (ORAM), which can be utilized to evaluate wetland habitat quality based on the apparent functions and values of the wetland resource. The two primary components of the ORAM are the Narrative Rating and the Quantitative Rating. TRC completed ORAM (Version 5.0) Quantitative Rating forms for all the wetland resources identified within the Project Study Area. Each delineated wetland resource received a provisional category designation based on the results of the ORAM Narrative and Quantitative Ratings and review of narrative criteria in the Ohio Administrative Code (OAC) 3745-1-54(C) (Mack, 2000). OEPA ORAM Rating and Categorization Forms are provided within **Appendix D**.

2.4 USACE Waterbody Identification

During field investigations, other waterbody features including streams, ponds, lakes, etc. were investigated. Streams within the Project Study Area were identified by the presence of an ordinary high-water mark (OHWM) and scoured channel or defined bed and banks. The OHWM was delineated based on the OHWM as defined in 33 CFR Part 328.3 and 33 CFR 329.4 (as applicable), in accordance with the Regulatory Guidance Letter No. 05-05 and the *National Ordinary High Water Mark Field Delineation Manual for Rivers and* Streams (USACE, 2005; USACE and EPA, 2025). All streams identified in the Project Study Area that were wider than five feet were demarcated via GPS from bank-to-bank. Streams that were less than five feet wide had the centerline demarcated. Streams identified during the course of the investigation were classified as perennial, intermittent, or ephemeral waterways in accordance with the rationale defined by the USACE Buffalo District.

The Project Study Area was also investigated for areas that were considered "open water" by the USACE. These open waters were also delineated based on their (USACE, 2005). According to the USACE, an open water is an area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an OHWM can be determined. Aquatic vegetation within the area of flowing or standing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of "open waters" may include rivers, lakes, and ponds. Artificial "open water" features may include stormwater retention basins, fish hatchery ponds, drainage tile pump stations, etc.

2.5 OEPA Waterbody Quality Quantification

In addition, streams were evaluated utilizing OEPA approved methods for stream habitat assessment which include the Qualitative Habitat Evaluation Index (QHEI) (OEPA, 2006) (Rankin, 1989) and/or the Headwater Habitat Evaluation Index (HHEI) (OEPA, 2020) assessment method. These approved assessment methods provide an empirical, quantified evaluation of streams as required by the State of Ohio for permitting and mitigation purposes. These methods assess stream habitat to provide a qualitative index (or score) to determine the level of compensatory mitigation that may be needed for impacts to waters of the United States (i.e., streams).

Use of the QHEI or HHEI assessment method is determined based on the size of the stream's drainage area and/or the stream's pool depths. Where coverage was available, the drainage area was calculated using automated basin characteristics from StreamStats v 4.31.1 (USGS, 2026).

2.5.1 Qualitative Habitat Evaluation Index

Following OEPA guidance, streams with a drainage area of greater than 1.0 square mile (2.6 square kilometers) or which have pools with maximum depths over 15.8 inches (40.0 centimeters), as determined by measuring pool depth within the stream, were evaluated using the QHEI. Data on these streams were collected on the QHEI form provided by the OEPA. The QHEI is composed of six principal metrics: substrate, instream cover, channel morphology, riparian zone and bank erosion, pool/glide and riffle-run quality, and map gradient. Each metric is scored separately and summed to obtain the total QHEI score. Using the scoring methods associated with these forms, the stream is placed into the following general narrative ranges, dependent upon stream size; for smaller streams (≤20 sq. mi): Excellent >70, Good 55-69, Fair 43-54, Poor 30-42, and Very Poor <30; for larger streams (>20 sq. mi): Excellent >75, Good 60-74, Fair 45-59, Poor 30-44, and Very Poor <30.

2.5.2 Headwater Habitat Evaluation Index

The HHEI was utilized to score streams with a drainage area of <1.0 square mile (2.6 square kilometers). Data on these streams was collected on the HHEI forms, provided by the OEPA (OEPA, 2020). Observational data regarding the physical nature of the stream corridor including stream flow, riparian zone land use and buffer width, and channel modification was recorded. Measurements included bankfull width, maximum pool depth, and substrate composition.

3.0 Results

3.1 Site Description

The Project Study Area is 70.18 acres located in Carroll Township, Ottawa County, Ohio; within the Turtle Creek-Frontal Lake Erie and Lower Toussaint Creek watersheds (12-Digit Hydrologic Unit Code [HUC]: 041000100701 and 041000100603) (USGS, 2022).

The Project Study Area is shown on the Oak Harbor and Lacarne, Ohio United States Geological Survey 7.5-minute series topographic quadrangles (**Appendix A, Figure 1**) (USGS, 2023).

There are four (4) United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) features mapped within the Project Study Area. The four (4) NWI features include two (2) freshwater emergent wetlands, one (1) riverine feature, and one (1) freshwater pond (**Appendix A, Figure 4**) (USFWS, 2023).

The USGS National Hydrography Dataset (NHD) (USGS, 2018) Downloadable Data Collection from The National Map is a comprehensive set of digital spatial data that encodes information about naturally occurring and constructed bodies of surface water (e.g., lakes, ponds, and reservoirs), paths through which water flows (e.g., canals, ditches, streams, and rivers) and related entities such as point features (e.g., springs, wells, stream gages, and dams). There is one (1) NHD stream mapped within the Project Study Area (**Appendix A, Figure 4**).

According to Federal Emergency Management Agency Flood Insurance Rate Map Panels 39123C0085D (eff. 12/1/2022), 39123C0105D (eff. 12/1/2022), and 39095C0350F (eff. 2/22/2024), the proposed Project is located within a mapped 100-year floodplain (**Appendix A, Figure 4**) (FEMA, 2024).

The USACE Antecedent Precipitation Tool (APT) Version 3.0 (USACE, 2025) was used to collect 90-day antecedent precipitation data. **Table 1** below shows the associated APT weather station information accessed for the November 19 and 20, 2024, and March 23, 2026, field investigations. Compared to historical data, antecedent hydrologic conditions on November 19, 2024, were considered to be drier than normal and on November 20, 2024, antecedent hydrologic conditions were considered to be normal. Typical conditions for the time of year (wet season) were observed although the drought index reported severe drought conditions (USACE, 2025). Compared to historical data, antecedent hydrologic conditions in March 2026 were considered to be drier than normal, as well. Typical conditions for the time of year (wet season) were observed, although the drought index reported moderate drought conditions (USACE, 2025). APT results are provided within **Appendix B**.

Table 1. USACE APT Weather Station Data

Observation Date	Weather Station Name	Coordinates	Elevation (feet)	Distance (miles)	Days Normal	Days Antecedent
11/19/2024 11/20/2024	FREMONT	41.3336, -83.1197	600.066	18.107	11347	90
3/23/2026					11339	88
11/19/2024 11/20/2024 3/23/2026	FREMONT 0.5 SW	41.3448, -83.1201	628.937	0.774	1	0
11/19/2024 11/20/2024 3/23/2026	FREMONT AG STN	41.3119, -83.1719	664.042	3.096	5	0
3/23/2026	FREMONT 2.2 ENE	41.3658, -83.0754	608.924	3.198	8	2

The USDA-NRCS Web Soil Survey (USDA-NRCS, 2016) was used to identify the soil types contained within the Project Study Area (**Appendix A, Figure 3**). **Table 2** provides a summary of the soils identified within proposed Project Study Area.

Table 2. Soils Type Summary

Map Unit Symbol	Map Unit Name	Hydric Status	Acres Within Project Study Area	Percent Cover in Project Study Area
Bo	Bono silty clay	Hydric	1.25	1.77%
NpA	Nappanee silty clay loam, 0 to 3 percent slopes	Non-Hydric with Hydric Inclusions	13.93	19.85%
To	Toledo silty clay, 0 to 1 percent slopes	Hydric	50.38	71.79%
Tp	Toledo silty clay, 0 to 1 percent slopes, flooded	Hydric	3.78	5.39%
W	Water	Non-Hydric	0.84	1.20%
		Total	**70.18**	**100.00%**

Notes:
Accessed online March 2026 at: http://websoilsurvey.sc.egov.usda.gov.

3.2 Surface Water Resource Field Delineations

TRC performed field investigations on November 19 and 20, 2024 and March 23, 2026. During the 72 hours prior to the 2024 field investigations, the surrounding area averaged 0.11 inches of rainfall per day, and the average temperature was 55 degrees Fahrenheit. During the 72 hours prior to the 2026 field investigation, the surrounding area averaged 0.08 inches of rainfall per day, and the average temperature was 47 degrees Fahrenheit. During the field investigations, overall on-site observations of hydrology revealed normal conditions. The results of the APT are discussed in Section 3.1 and can be found in **Appendix B**. Native and non-native herbaceous vegetation was observed within the Project Study Area. The USACE maintains the final authority that determines jurisdiction; therefore, statements about jurisdiction within this Report are preliminary and subject to final determination by the USACE and EPA.

3.2.1 Wetlands

During the field investigations, five (5) wetlands were identified and delineated within the Project Study Area. The delineated wetland boundaries and sample points are shown on **Figure 5** in **Appendix A**. Representative photographs of sample points and other areas of interest are provided in **Appendix C**. Data were collected and recorded on the USACE Wetland Determination Data Sheets – Northcentral and Northeast Region (**Appendix D**) and wetland functional assessments were completed for each delineated wetland using the ORAM (**Appendix D**). Delineated wetlands within the Project Study Area are summarized in **Table 3**.

Table 3. Delineated Wetland Features Summary

Wetland ID[1]	Latitude, Longitude	Delineation Date	Extends Outside Project Study Area (Y/N)?	Cowardin Classification within Study Area[2]	Water Regime Modifier[3]	Connection[4]	Apparent Downstream Connectivity[5]	Provisional Jurisdictional Status[6]	ORAM Score	ORAM Category[7]	Approximate Delineated Area within Project Study Area[8] (acres)
W-EVN-1	41.594658, -83.140224	11/19/2024	Y	PEM	Seasonally Flooded	Abutting	W-EVN-1 → UNT to Turtle Creek → Turtle Creek → Lake Erie (TNW)	USACE Jurisdictional Wetland	26.5	Cat. 1	0.65
W-EVN-2	41.595144, -83.164032	11/20/2024	Y	PEM	Seasonally Flooded	Abutting	W-EVN-2 → UNT to Turtle Creek → Turtle Creek → Lake Erie (TNW)	USACE Jurisdictional Wetland	35	Cat. 2	2.02
W-EVN-3	41.594843, -83.160377	11/20/2024	Y	PFO	Semi-permanently Flooded	Abutting	W-EVN-3 → UNT to Turtle Creek → Turtle Creek → Lake Erie (TNW)	USACE Jurisdictional Wetland	54	Cat. 2	0.48
W-EVN-4	41.595083, -83.159253	11/20/2024	Y	PEM	Seasonally Flooded/ Saturated	Abutting	W-EVN-4→ Turtle Creek → Lake Erie (TNW)	USACE Jurisdictional Wetland	45.5	Cat. 2	3.61
W-EVN-5	41.595049, -83.164585	11/20/2024	Y	PEM	Seasonally Flooded	Abutting	W-EVN-5→ UNT to Turtle Creek → Turtle Creek → Lake Erie (TNW)	USACE Jurisdictional Wetland	27	Cat. 1	1.29
										Total:	**8.05**

Wetland ID[1]	Latitude, Longitude	Delineation Date	Extends Outside Project Study Area (Y/N)?	Cowardin Classification within Study Area[2]	Water Regime Modifier[3]	Connection[4]	Apparent Downstream Connectivity[5]	Provisional Jurisdictional Status[6]	ORAM Score	ORAM Category[7]	Approximate Delineated Area within Project Study Area[8] (acres)

NOTES:

[1]TRC resource identification.

[2]Cowardin Wetland Classification within Project Study Area (approximation based upon field identification and delineation) (Cowardin, Carter, Golet, & LaRoe, 1979): PEM – Palustrine Emergent, PFO – Palustrine Forested.

[3]National Wetland Inventory Wetlands and Deepwater Map Code Diagram – Modifiers for non-tidal waters (USFWS, 2019)

[4]Connection to a jurisdictional waterway: Isolated or Abutting as determined by TRC; subject to USACE verification. Wetland connection is pending an update from EPA and USACE based on the EPA vs. Sackett case.

[5]UNT=Unnamed Tributary, TNW=Traditional Navigable Waterway.

[6]Jurisdiction status is based upon field observations and mapping review of apparent connectivity or adjacency of the resource to Waters of the United States and the assumption that a preliminary jurisdictional determination process will be utilized for the project.

[7]ORAM Category assigned based on scoring breakpoints from Table 2 of the ORAM v. 5.0 Quantitative Score Calibration; scores falling within a “gray zone” or “modified” ranges have been assigned to the higher of the two categories.

[8]Area is rounded to nearest 0.01-acre, based upon GPS data.

3.2.2 Streams and Waterbodies

During the field investigations, one (1) stream was delineated within the Project Study Area. A detailed summary of the stream identified is provided in **Table 4** and **Appendix A**, **Figure 5**. Representative photographs of the described stream identified within the Project Study Area can be found in **Appendix C**.

Table 4. Delineated Stream Feature Summary

Stream ID[1]/Resource Name*	Latitude, Longitude	Delineation Date	Resource / Downstream Flow Path[2]	Flow Regime	OEPA Use Designation[3]	QHEI Score[4]	Approximate Delineated Length and Area within Project Study Area[5] (linear feet/acre)
S-EVN-1 (Turtle Creek)	41.594942, -83.154527	11/20/2024	S-EVN-1 (Turtle Creek) → Turtle Creek Bay → Lake Erie (TNW)	Perennial	WWH, AWS, IWS, PCR	N/A	151 feet (0.91-acre)
						TOTAL	**151 feet (0.91-acre)**

Notes:

[1]TRC resource identification. *Resource Name taken from USGS 7.5-minute topographic map is given, if applicable.

[2] TNW=Traditional Navigable Waterway.

[3]Determined by OEPA and listed in OAC §3745-1-23 Portage River drainage basin (Ohio Administrative Code Rule 3745-1-23). WWH = Warmwater Habitat, AWS = Agricultural Water Supply, IWS = Industrial Water Supply, PCR = Primary Contact Recreation.

[4]Turtle Creek was inaccessible, therefore a stream assessment was not conducted.

[5]Length is rounded to nearest foot, based upon GPS data. Area is rounded to nearest 0.01-acre, based upon GPS data.

4.0 Permitting Considerations

It is anticipated that due to the nature of the Project, jurisdictional resources may be impacted by the proposed Project activities. It is TRC's understanding that this Project would fall under Nationwide Permit (NWP) 57 - Electric Utility Line and Telecommunications Activities (USACE, 2026). This Project is located in Carroll Township, Ottawa County, Ohio within the USACE Buffalo Regulatory District. Carroll Township in Ottawa County is listed in Table 1 of General Condition 18 (Endangered Species) and Regional General Condition 6a (Threatened and Endangered Species), which triggers the need for a Section 404 Pre-Construction Notification application to be submitted to the USACE when the proposed Project includes regulated activities within jurisdictional resources.

4.1 USACE Verification

The USACE has the authority to determine and/or verify the geographical boundaries of Waters of the United States in accordance with 33 Code of Federal Regulations (CFR) 328 and 33 CFR 329; therefore, the results of this Report are termed "preliminary" until verified and accepted by the USACE. This verification is part of the Jurisdictional Determination process, which is required for approval under Section 404 Clean Water Act, Section 401 Water Quality Certification, and/or isolated wetland permitting process through OEPA. It is the responsibility of any party that intends to discharge dredge or fill material into Waters of the United States to comply with all applicable regulations.

5.0 Limitations

This Report is limited in scope to the specific terms of the Agreement previously entered into between TRC and FirstEnergy. This Report represents the conditions within the Project Study Area identified herein, as of the inspection dates.

Should the Project change from the scope described herein, TRC should be immediately notified such that additional investigations may be conducted to amend the content of the Report herein. Human-induced and/or natural changes within the Project Study Area may occur after the date of this investigation and may result in changes to the presence, extent, and classification of the surface water resources identified within this Report.

6.0 References

Cowardin, L., Carter, V., Golet, F., & LaRoe, E. (1979). Classification of Wetland and Deepwater Habitats of the United States. 103 pp. U.S. Fish and Wildlife Service.

Federal Register. (1994, July 13). Changes in hydric soils of the United States.

FEMA. (2024, March). *FEMA Flood Map Service Center*. Retrieved March 2026, from U.S. Department of Homeland Security: Federal Emergency Management Agency: https://msc.fema.gov/portal

Mack, J. (2000). ORAM v. 5.0 Quantitative Score Calibration. Columbus, Ohio: Ohio Environmental Protection Agency, Division of Surface Water, 401/Wetland Ecology Unit.

Munsell Color Company. (2009). X-Rite Munsell Soil Color Book 2009 Revised Edition.

OEPA. (2006). *Methods for Assessing Habitat in Flowing Waters: Using the Qualitative Habitat Evaluation Index (QHEI).* Columbus, OH: Division of Surface Water, Ohio Environmental Protection Agency.

OEPA. (2020). *Field Methods for Evaluating Primary Headwater Streams in Ohio(Version 4.1) (HHEI).* Columbus, OH: Division of Surface Water, Ohio Environmental Protection Agency.

Ohio Administrative Code Rule 3745-1-23. (n.d.). Portage River Drainage Basin, Table 23-1. *Use Designations for Water Bodies in the Portage River Drainage Basin*.

Rankin, E. T. (1989, November 6). The Qualitative Habitat Evaluation Index (QHEI): Rationale, Methods, and Application. Columbus, Ohio: Ohio Environmental Protection Agency, Division of Surface Water.

USACE. (1987). *Corps of Engineers Wetlands Delineation Manual.* Vicksburg, MS: Environmental Laboratory U.S. Army Corps of Engineers.

USACE. (2005, December 7). Regulatory Guidance Letter No. 05-05: Ordinary High Water Mark Identification.

USACE. (2008, June 26). Regulatory Guidance Letter, Subject: Jurisdictional Determinations.

USACE. (2012). *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)*. Vicksburg: U.S. Army Engineer Research and Development Center Environmental Laboratory: U.S. Army Corps of Engineers.

USACE. (2023). *The 2022 National Wetland Plant List, version 3.6*. Retrieved from http://wetland-plants.usace.army.mil/

USACE. (2025). *Antecedent Precipitation Tool (APT) Version 3.0.8. ERDC/TN WRAP-25-1.* Vicksburg, MS: USACE Engineer Research and Development Center. Retrieved March 2026, from APT GitHub repository

USACE. (2026, January). 91 FR 768. *Nationwide Permits, Regional Conditions and Water Quality Certifications for the State of Ohio*.

USACE and EPA. (2025, January). National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams. (C. R. Laboratory, Ed.) Hanover, NH 03755-1290: The US Army Engineer Research and Development Center.

USDA, NRCS. (2025). Field Indicators of Hydric Soils in the United States, Version 9.2. (L. Vasilas, G. Hurt, & C. Noble, Eds.) USDA, NRCS in cooperation with the National Technical Committee for Hydric Soils.

USDA-NRCS. (2016). Web Soil Survey. Retrieved March 2026, from http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

USFWS. (2019, Feburary 1). Wetlands and Deepwater Habitat Classification Diagram. Retrieved from https://www.fws.gov/sites/default/files/documents/wetlands-and-deepwater-map-code-diagram.pdf

USFWS. (2023). National Wetlands Inventory. Retrieved March 2026, from http://www.fws.gov/wetlands/Data/Mapper.html

USGS. (2018). National Hydrography Dataset. Retrieved March 2026, from https://nhd.usgs.gov/data.html

USGS. (2022, February). *The National Map (TNM)*. Retrieved March 2026, from https://apps.nationalmap.gov/viewer/

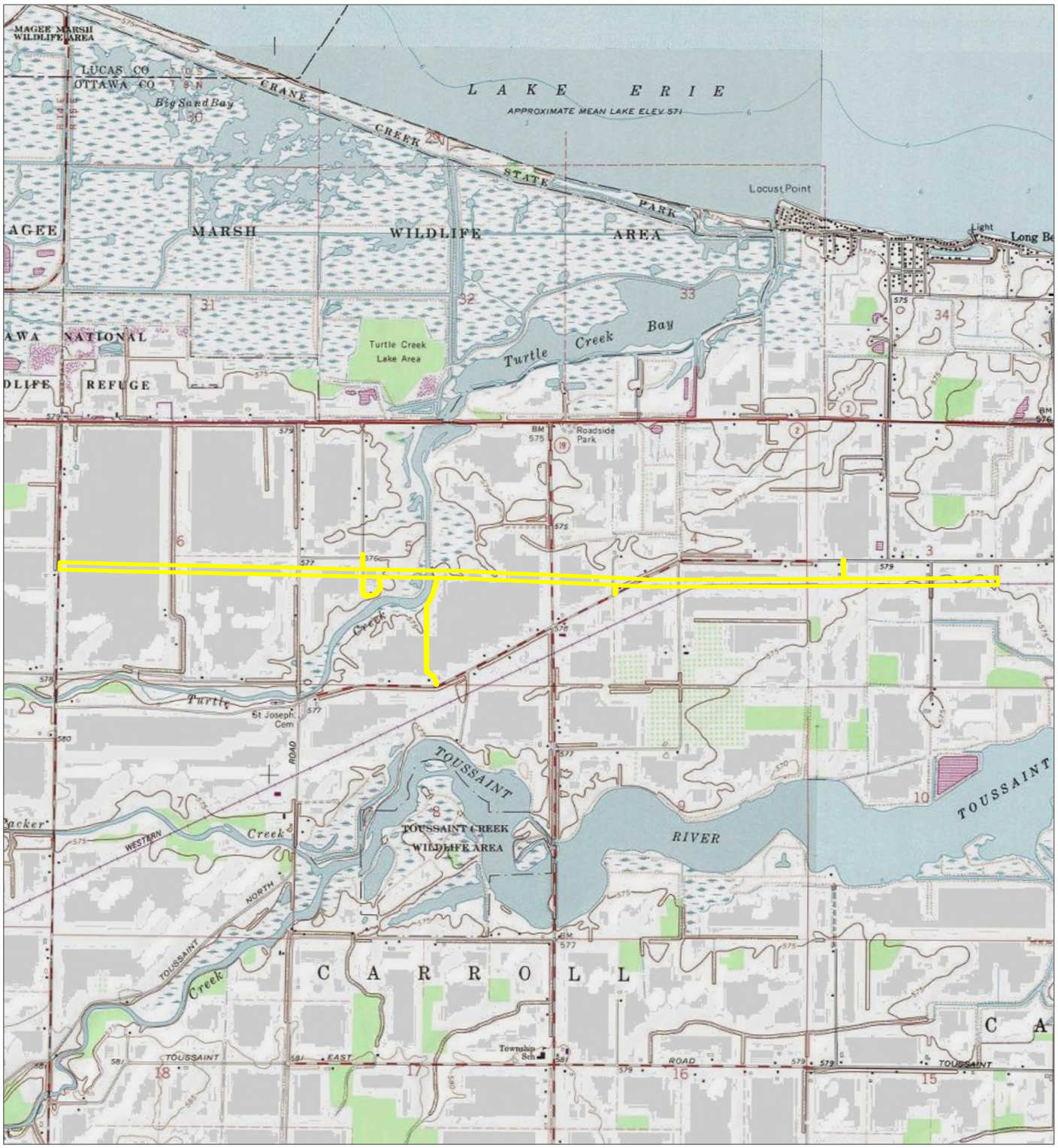
USGS. (2023). Topographical Quadrangle Maps (7.5 minute series). *Oak Harbor and Lacarne, OH 7.5 minute Quadrangle*. U.S. Geological Survey.

USGS. (2026). *The StreamStats Program, v 4.31.1*. (U.S. Geological Survey) Retrieved March 2026, from StreamStats Ohio: https://streamstats.usgs.gov/ss/

Williams, A. (1992). Memorandum: Clarification and Interpretation of the 1987 Manual. U.S. Army Corps of Engineers.

Appendix A

Figures



PROJECT STUDY AREA

BASE MAP: USA TOPO MAPS MAP SERVICE, OAK HARBOR & LACARNE QUAD

N

0 1,500 3,000

FEET

1:36,000 1" = 3,000'



PROJECT:
FIRSTENERGY
BAYSHORE-DAVIS BESSE 345KV REBUILD PROJECT
OTTAWA COUNTY, OH

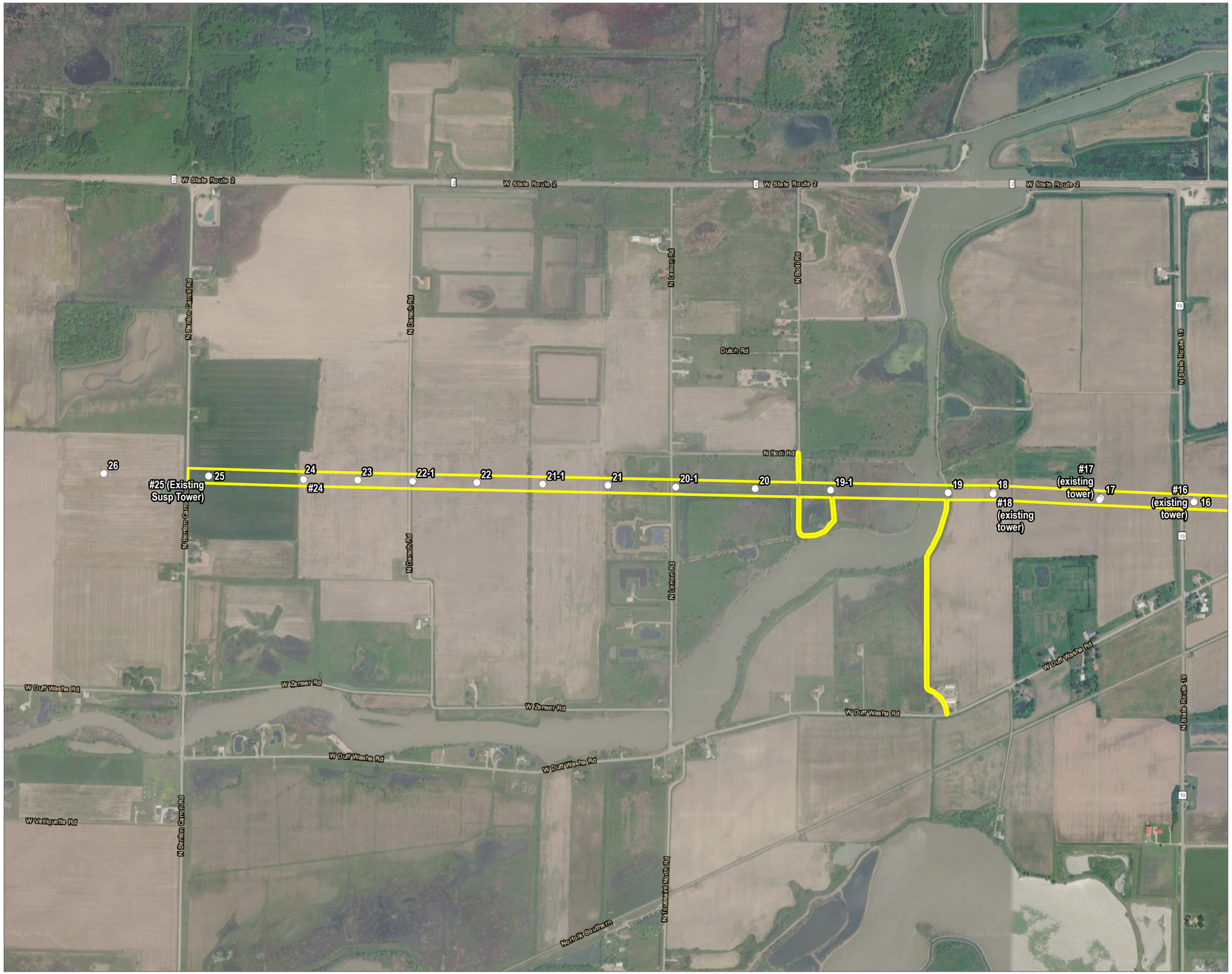
TITLE:
SITE LOCATION MAP

DRAWN BY:	M. OPEL	PROJ. NO.:	629846
CHECKED BY:	M. MOLNAR		
APPROVED BY:	B. FALKINBURG		**FIGURE 1**
DATE:	MARCH 2026		

TRC
1382 WEST NINTH STREET
SUITE 400
CLEVELAND, OH 44113
PHONE: 216-344-3072

FILE: WDRV2

COORDINATE SYSTEM: NAD 1983 STATEPLANE OHIO NORTH FIPS 3401 FEET; MAP ROTATION: 0
-- SAVED BY: MOPEL ON 3/12/2026, 11:54:53 AM; FILE PATH: T:\1-PROJECTS\FIRST_ENERGY\629846_BAYSHOREDAVISBESSE\12-APRX\WDRV2 APRX; LAYOUT NAME: FIG01_SLM



PROJECT STUDY AREA

EXISTING STRUCTURE

BASE MAP: GOOGLE MAPS.



1:12,000

1" = 1,000'

0 1,000 2,000 FEET

PROJECT:
FIRSTENERGY
BAYSHORE-DAVIS BESSE 345KV REBUILD PROJECT
OTTAWA COUNTY, OH

TITLE:
AERIAL MAP

DRAWN BY:	M. OPEL	PROJ. NO.:	629846
CHECKED BY:	M. MOLNAR	**FIGURE 2 (PAGE 1 OF 2)**	
APPROVED BY:	B. FALKINBURG		
DATE:	MARCH 2026		

TRC
1382 WEST NINTH STREET
SUITE 400
CLEVELAND, OH 44113
PHONE: 216-344-3072

FILE: WDRv2.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet; Map Rotation: 0
Saved By: JCURNS on 3/20/2026, 1:52:57 PM; File Path: T:\1_PROJECTS\FirstEnergy\629846_BayshoreDavisBesse\2-APRX\WDRv2.aprx; Layout Name: Fig02_Aerial



PROJECT STUDY AREA

EXISTING STRUCTURE

BASE MAP: GOOGLE MAPS.

1:12,000

1" = 1,000'

0 1,000 2,000 FEET



PROJECT:
FIRSTENERGY
BAYSHORE-DAVIS BESSE 345KV REBUILD PROJECT
OTTAWA COUNTY, OH

TITLE:
AERIAL MAP

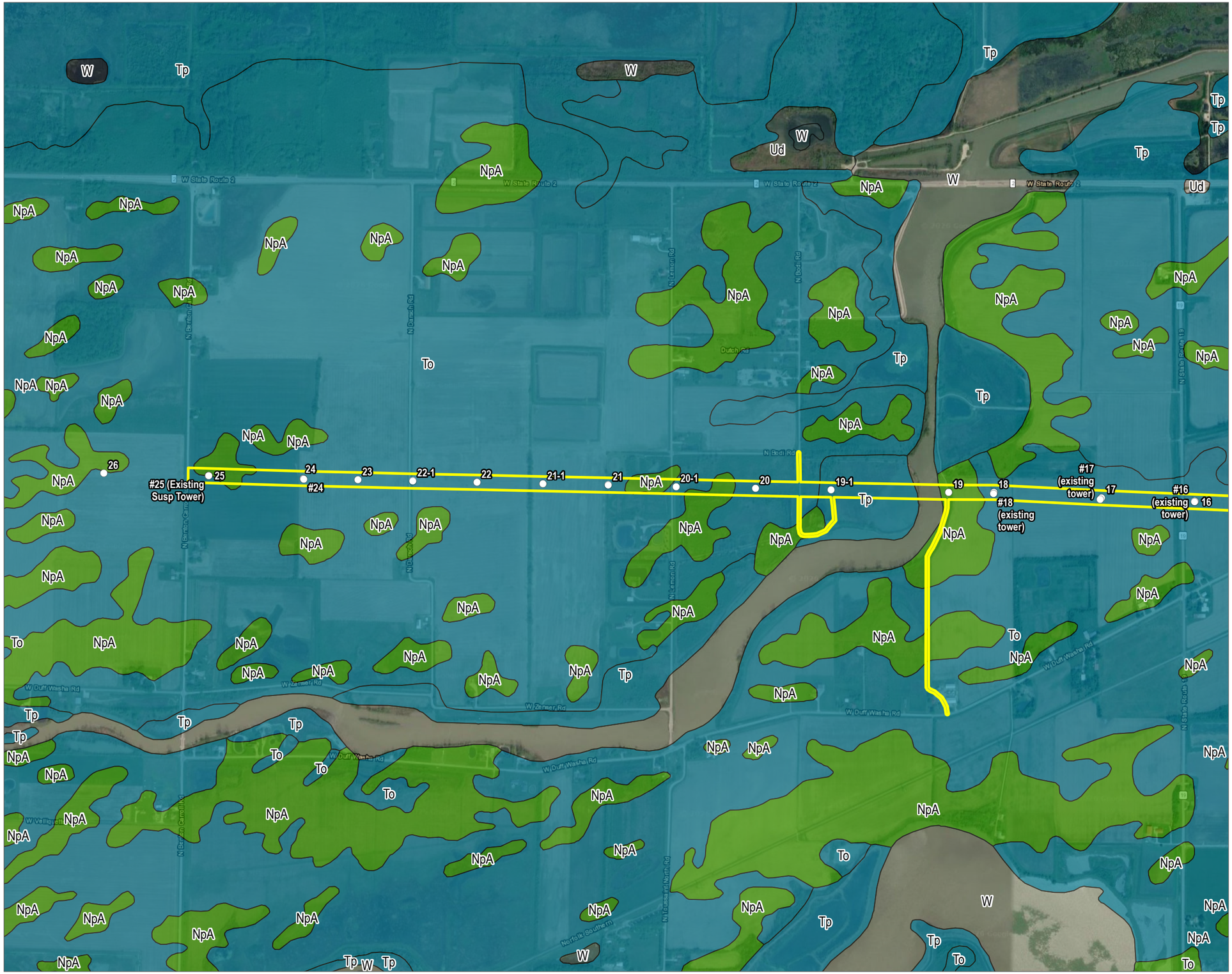
DRAWN BY:	M. OPEL	PROJ. NO.:	629846
CHECKED BY:	M. MOLNAR		
APPROVED BY:	B. FALKINBURG		
DATE:	MARCH 2026		

FIGURE 2 (PAGE 2 OF 2)

TRC
1382 WEST NINTH STREET
SUITE 400
CLEVELAND, OH 44113
PHONE: 216-344-3072

FILE: WDRv2.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet; Map Rotation: 0
Saved By: JEFFRIS on 3/20/2026, 1:54:57 PM; File Path: T:\1 PROJECTS\FirstEnergy\629846_BayshoreDavisBesse\3-APRX\WDRv2.aprx; Layout Name: Fig02_Aerial



PROJECT STUDY AREA
EXISTING STRUCTURE
HYDRIC SOIL
NON-HYDRIC W/ HYDRIC INCLUSIONS SOIL
NON-HYDRIC SOIL

BASE MAP: GOOGLE MAPS.
DATA SOURCES: SOILS DATA ACQUIRED FROM USDA/NRCS SSURGO DATABASE.



1:12,000
1" = 1,000'

0 1,000 2,000 FEET

PROJECT:
FIRSTENERGY
BAYSHORE-DAVIS BESSE 345KV REBUILD PROJECT
OTTAWA COUNTY, OH

TITLE:
SOILS MAP

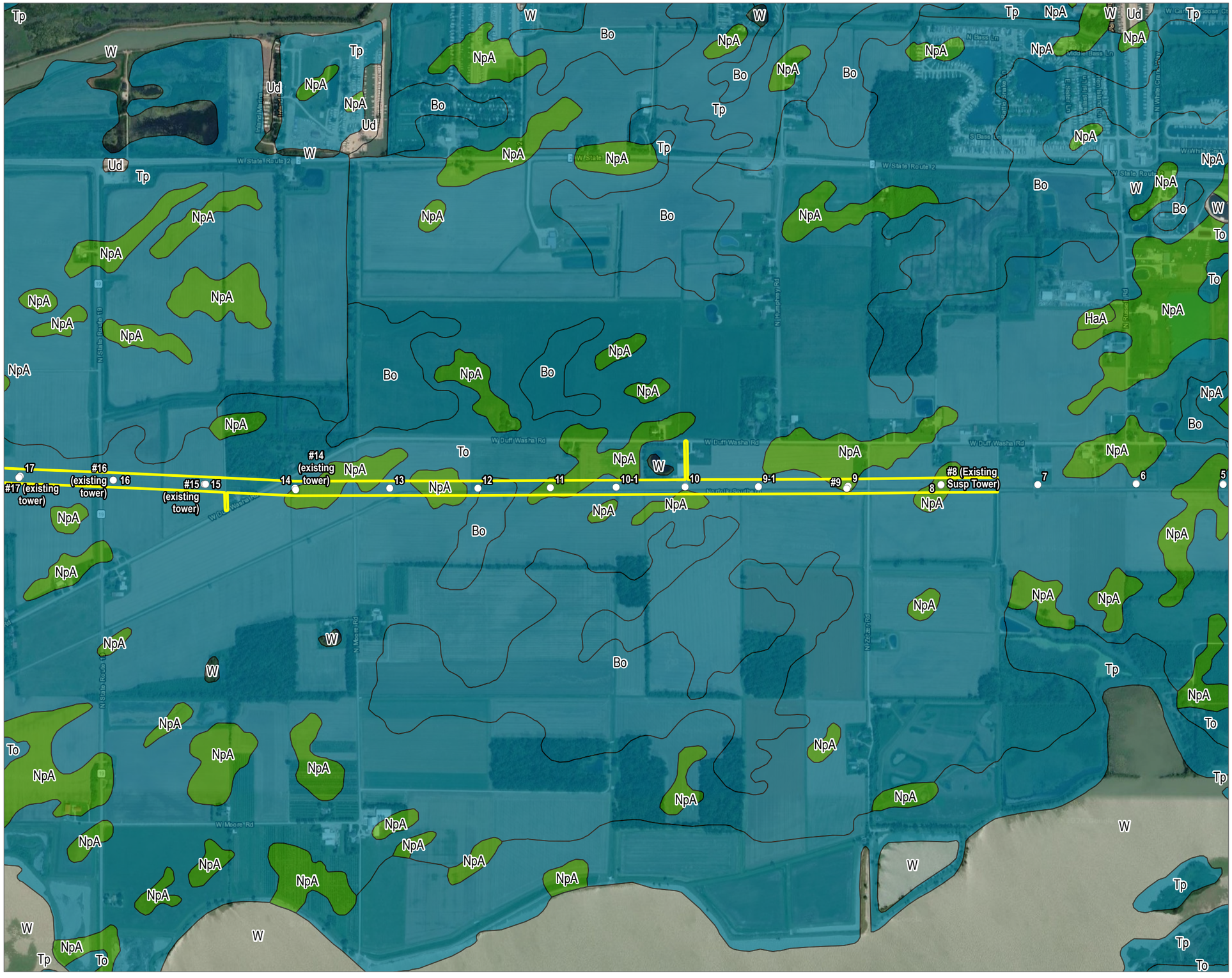
DRAWN BY:	M. OPEL	PROJ. NO.:	629846
CHECKED BY:	M. MOLNAR		
APPROVED BY:	B. FALKINBURG		
DATE:	MARCH 2026		

FIGURE 3
(PAGE 1 OF 2)

TRC
1382 WEST NINTH STREET
SUITE 400
CLEVELAND, OH 44113
PHONE: 216-344-3072

FILE: WDRv2.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet; Map Rotation: 0
Saved By: AFALKINS on 3/2/2026, 1:51:50 PM; File Path: T:\PROJECTS\First Energy\629846_BayshoreDavisBesse\3-APRX\WDRv2.aprx; Layout Name: Fig#3_Soils



PROJECT STUDY AREA
EXISTING STRUCTURE
HYDRIC SOIL
NON-HYDRIC W/ HYDRIC INCLUSIONS SOIL
NON-HYDRIC SOIL

BASE MAP: GOOGLE MAPS.
DATA SOURCES: SOILS DATA ACQUIRED FROM USDA/NRCS SSURGO DATABASE.



1:12,000
1" = 1,000'
0 1,000 2,000 FEET

PROJECT:
FIRSTENERGY
BAYSHORE-DAVIS BESSE 345KV REBUILD PROJECT
OTTAWA COUNTY, OH

TITLE:
SOILS MAP

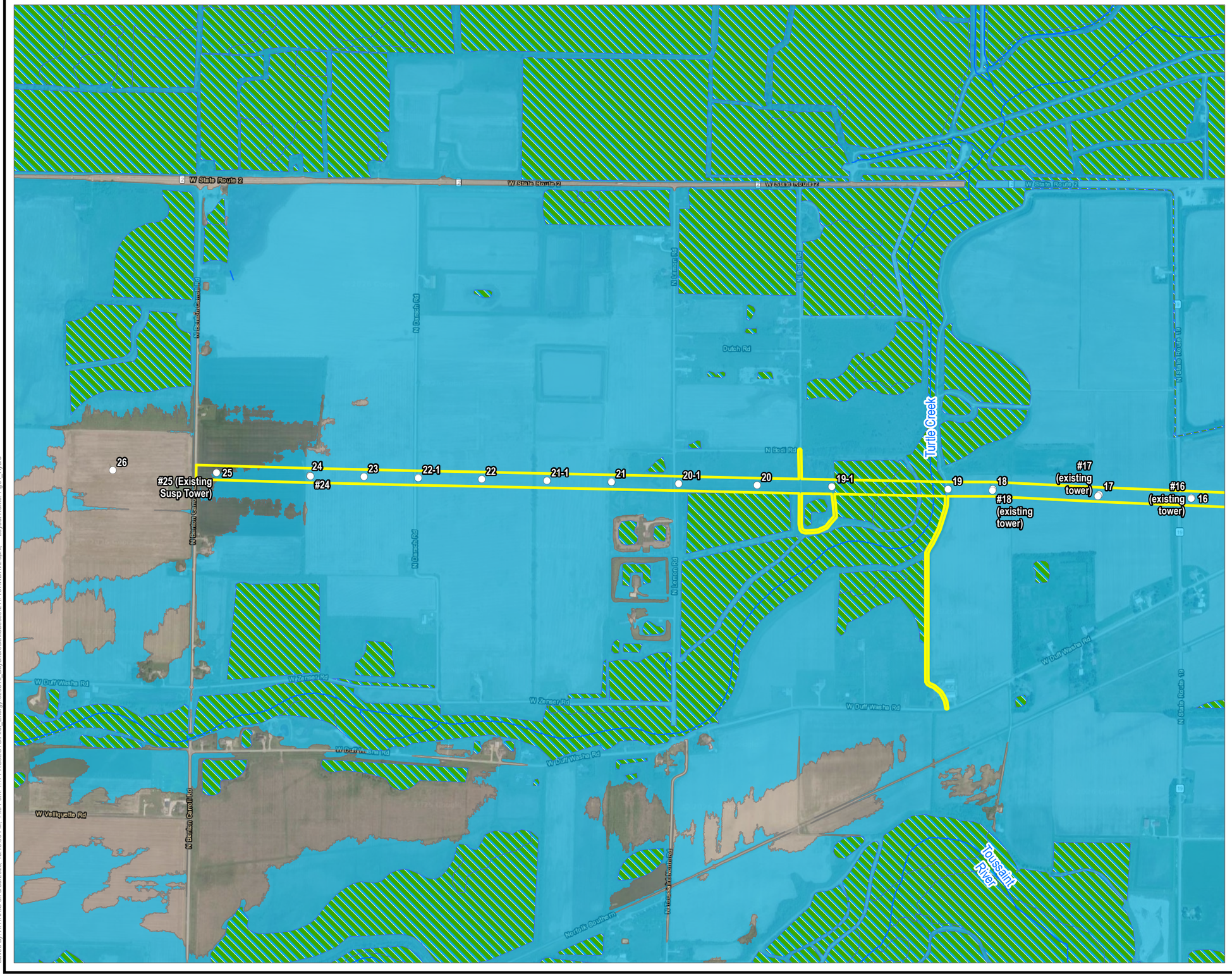
DRAWN BY:	M. OPEL	PROJ. NO.:	629846
CHECKED BY:	M. MOLNAR		
APPROVED BY:	B. FALKINBURG		
DATE:	MARCH 2026		

FIGURE 3
(PAGE 2 OF 2)

TRC
1382 WEST NINTH STREET
SUITE 400
CLEVELAND, OH 44113
PHONE: 216-344-3072

FILE: WDRv2.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet Map Rotation: 0
Saved By: JHARRIS on 3/30/2026 15:15:30 PM File Path: T:_PROJECTS\First Energy\629846_BayshoreDavisBesse\2-APRX\WDRv2.aprx Layout Name: Fig03_Soils



PROJECT STUDY AREA
EXISTING STRUCTURE
NATIONAL HYDROGRAPHY DATASET (NHD) STREAM
NATIONAL WETLANDS INVENTORY (NWI) FEATURE
100-YEAR FLOOD ZONE

BASE MAP: GOOGLE MAPS.
DATA SOURCES: WETLAND DATA ACQUIRED FROM U.S. FISH & WILDLIFE SERVICE, NATIONAL WETLANDS INVENTORY (NWI). STREAM DATA ACQUIRED FROM USGS, NATIONAL HYDROGRAPHY DATASET (NHD). FLOOD DATA ACQUIRED FROM FEMA, NATIONAL FLOOD HAZARD LAYER (NFHL).



1:12,000
1" = 1,000'
0 1,000 2,000 FEET

PROJECT:
FIRSTENERGY
BAYSHORE-DAVIS BESSE 345KV REBUILD PROJECT
OTTAWA COUNTY, OH

TITLE:
NHD, NWI AND FEMA FLOODPLAIN MAP

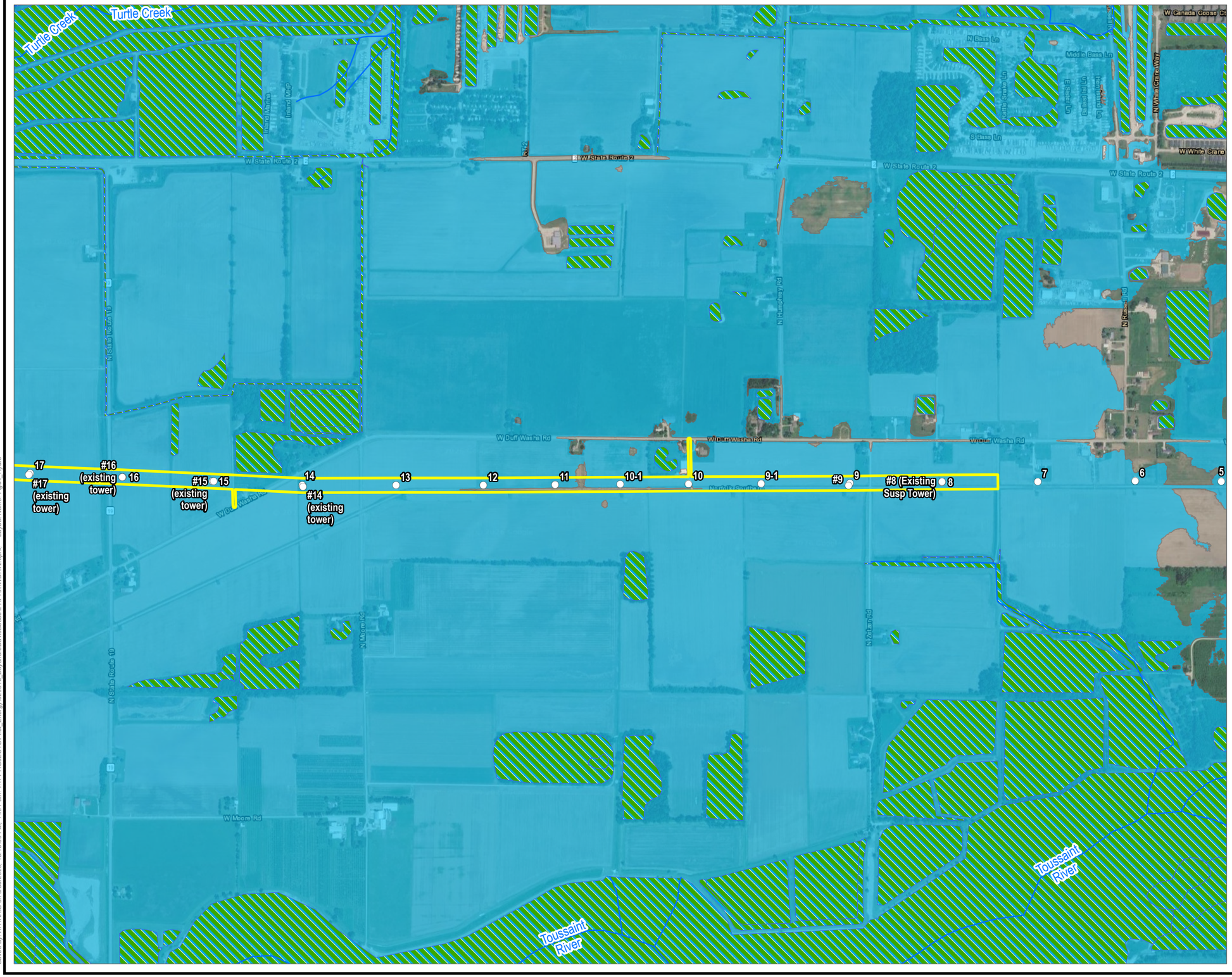
DRAWN BY:	A. CORDAS	PROJ. NO.:	629846
CHECKED BY:	E. GIVEN		
APPROVED BY:	B. FALKINBURG		
DATE:	MARCH 2026		

FIGURE 4
(PAGE 1 OF 2)

TRC
1382 WEST NINTH STREET
SUITE 400
CLEVELAND, OH 44113
PHONE: 216-344-3072

FILE: WDRv2.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet - Map Rotation: 0
Saved By: KPARKS on 3/30/2026 - 15:15:30 PM - File Path: T:\PROJECTS\First_Energy\629846_BayshoreDavisBesse\2-APRX\WDRv2.aprx - Layout Name: Fig04_Hydro



PROJECT STUDY AREA

EXISTING STRUCTURE

NATIONAL HYDROGRAPHY DATASET (NHD) STREAM

NATIONAL WETLANDS INVENTORY (NWI) FEATURE

100-YEAR FLOOD ZONE

BASE MAP: GOOGLE MAPS.
DATA SOURCES: WETLAND DATA ACQUIRED FROM U.S. FISH & WILDLIFE SERVICE, NATIONAL WETLANDS INVENTORY (NWI). STREAM DATA ACQUIRED FROM USGS, NATIONAL HYDROGRAPHY DATASET (NHD). FLOOD DATA ACQUIRED FROM FEMA, NATIONAL FLOOD HAZARD LAYER (NFHL).



1:12,000
1" = 1,000'

0 1,000 2,000 FEET

PROJECT:
FIRSTENERGY
BAYSHORE-DAVIS BESSE 345KV REBUILD PROJECT
OTTAWA COUNTY, OH

TITLE:
NHD, NWI AND FEMA FLOODPLAIN MAP

DRAWN BY:	A. CORDAS	PROJ. NO.:	629846
CHECKED BY:	E. GIVEN		
APPROVED BY:	B. FALKINBURG		
DATE:	MARCH 2026		

FIGURE 4
(PAGE 2 OF 2)

TRC
1382 WEST NINTH STREET
SUITE 400
CLEVELAND, OH 44113
PHONE: 216-344-3072

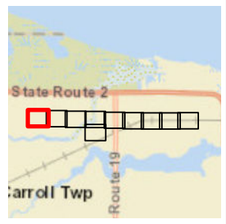
FILE: WDRv2.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet; Map Rotation: 0
Saved By: AFAIRIS on 3/30/2026, 15:15:30 PM; File Path: T:\PROJECTS\First_Energy\629846_BayshoreDavisBesse\2-APRX\WDRv2.aprx; Layout Name: Fig04_Hydro



PROJECT STUDY AREA
EXISTING STRUCTURE
CULVERT
NON-JURISDICTIONAL DITCH
PERENNIAL STREAM
PEM WETLAND
PFO WETLAND
WETLAND CONTINUES
WETLAND DATA POINT
UPLAND DATA POINT

BASE MAP: GOOGLE MAPS.
DATA SOURCES: TRC WETLAND DELINEATION COMPLETED NOVEMBER 19-20, 2024 & MARCH 23, 2026.



1:2,400
1" = 200'
0 200 400 FEET

PROJECT:
FIRSTENERGY
BAYSHORE-DAVIS BESSE 345KV REBUILD PROJECT
OTTAWA COUNTY, OH

TITLE:
DELINEATED RESOURCES MAP

DRAWN BY:	M. OPEL	PROJ. NO.:	629846
CHECKED BY:	M. MOLNAR		
APPROVED BY:	B. FALKINBURG		
DATE:	APRIL 2026		

FIGURE 5
(PAGE 1 OF 10)

TRC
1382 WEST NINTH STREET
SUITE 400
CLEVELAND, OH 44113
PHONE: 216-344-3072

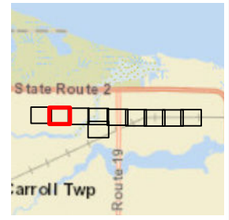
FILE: WDRv2.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet Map Rotation: 0
Saved By: AKARG on 4/7/2026 15:52:23 PM File Path: T:\1 PROJECTS\First Energy\629846_BayshoreDavisBesse\2-APRX\WDRv2.aprx Layout Name: Fig05_Delineation1



PROJECT STUDY AREA
EXISTING STRUCTURE
CULVERT
NON-JURISDICTIONAL DITCH
PERENNIAL STREAM
PEM WETLAND
PFO WETLAND
WETLAND CONTINUES
WETLAND DATA POINT
UPLAND DATA POINT

BASE MAP: GOOGLE MAPS.
DATA SOURCES: TRC WETLAND DELINEATION COMPLETED NOVEMBER 19-20, 2024 & MARCH 23, 2026.



1:2,400
1" = 200'

0 200 400 FEET

PROJECT:
FIRSTENERGY
BAYSHORE-DAVIS BESSE 345KV REBUILD PROJECT
OTTAWA COUNTY, OH

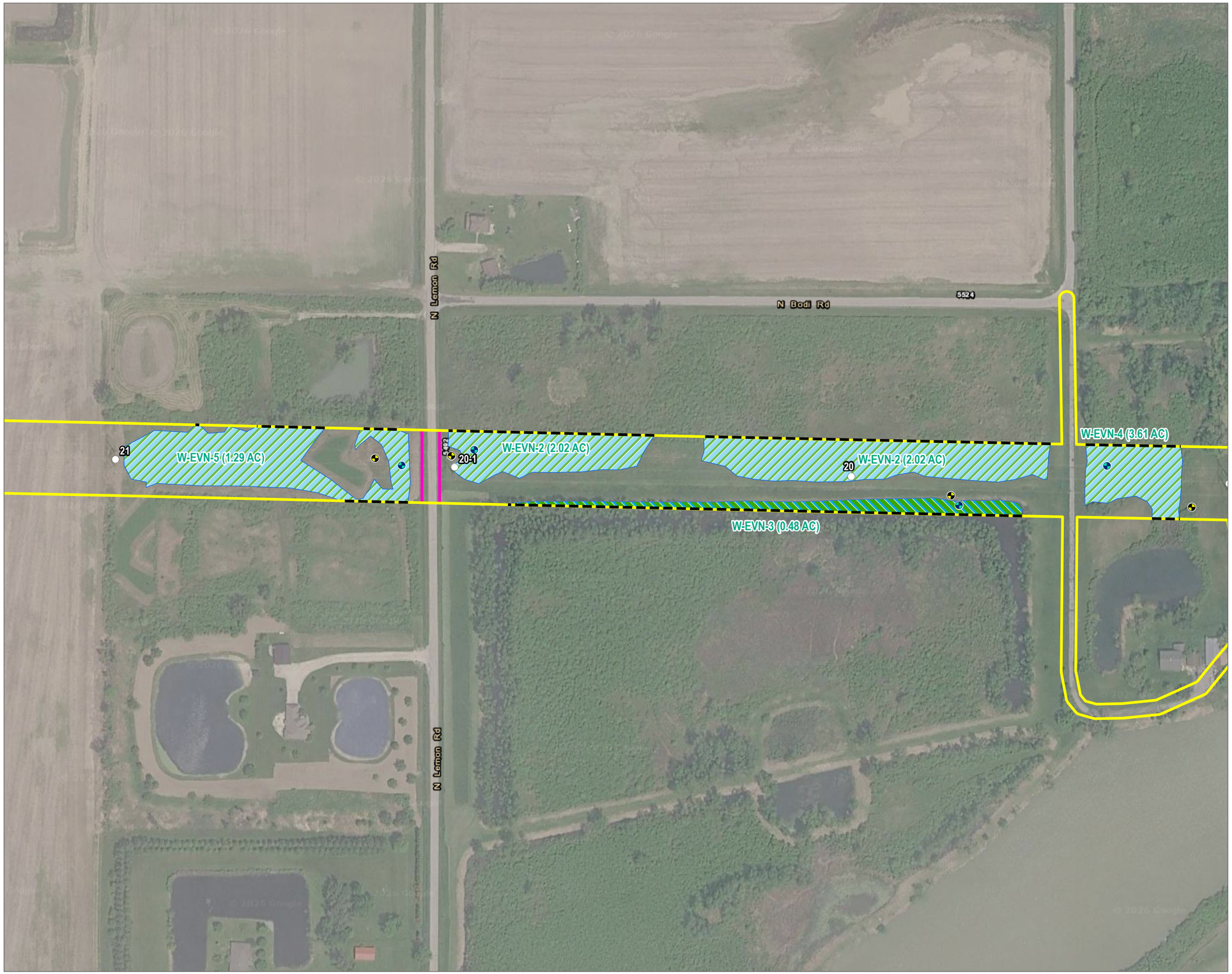
TITLE:
DELINEATED RESOURCES MAP

DRAWN BY:	M. OPEL	PROJ. NO.:	629846
CHECKED BY:	M. MOLNAR		
APPROVED BY:	B. FALKINBURG	**FIGURE 5**	
DATE:	APRIL 2026	**(PAGE 2 OF 10)**	

TRC
1382 WEST NINTH STREET
SUITE 400
CLEVELAND, OH 44113
PHONE: 216-344-3072

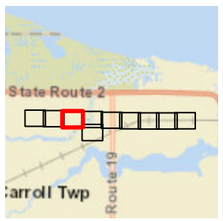
FILE: WDRv2.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet - Map Rotation: 0
Saved By: AFKRNS on 4/7/2026 1:52:23 PM - File Path: I:\1-PROJECTS\First Energy\629846_BayshoreDavisBesse\2-APRX\WDRv2.aprx - Layout Name: Fig05_Delineation1



PROJECT STUDY AREA
EXISTING STRUCTURE
CULVERT
NON-JURISDICTIONAL DITCH
PERENNIAL STREAM
PEM WETLAND
PFO WETLAND
WETLAND CONTINUES
WETLAND DATA POINT
UPLAND DATA POINT

BASE MAP: GOOGLE MAPS.
DATA SOURCES: TRC WETLAND DELINEATION COMPLETED NOVEMBER 19-20, 2024 & MARCH 23, 2026.



1:2,400
1" = 200'

0 200 400 FEET

PROJECT:
FIRSTENERGY
BAYSHORE-DAVIS BESSE 345KV REBUILD PROJECT
OTTAWA COUNTY, OH

TITLE:
DELINEATED RESOURCES MAP

DRAWN BY:	M. OPEL	PROJ. NO.:	629846
CHECKED BY:	M. MOLNAR		
APPROVED BY:	B. FALKINBURG		
DATE:	APRIL 2026		

FIGURE 5
(PAGE 3 OF 10)

TRC
1382 WEST NINTH STREET
SUITE 400
CLEVELAND, OH 44113
PHONE: 216-344-3072

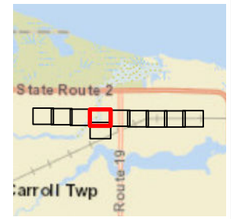
FILE: WDRv2.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet Map Rotation: 0
Saved By: AFARNS on 4/7/2026 - 1:52:23 PM File Path: T:\PROJECTS\FirstEnergy\629846_BayshoreDavisBesse\2-4\PRX\WDRv2.aprx Layout Name: Fig05_Delineation1



PROJECT STUDY AREA
EXISTING STRUCTURE
CULVERT
NON-JURISDICTIONAL DITCH
PERENNIAL STREAM
PEM WETLAND
PFO WETLAND
WETLAND CONTINUES
WETLAND DATA POINT
UPLAND DATA POINT

BASE MAP: GOOGLE MAPS.
DATA SOURCES: TRC WETLAND DELINEATION COMPLETED NOVEMBER 19-20, 2024 & MARCH 23, 2026.



1:2,400
1" = 200'
0 200 400 FEET

PROJECT:
FIRSTENERGY
BAYSHORE-DAVIS BESSE 345KV REBUILD PROJECT
OTTAWA COUNTY, OH

TITLE:
DELINEATED RESOURCES MAP

DRAWN BY:	M. OPEL	PROJ. NO.:	629846
CHECKED BY:	M. MOLNAR		
APPROVED BY:	B. FALKINBURG	**FIGURE 5**	
DATE:	APRIL 2026	**(PAGE 4 OF 10)**	

1382 WEST NINTH STREET
SUITE 400
CLEVELAND, OH 44113
PHONE: 216-344-3072

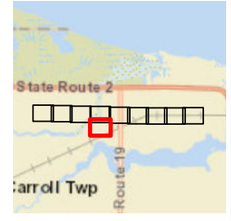
FILE: WDRv2.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet Map Rotation: 0
Saved By: AKARR on 4/7/2026 1:52:23 PM File Path: T:\1 PROJECTS\First Energy\629846_BayshoreDavisBesse\2-APRX\WDRv2.aprx Layout Name: Fig05_Delineation1



PROJECT STUDY AREA
EXISTING STRUCTURE
CULVERT
NON-JURISDICTIONAL DITCH
PERENNIAL STREAM
PEM WETLAND
PFO WETLAND
WETLAND CONTINUES
WETLAND DATA POINT
UPLAND DATA POINT

BASE MAP: GOOGLE MAPS.
DATA SOURCES: TRC WETLAND DELINEATION COMPLETED NOVEMBER 19-20, 2024 & MARCH 23, 2026.



1:2,400
1" = 200'

0 200 400 FEET

PROJECT:
FIRSTENERGY
BAYSHORE-DAVIS BESSE 345KV REBUILD PROJECT
OTTAWA COUNTY, OH

TITLE:
DELINEATED RESOURCES MAP

DRAWN BY:	M. OPEL	PROJ. NO.:	629846
CHECKED BY:	M. MOLNAR		
APPROVED BY:	B. FALKINBURG		**FIGURE 5** (PAGE 5 OF 10)
DATE:	APRIL 2026		

TRC
1382 WEST NINTH STREET
SUITE 400
CLEVELAND, OH 44113
PHONE: 216-344-3072

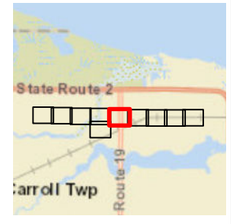
FILE: WDRv2.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet Map Rotation: 0
Saved By AFALKINS on 4/1/2026 - 15:52:23 File Path: T:\1-PROJECTS\Final_Energy\629846_BayshoreDavisBesse\2-APRX\WDRv2.aprx Layout Name: Fig05_Delineation1



PROJECT STUDY AREA
EXISTING STRUCTURE
CULVERT
NON-JURISDICTIONAL DITCH
PERENNIAL STREAM
PEM WETLAND
PFO WETLAND
WETLAND CONTINUES
WETLAND DATA POINT
UPLAND DATA POINT

BASE MAP: GOOGLE MAPS.
DATA SOURCES: TRC WETLAND DELINEATION COMPLETED NOVEMBER 19-20, 2024 & MARCH 23, 2026.



1:2,400
1" = 200'

0 200 400 FEET

PROJECT:
FIRSTENERGY
BAYSHORE-DAVIS BESSE 345KV REBUILD PROJECT
OTTAWA COUNTY, OH

TITLE:
DELINEATED RESOURCES MAP

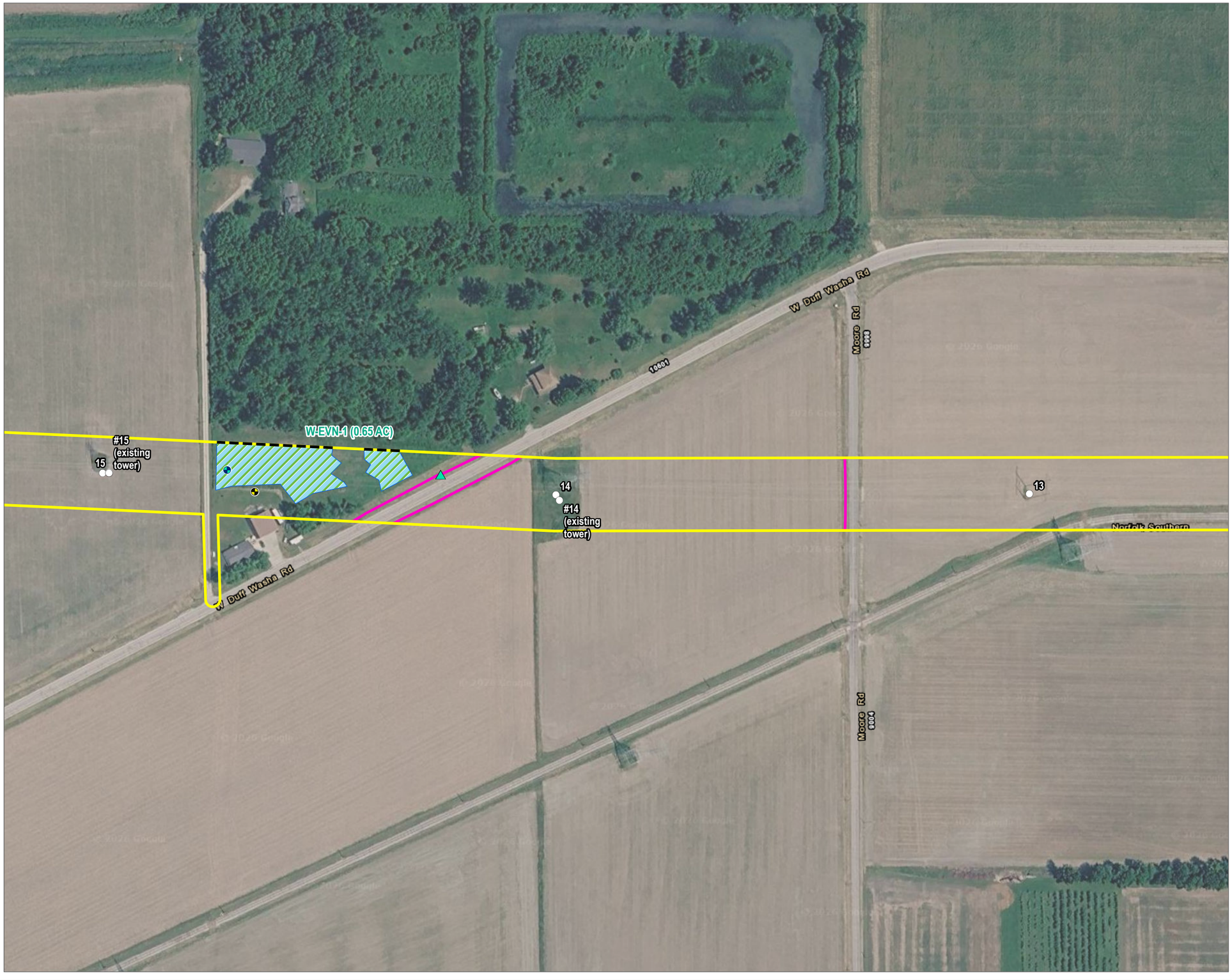
DRAWN BY:	M. OPEL	PROJ. NO.:	629846
CHECKED BY:	M. MOLNAR		
APPROVED BY:	B. FALKINBURG		
DATE:	APRIL 2026		

FIGURE 5
(PAGE 6 OF 10)

1382 WEST NINTH STREET
SUITE 400
CLEVELAND, OH 44113
PHONE: 216-344-3072

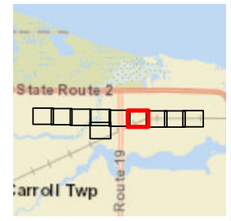
FILE: WDRv2.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet Map Rotation: 0
Saved By: AFALKINS on 4/1/2026 1:52:23 PM File Path: T:\PROJECTS\First_Energy\629846_BayshoreDavisBesse\2-APRX\WDRv2.aprx Layout Name: Fig05_Delineation1



PROJECT STUDY AREA
EXISTING STRUCTURE
CULVERT
NON-JURISDICTIONAL DITCH
PERENNIAL STREAM
PEM WETLAND
PFO WETLAND
WETLAND CONTINUES
WETLAND DATA POINT
UPLAND DATA POINT

BASE MAP: GOOGLE MAPS.
DATA SOURCES: TRC WETLAND DELINEATION COMPLETED NOVEMBER 19-20, 2024 & MARCH 23, 2026.



1:2,400
1" = 200'

0 200 400 FEET

PROJECT:
FIRSTENERGY
BAYSHORE-DAVIS BESSE 345KV REBUILD PROJECT
OTTAWA COUNTY, OH

TITLE:
DELINEATED RESOURCES MAP

DRAWN BY:	M. OPEL	PROJ. NO.:	629846
CHECKED BY:	M. MOLNAR		
APPROVED BY:	B. FALKINBURG		
DATE:	APRIL 2026		

FIGURE 5
(PAGE 7 OF 10)

TRC
1382 WEST NINTH STREET
SUITE 400
CLEVELAND, OH 44113
PHONE: 216-344-3072

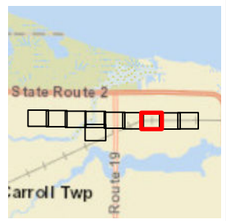
FILE: WDRv2.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet - Map Rotation: 0
Saved By: APERKINS on 4/7/2026, 15:52:33 PM - File Path: T:\1 PROJECTS\First Energy\629846_BayshoreDavisBesse\2-4\PRX\WDRv2.aprx; - Layout Name: Fig05_Delineation1



- PROJECT STUDY AREA
- EXISTING STRUCTURE
- CULVERT
- NON-JURISDICTIONAL DITCH
- PERENNIAL STREAM
- PEM WETLAND
- PFO WETLAND
- WETLAND CONTINUES
- WETLAND DATA POINT
- UPLAND DATA POINT

BASE MAP: GOOGLE MAPS.
DATA SOURCES: TRC WETLAND DELINEATION COMPLETED NOVEMBER 19-20, 2024 & MARCH 23, 2026.



1:2,400
1" = 200'

0 200 400 FEET

PROJECT:
FIRSTENERGY
BAYSHORE-DAVIS BESSE 345KV REBUILD PROJECT
OTTAWA COUNTY, OH

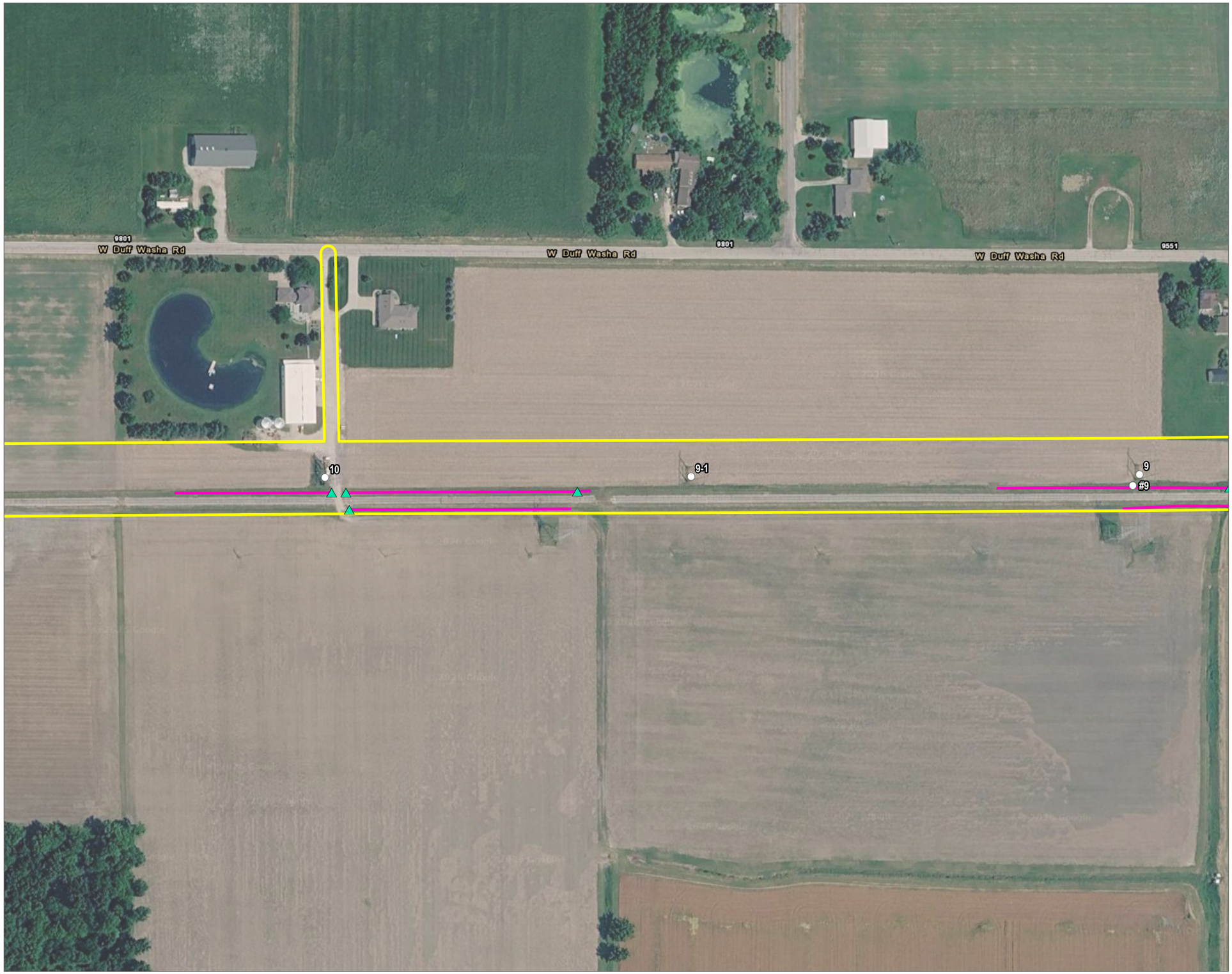
TITLE:
DELINEATED RESOURCES MAP

DRAWN BY:	M. OPEL	PROJ. NO.:	629846
CHECKED BY:	M. MOLNAR		
APPROVED BY:	B. FALKINBURG	**FIGURE 5**	
DATE:	APRIL 2026	**(PAGE 8 OF 10)**	

TRC
1382 WEST NINTH STREET
SUITE 400
CLEVELAND, OH 44113
PHONE: 216-344-3072

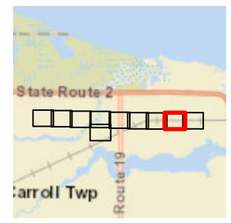
FILE: WDRv2.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet; Map Rotation: 0
Saved By: JAFARIS on 4/7/2026 1:52:23 PM; File Path: T:\1_PROJECTS\FirstEnergy\629846_BayshoreDavisBesse\2-APRX\WDRv2.aprx; Layout Name: Fig05_Delineation1



PROJECT STUDY AREA
EXISTING STRUCTURE
CULVERT
NON-JURISDICTIONAL DITCH
PERENNIAL STREAM
PEM WETLAND
PFO WETLAND
WETLAND CONTINUES
WETLAND DATA POINT
UPLAND DATA POINT

BASE MAP: GOOGLE MAPS.
DATA SOURCES: TRC WETLAND DELINEATION COMPLETED NOVEMBER 19-20, 2024 & MARCH 23, 2026.



1:2,400
1" = 200'
0 200 400 FEET

PROJECT:
FIRSTENERGY
BAYSHORE-DAVIS BESSE 345KV REBUILD PROJECT
OTTAWA COUNTY, OH

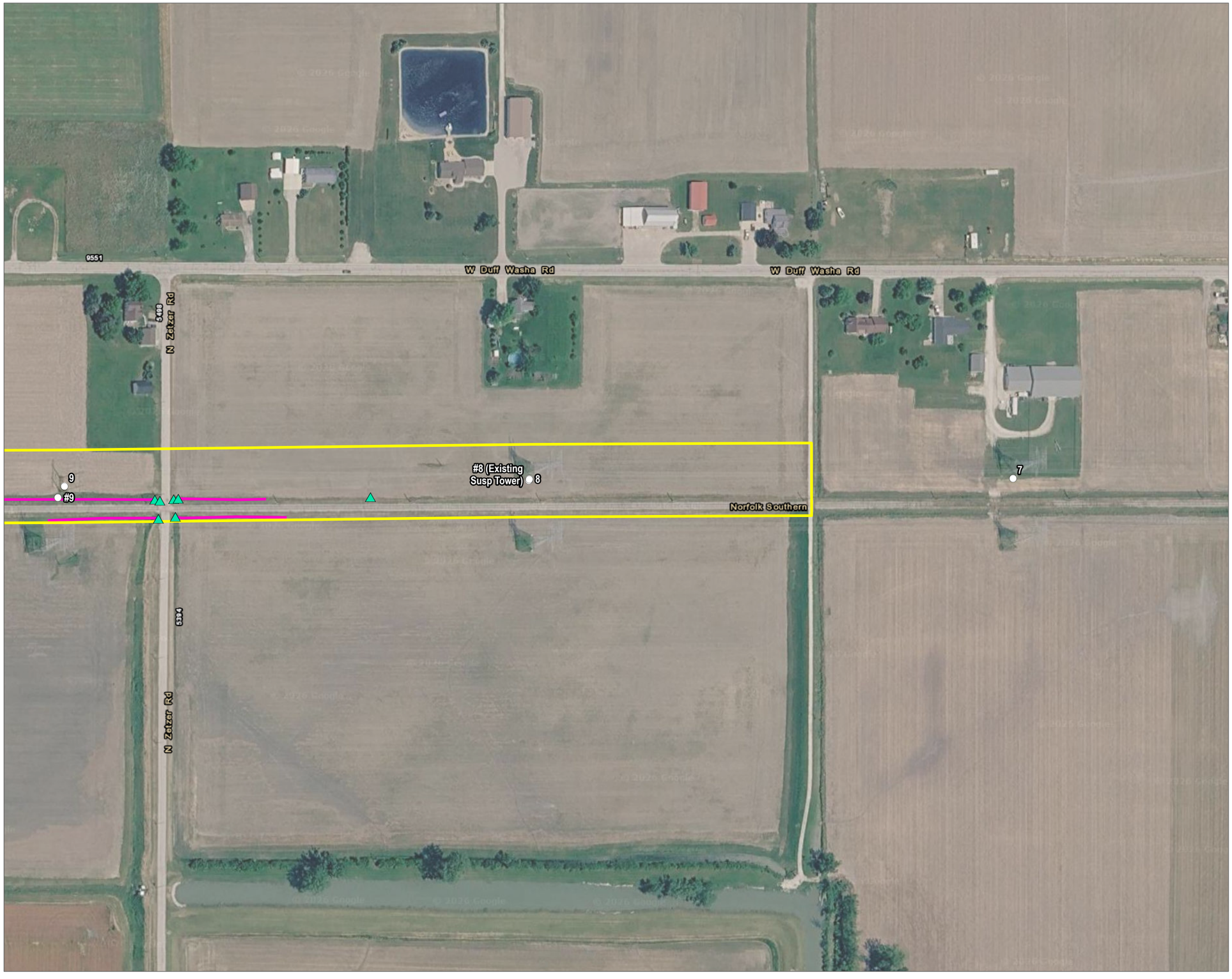
TITLE:
DELINEATED RESOURCES MAP

DRAWN BY:	M. OPEL	PROJ. NO.:	629846
CHECKED BY:	M. MOLNAR		
APPROVED BY:	B. FALKINBURG	**FIGURE 5**	
DATE:	APRIL 2026	**(PAGE 9 OF 10)**	

TRC
1382 WEST NINTH STREET
SUITE 400
CLEVELAND, OH 44113
PHONE: 216-344-3072

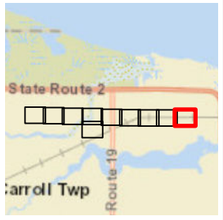
FILE: WDRv2.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet Map Rotation: 0
Saved By AFALKINS on 4/1/2026 - 15:52:23 PM File Path: T:\1_PROJECTS\First_Energy\629846_BayshoreDavisBesse\2-APRX\WDRv2.aprx Layout Name: Fig05_Delineation1



PROJECT STUDY AREA
EXISTING STRUCTURE
CULVERT
NON-JURISDICTIONAL DITCH
PERENNIAL STREAM
PEM WETLAND
PFO WETLAND
WETLAND CONTINUES
WETLAND DATA POINT
UPLAND DATA POINT

BASE MAP: GOOGLE MAPS.
DATA SOURCES: TRC WETLAND DELINEATION COMPLETED NOVEMBER 19-20, 2024 & MARCH 23, 2026.



1:2,400
1" = 200'
0 200 400 FEET

PROJECT:
FIRSTENERGY
BAYSHORE-DAVIS BESSE 345KV REBUILD PROJECT
OTTAWA COUNTY, OH

TITLE:
DELINEATED RESOURCES MAP

DRAWN BY:	M. OPEL	PROJ. NO.:	629846
CHECKED BY:	M. MOLNAR		
APPROVED BY:	B. FALKINBURG		
DATE:	APRIL 2026		

FIGURE 5
(PAGE 10 OF 10)

TRC
1382 WEST NINTH STREET
SUITE 400
CLEVELAND, OH 44113
PHONE: 216-344-3072

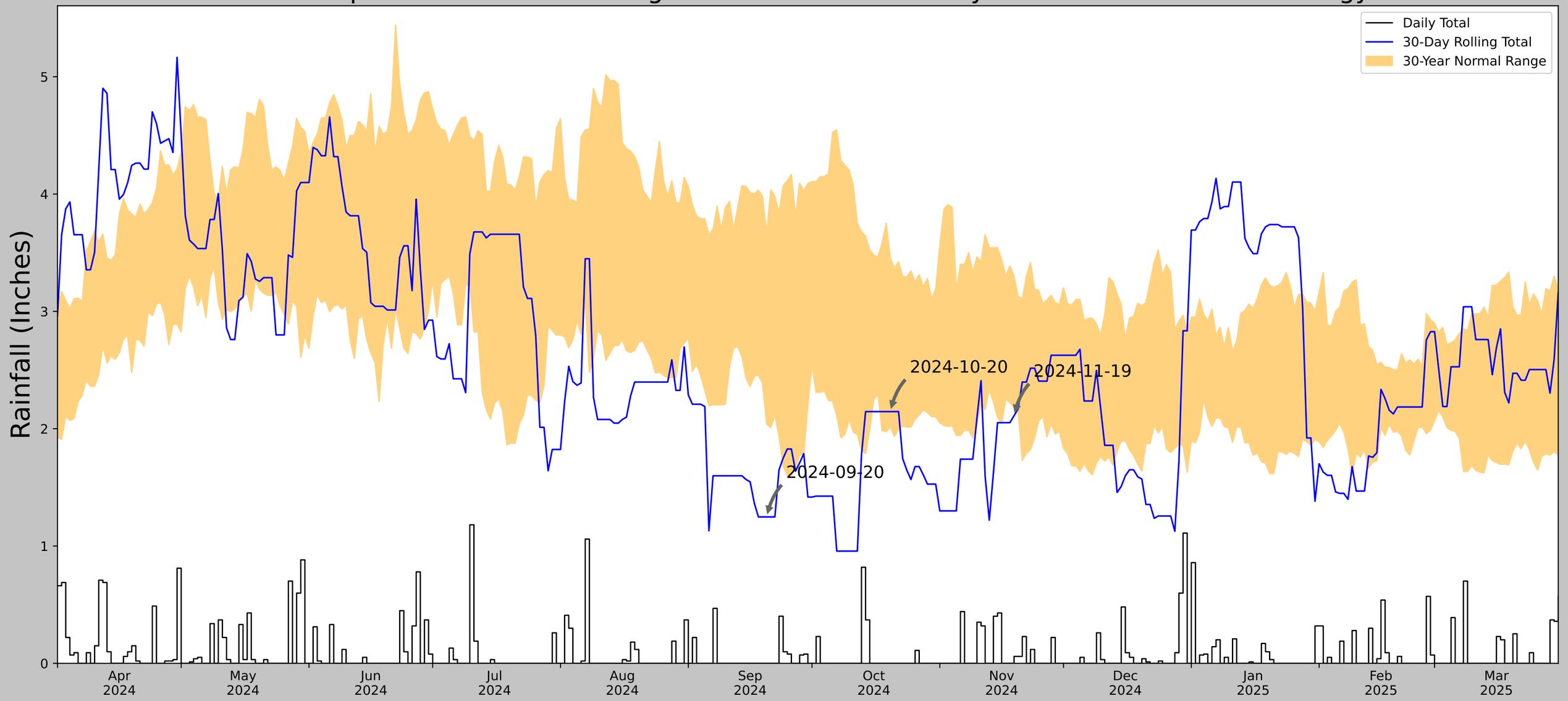
FILE: WDRv2.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet Map Rotation: 0
Saved By: AFFKINS on 4/7/2026 1:52:23 PM File Path: T:\PROJECTS\First Energy\629846_BayshoreDavisBesse\2-APRX\WDRv2.aprx Layout Name: Fig05_Delineation1

Appendix B

Antecedent Precipitation Tables

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	41.59485, -83.14734
Observation Date	2024-11-19
Elevation (ft)	574.338
Drought Index (PDSI)	Severe drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-11-19	2.179921	3.299213	2.110236	Dry	1	3	3
2024-10-20	2.011811	3.453937	2.145669	Normal	2	2	4
2024-09-20	2.038583	3.670079	1.248032	Dry	1	1	1
Result							Drier than Normal - 8

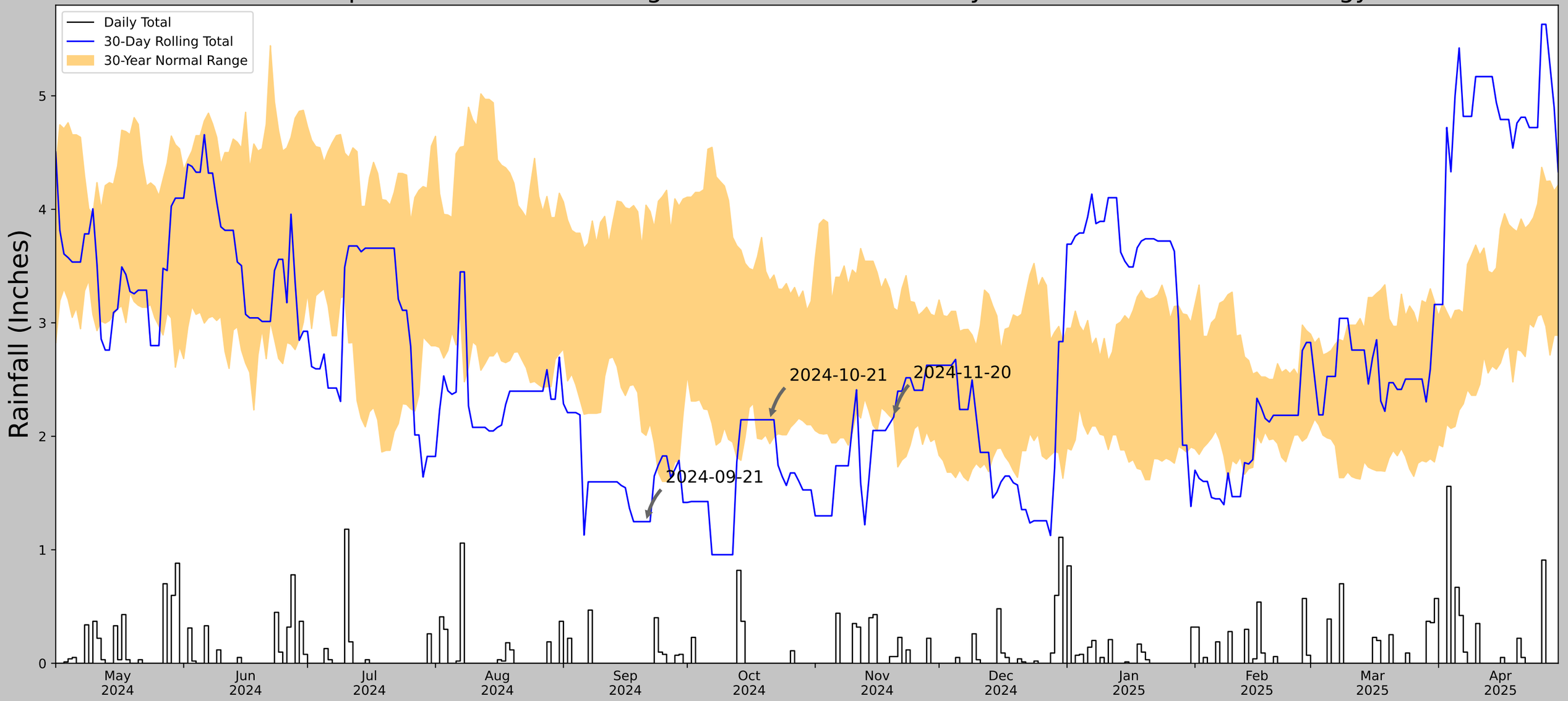
Figures and tables made by the
Antecedent Precipitation Tool
Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and
Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
FREMONT	41.3336, -83.1197	600.066	18.107	25.728	8.614	11347	90
FREMONT 0.5 SW	41.3448, -83.1201	628.937	0.774	28.871	0.371	1	0
FREMONT AG STN	41.3119, -83.1719	664.042	3.096	63.976	1.591	5	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	41.59485, -83.14734
Observation Date	2024-11-20
Elevation (ft)	574.338
Drought Index (PDSI)	Severe drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-11-20	2.149606	3.129528	2.169291	Normal	2	3	6
2024-10-21	1.934646	3.370473	2.145669	Normal	2	2	4
2024-09-21	2.008268	4.036614	1.248032	Dry	1	1	1
Result							Normal Conditions - 11

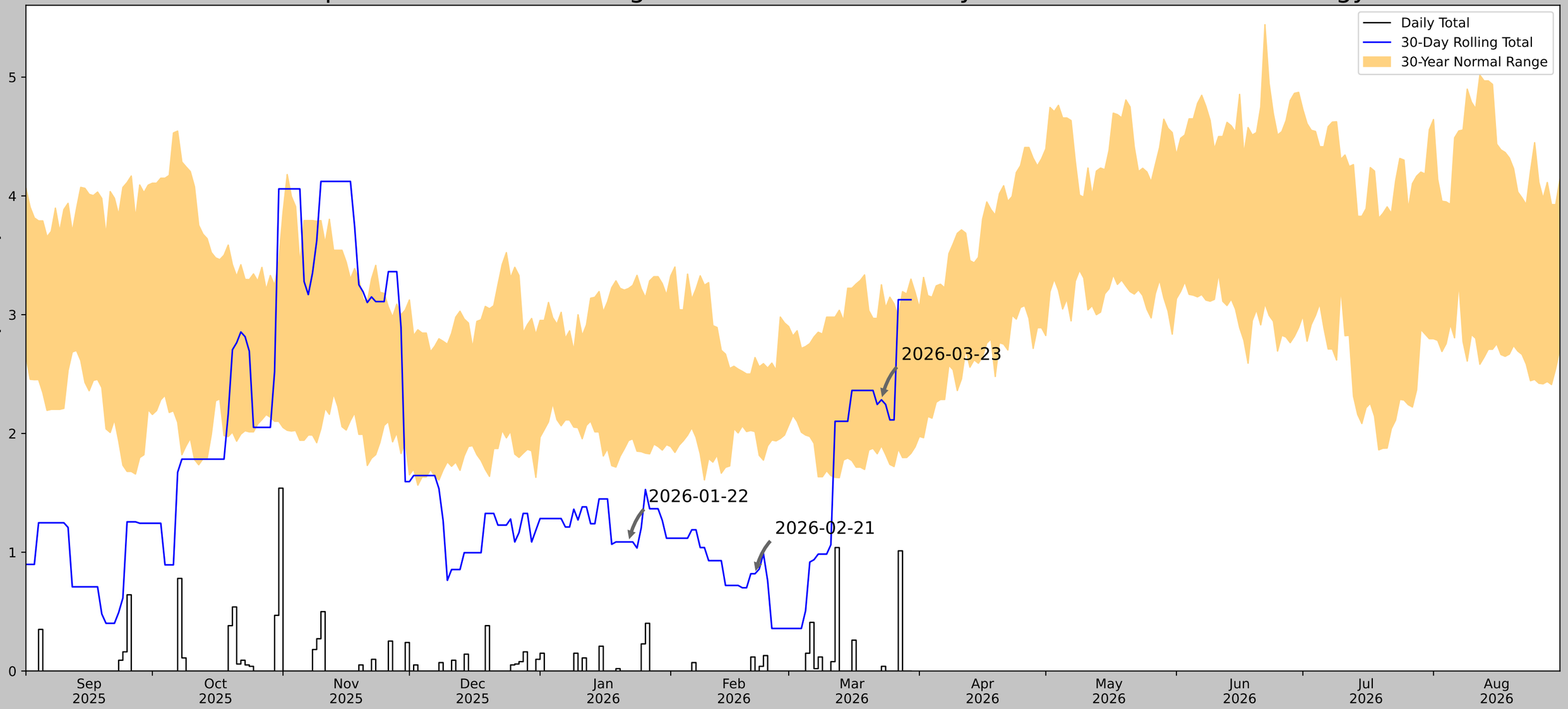
Figures and tables made by the
Antecedent Precipitation Tool
Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and
Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
FREMONT	41.3336, -83.1197	600.066	18.107	25.728	8.614	11347	90
FREMONT 0.5 SW	41.3448, -83.1201	628.937	0.774	28.871	0.371	1	0
FREMONT AG STN	41.3119, -83.1719	664.042	3.096	63.976	1.591	5	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	41.59485, -83.14734
Observation Date	2026-03-23
Elevation (ft)	574.338
Drought Index (PDSI)	Moderate drought (2026-02)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2026-03-23	1.896457	3.251969	2.283465	Normal	2	3	6
2026-02-21	2.015748	2.63937	0.818898	Dry	1	2	2
2026-01-22	1.940945	3.220866	1.086614	Dry	1	1	1
Result							Drier than Normal - 9

Figures and tables made by the
Antecedent Precipitation Tool
Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and
Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
FREMONT	41.3336, -83.1197	600.066	18.107	25.728	8.614	11339	88
FREMONT 0.5 SW	41.3448, -83.1201	628.937	0.774	28.871	0.371	1	0
FREMONT 2.2 ENE	41.3658, -83.0754	608.924	3.198	8.858	1.467	8	2
FREMONT AG STN	41.3119, -83.1719	664.042	3.096	63.976	1.591	5	0

Appendix C

Photographic Record

PHOTOGRAPHIC RECORD
Bayshore-Davis Besse 345kV Rebuild Project

Client Name:	Site Location:	Project No.
FirstEnergy	Carroll Township, Ottawa County, Ohio	629846

Photo No. 1. **Photo Date:** 11/19/2024 **Description:** Photo of Wetland W-EVN-1, facing north.	

Photo No. 2. **Photo Date:** 11/19/2024 **Description:** Photo of Wetland W-EVN-1, facing east.	

PHOTOGRAPHIC RECORD
Bayshore-Davis Besse 345kV Rebuild Project

Client Name:	Site Location:	Project No.
FirstEnergy	Carroll Township, Ottawa County, Ohio	629846

Photo No. 3. **Photo Date:** 11/19/2024 **Description:** Photo of Wetland W-EVN-1, facing south.	

Photo No. 4. **Photo Date:** 11/19/2024 **Description:** Photo of Wetland W-EVN-1, facing west.	

PHOTOGRAPHIC RECORD
Bayshore-Davis Besse 345kV Rebuild Project

Client Name:	Site Location:	Project No.
FirstEnergy	Carroll Township, Ottawa County, Ohio	629846

Photo No. 5. **Photo Date:** 11/20/2024 **Description:** Photo of Wetland W-EVN-2, facing north.	

Photo No. 6. **Photo Date:** 11/20/2024 **Description:** Photo of Wetland W-EVN-2, facing east.	

PHOTOGRAPHIC RECORD
Bayshore-Davis Besse 345kV Rebuild Project

Client Name:	Site Location:	Project No.
FirstEnergy	Carroll Township, Ottawa County, Ohio	629846

Photo No. 7. **Photo Date:** 11/20/2024 **Description:** Photo of Wetland W-EVN-2, facing south.	

Photo No. 8. **Photo Date:** 11/20/2024 **Description:** Photo of Wetland W-EVN-2, facing west.	

PHOTOGRAPHIC RECORD
Bayshore-Davis Besse 345kV Rebuild Project

Client Name:	Site Location:	Project No.
FirstEnergy	Carroll Township, Ottawa County, Ohio	629846

Photo No. 9. **Photo Date:** 11/20/2024 **Description:** Photo of Wetland W-EVN-3, facing north.	

Photo No. 10. **Photo Date:** 11/20/2024 **Description:** Photo of Wetland W-EVN-3, facing east.	

PHOTOGRAPHIC RECORD
Bayshore-Davis Besse 345kV Rebuild Project

Client Name:	Site Location:	Project No.
FirstEnergy	Carroll Township, Ottawa County, Ohio	629846

Photo No. 11. **Photo Date:** 11/20/2024 **Description:** Photo of Wetland W-EVN-3, facing south.	

Photo No. 12. **Photo Date:** 11/20/2024 **Description:** Photo of Wetland W-EVN-3, facing west.	

PHOTOGRAPHIC RECORD
Bayshore-Davis Besse 345kV Rebuild Project

Client Name:	Site Location:	Project No.
FirstEnergy	Carroll Township, Ottawa County, Ohio	629846

Photo No. 13. **Photo Date:** 11/20/2024 **Description:** Photo of Wetland W-EVN-4, facing north.	

Photo No. 14. **Photo Date:** 11/20/2024 **Description:** Photo of Wetland W-EVN-4, facing east.	

PHOTOGRAPHIC RECORD
Bayshore-Davis Besse 345kV Rebuild Project

Client Name:	Site Location:	Project No.
FirstEnergy	Carroll Township, Ottawa County, Ohio	629846

Photo No. 15. **Photo Date:** 11/20/2024 **Description:** Photo of Wetland W-EVN-4, facing south.	

Photo No. 16. **Photo Date:** 11/20/2024 **Description:** Photo of Wetland W-EVN-4, facing west.	

PHOTOGRAPHIC RECORD
Bayshore-Davis Besse 345kV Rebuild Project

Client Name:	Site Location:	Project No.
FirstEnergy	Carroll Township, Ottawa County, Ohio	629846

Photo No. 17. **Photo Date:** 11/20/2024 **Description:** Photo of Wetland W-EVN-5, facing north.	

Photo No. 18. **Photo Date:** 11/20/2024 **Description:** Photo of Wetland W-EVN-5, facing east.	

PHOTOGRAPHIC RECORD
Bayshore-Davis Besse 345kV Rebuild Project

Client Name:	Site Location:	Project No.
FirstEnergy	Carroll Township, Ottawa County, Ohio	629846

Photo No. 19. **Photo Date:** 11/20/2024 **Description:** Photo of Wetland W-EVN-5, facing south.	

Photo No. 20. **Photo Date:** 11/20/2024 **Description:** Photo of Wetland W-EVN-5, facing west.	

PHOTOGRAPHIC RECORD
Bayshore-Davis Besse 345kV Rebuild Project

Client Name:	Site Location:	Project No.
FirstEnergy	Carroll Township, Ottawa County, Ohio	629846

Photo No. 21. **Photo Date:** 11/20/2024 **Description:** Photo of Stream S-EVN-1 (Turtle Creek) looking upstream, facing north.	

Photo No. 22. **Photo Date:** 11/20/2024 **Description:** Photo of Stream S-EVN-1 (Turtle Creek) looking downstream, facing south.	

PHOTOGRAPHIC RECORD
Bayshore-Davis Besse 345kV Rebuild Project

Client Name:	Site Location:	Project No.
FirstEnergy	Carroll Township, Ottawa County, Ohio	629846

Photo No. 23. **Photo Date:** 11/20/2024 **Description:** Photo of Stream S-EVN-1 (Turtle Creek) showing the observed substrate.	

Photo No. 24. **Photo Date:** 11/20/2024 **Description:** Representative photo of the western extent of the Project Study Area, facing north.	

PHOTOGRAPHIC RECORD
Bayshore-Davis Besse 345kV Rebuild Project

Client Name:	Site Location:	Project No.
FirstEnergy	Carroll Township, Ottawa County, Ohio	629846

Photo No. 25. **Photo Date:** 11/20/2024 **Description:** Representative photo of the western extent of the Project Study Area, facing east.	

Photo No. 26. **Photo Date:** 11/20/2024 **Description:** Representative photo of the Project Study Area, facing west.	

PHOTOGRAPHIC RECORD
Bayshore-Davis Besse 345kV Rebuild Project

Client Name:	Site Location:	Project No.
FirstEnergy	Carroll Township, Ottawa County, Ohio	629846

Photo No. 27. **Photo Date:** 11/20/2024 **Description:** Representative photo of the Project Study Area, facing east.	

Photo No. 28. **Photo Date:** 11/19/2024 **Description:** Representative photo of the Project Study Area, facing east.	

PHOTOGRAPHIC RECORD
Bayshore-Davis Besse 345kV Rebuild Project

Client Name:	Site Location:	Project No.
FirstEnergy	Carroll Township, Ottawa County, Ohio	629846

Photo No. 29. **Photo Date:** 11/19/2024 **Description:** Representative photo of the eastern extent of the Project Study Area, facing east.	

Photo No. 30. **Photo Date:** 11/19/2024 **Description:** Representative photo of the eastern extent of the Project Study Area, facing west.	

PHOTOGRAPHIC RECORD
Bayshore-Davis Besse 345kV Rebuild Project

Client Name:	Site Location:	Project No.
FirstEnergy	Carroll Township, Ottawa County, Ohio	629846

Photo No. 31. **Photo Date:** 3/23/2026 **Description:** Representative photo of an access road within the Project Study Area, facing northwest.	

Photo No. 32. **Photo Date:** 3/23/2026 **Description:** Representative photo of an access road within the Project Study Area, facing north.	

Appendix D

Data Forms

USACE Wetland Determination Data Sheets – Northcentral and Northeast Region

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Bayshore-Davis Besse 345kV Rebuild City/County: Oak Harbor, Ottawa County Sampling Date: 2024-11-19
Applicant/Owner: FirstEnergy State: OH Sampling Point: W-EVN-01_PEM-1
Investigator(s): Erin Van Nort, Emma Given Section, Township, Range: 03 7N 15E
Landform (hillslope, terrace, etc): Depression Local relief (concave, convex, none): None Slope (%): 0 to 1
Subregion (LRR or MLRA): MLRA 99 of LRR L Lat: 41.5946428167 Long: -83.1402299167 Datum: WGS84
Soil Map Unit Name: Toledo silty clay, 0 to 1 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✘ No _____ (If no, explain in Remarks.)
Are Vegetation _____ , Soil _____ , or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✘ No _____
Are Vegetation _____ , Soil _____ , or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes ✘ No _____
Hydric Soil Present? Yes ✘ No _____
Wetland Hydrology Present? Yes ✘ No _____

Is the Sampled Area within a Wetland? Yes ✘ No _____

If yes, optional Wetland Site ID: W-EVN-01

Remarks: (Explain alternative procedures here or in a separate report.)
Covertype is PEM. Based on the presence of all three parameters, this area is a wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ✘ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✘ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✘ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✘ Depth (inches): _____
Water Table Present? Yes _____ No ✘ Depth (inches): _____
Saturation Present? (includes capillary fringe) Yes _____ No ✘ Depth (inches): _____

Wetland Hydrology Present? Yes ✘ No _____

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

Remarks:
The criterion for wetland hydrology is met.

VEGETATION – Use scientific names of plants. Sampling Point: W-EVN-01_PEM-1

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Phalaris arundinacea*	60	Yes	FACW
2. *Anthoxanthum hirtum*	30	Yes	FACW
3. *Apocynum cannabinum*	5	No	FAC
4. *Veronica prostrata*	5	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	90	x 2 =	180
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		210 (B)

Prevalence Index = B/A = 2.1

Hydrophytic Vegetation Indicators:

✘ 1 - Rapid Test for Hydrophytic Vegetation

✘ 2 - Dominance Test is >50%

✘ 3 - Prevalence Index is ≤3.0[1]

__ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ✘ **No** __

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

The criterion for hydrophytic vegetation is met.

SOIL Sampling Point: W-EVN-01_PEM-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 to 20	10YR 4/1	95	10YR 4/6	5	C	M	Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ✘ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Muck Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
Type: ___
Depth (inches): ___

Hydric Soil Present? Yes ✘ **No** ___

Remarks:
The criterion for hydric soil is met.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Bayshore-Davis Besse 345kV Rebuild City/County: Oak Harbor, Ottawa County Sampling Date: 2024-11-19
Applicant/Owner: FirstEnergy State: OH Sampling Point: W-EVN-01_UPL-1
Investigator(s): Erin Van Nort, Emma Given Section, Township, Range: 03 7N 15E
Landform (hillslope, terrace, etc): Flat Local relief (concave, convex, none): None Slope (%): 0 to 1
Subregion (LRR or MLRA): MLRA 99 of LRR L Lat: 41.5945676667 Long: -83.1400240833 Datum: WGS84
Soil Map Unit Name: Toledo silty clay, 0 to 1 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✘ No ____ (If no, explain in Remarks.)
Are Vegetation ____ , Soil ____ , or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✘ No ____
Are Vegetation ____ , Soil ____ , or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes ____ No ✘
Hydric Soil Present? Yes ✘ No ____
Wetland Hydrology Present? Yes ____ No ✘

Is the Sampled Area within a Wetland? **Yes** ____ **No** ✘

If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)
Covertype is UPL. Based on the absence of two of three parameters, this area is an upland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)
- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)
- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? Yes ____ No ✘ Depth (inches): ____
Water Table Present? Yes ____ No ✘ Depth (inches): ____
Saturation Present? (includes capillary fringe) Yes ____ No ✘ Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** ✘

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

Remarks:
The criterion for wetland hydrology is not met.

VEGETATION ─ Use scientific names of plants. Sampling Point: W-EVN-01_UPL-1

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Herb Stratum (Plot size: 5 ft radius)			
1. *Poa annua*	80	Yes	FACU
2. *Taraxacum officinale*	15	No	FACU
3. *Plantago lanceolata*	5	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100	= Total Cover	

Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	100 (A)		400 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

__ 1 - Rapid Test for Hydrophytic Vegetation

__ 2 - Dominance Test is >50%

__ 3 - Prevalence Index is ≤3.0[1]

__ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree ─ Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub ─ Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb ─ All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines ─ All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ____ **No** ✘

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

The criterion for hydrophytic vegetation is not met.

SOIL Sampling Point: W-EVN-01_UPL-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 to 9	10YR 4/1	95	10YR 4/6	5	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ✘ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Muck Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
Type: Gravel
Depth (inches): 9

Hydric Soil Present? Yes ✘ **No** ___

Remarks:
The criterion for hydric soil is met.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Bayshore-Davis Besse 345kV Rebuild City/County: Oak Harbor, Ottawa County Sampling Date: 2024-11-20
Applicant/Owner: FirstEnergy State: OH Sampling Point: W-EVN-02_PEM-1
Investigator(s): Emma Given, Erin Van Nort Section, Township, Range: 05 7N 15E
Landform (hillslope, terrace, etc): Depression Local relief (concave, convex, none): Concave Slope (%): 0 to 1
Subregion (LRR or MLRA): MLRA 99 of LRR L Lat: 41.5951568167 Long: -83.1640255167 Datum: WGS84
Soil Map Unit Name: Toledo silty clay, 0 to 1 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✘ No _____ (If no, explain in Remarks.)
Are Vegetation _____ , Soil _____ , or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✘ No _____
Are Vegetation _____ , Soil _____ , or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes ✘ No _____
Hydric Soil Present? Yes ✘ No _____
Wetland Hydrology Present? Yes ✘ No _____

Is the Sampled Area within a Wetland? Yes ✘ No _____

If yes, optional Wetland Site ID: W-EVN-02

Remarks: (Explain alternative procedures here or in a separate report.)
Covertype is PEM. Based on the presence of all three parameters, this area is a wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ✘ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✘ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✘ Depth (inches): _____
Water Table Present? Yes _____ No ✘ Depth (inches): _____
Saturation Present? (includes capillary fringe) Yes _____ No ✘ Depth (inches): _____

Wetland Hydrology Present? Yes ✘ No _____

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

Remarks:
The criterion for wetland hydrology is met.

VEGETATION ─ Use scientific names of plants. Sampling Point: W-EVN-02_PEM-1

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Cornus amomum*	5	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	5	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Phalaris arundinacea*	60	Yes	FACW
2. *Scirpus cyperinus*	10	No	OBL
3. *Scirpus atrovirens*	5	No	OBL
4. *Lythrum salicaria*	5	No	OBL
5. *Verbena hastata*	5	No	FACW
6. *Veronica anagallis-aquatica*	5	No	OBL
7. *Panicum virgatum*	5	No	FAC
8. *Epilobium ciliatum*	5	No	FACW
9.			
10.			
11.			
12.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	25	x 1 =	25
FACW species	75	x 2 =	150
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	105 (A)		190 (B)

Prevalence Index = B/A = 1.8

Hydrophytic Vegetation Indicators:

✘ 1 - Rapid Test for Hydrophytic Vegetation

✘ 2 - Dominance Test is >50%

✘ 3 - Prevalence Index is ≤3.0[1]

__ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree ─ Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub ─ Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb ─ All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines ─ All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ✘ **No** __

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

The criterion for hydrophytic vegetation is met.

SOIL Sampling Point: W-EVN-02_PEM-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 to 12	10YR 3/1	90	10YR 4/6	10	C	M/PL	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✘ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Muck Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
Type: Gravel
Depth (inches): 12

Hydric Soil Present? Yes ✘ **No** ___

Remarks:
The criterion for hydric soil is met.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Bayshore-Davis Besse 345kV Rebuild City/County: Oak Harbor, Ottawa County Sampling Date: 2024-11-20
Applicant/Owner: FirstEnergy State: OH Sampling Point: W-EVN-02_UPL-1
Investigator(s): Emma Given, Erin Van Nort Section, Township, Range: 05 7N 15E
Landform (hillslope, terrace, etc): Flat Local relief (concave, convex, none): None Slope (%): 0 to 1
Subregion (LRR or MLRA): MLRA 99 of LRR L Lat: 41.5951269333 Long: -83.16418105 Datum: WGS84
Soil Map Unit Name: Toledo silty clay, 0 to 1 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✘ No ____ (If no, explain in Remarks.)
Are Vegetation ____ , Soil ____ , or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✘ No ____
Are Vegetation ____ , Soil ____ , or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes ____ No ✘
Hydric Soil Present? Yes ✘ No ____
Wetland Hydrology Present? Yes ____ No ✘

Is the Sampled Area within a Wetland? Yes ____ No ✘

If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)
Covertype is UPL. Based on the absence of two of three parameters, this area is an upland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)
- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)
- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? Yes ____ No ✘ Depth (inches): ____
Water Table Present? Yes ____ No ✘ Depth (inches): ____
Saturation Present? (includes capillary fringe) Yes ____ No ✘ Depth (inches): ____

Wetland Hydrology Present? Yes ____ No ✘

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

Remarks:
The criterion for wetland hydrology is not met.

VEGETATION ─ Use scientific names of plants. Sampling Point: W-EVN-02_UPL-1

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Poa pratensis*	40	Yes	FACU
2. *Sorghastrum nutans*	30	Yes	FACU
3. *Lythrum salicaria*	10	No	OBL
4. *Dipsacus laciniatus*	10	No	FACU
5. *Symphyotrichum pilosum*	5	No	FACU
6. *Geum laciniatum*	5	No	FACW
7.			
8.			
9.			
10.			
11.			
12.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	5	x 2 =	10
FAC species	0	x 3 =	0
FACU species	85	x 4 =	340
UPL species	0	x 5 =	0
Column Totals:	100 (A)		360 (B)

Prevalence Index = B/A = 3.6

Hydrophytic Vegetation Indicators:

__ 1 - Rapid Test for Hydrophytic Vegetation

__ 2 - Dominance Test is >50%

__ 3 - Prevalence Index is ≤3.0[1]

__ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree ─ Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub ─ Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb ─ All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines ─ All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** _____ **No** ✘

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

The criterion for hydrophytic vegetation is not met.

SOIL Sampling Point: W-EVN-02_UPL-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 to 15	10YR 4/2	95	10YR 4/6	5	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ✘ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Muck Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
Type: Gravel
Depth (inches): 15

Hydric Soil Present? Yes ✘ **No** ___

Remarks:
The criterion for hydric soil is met.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Bayshore-Davis Besse 345kV Rebuild City/County: Oak Harbor, Ottawa County Sampling Date: 2024-11-20
Applicant/Owner: FirstEnergy State: OH Sampling Point: W-EVN-03_PFO-1
Investigator(s): Emma Given, Erin Van Nort Section, Township, Range: 05 7N 15E
Landform (hillslope, terrace, etc): Depression Local relief (concave, convex, none): Concave Slope (%): 1 to 10
Subregion (LRR or MLRA): MLRA 99 of LRR L Lat: 41.5948644167 Long: -83.16045305 Datum: WGS84
Soil Map Unit Name: Toledo silty clay, 0 to 1 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✘ No ____ (If no, explain in Remarks.)
Are Vegetation ____ , Soil ____ , or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✘ No ____
Are Vegetation ____ , Soil ____ , or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes ✘ No ____
Hydric Soil Present? Yes ✘ No ____
Wetland Hydrology Present? Yes ✘ No ____

Is the Sampled Area within a Wetland? Yes ✘ No ____

If yes, optional Wetland Site ID: W-EVN-03

Remarks: (Explain alternative procedures here or in a separate report.)
Covertype is PFO. Based on the presence of all three parameters, this area is a wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ✘ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ✘ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✘ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ✘ No ____ Depth (inches): 5
Water Table Present? Yes ____ No ✘ Depth (inches): ____
Saturation Present? (includes capillary fringe) Yes ____ No ✘ Depth (inches): ____

Wetland Hydrology Present? Yes ✘ No ____

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

Remarks:
The criterion for wetland hydrology is met.

VEGETATION – Use scientific names of plants. Sampling Point: W-EVN-03_PFO-1

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix nigra*	20	Yes	OBL
2. *Cornus amomum*	15	Yes	FACW
3.			
4.			
5.			
6.			
7.			
	35	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Acer rubrum*	5	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	5	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Phragmites australis*	25	Yes	FACW
2. *Phalaris arundinacea*	20	Yes	FACW
3. *Scirpus cyperinus*	15	Yes	OBL
4. *Lythrum salicaria*	10	No	OBL
5. *Carex comosa*	5	No	OBL
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	75	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	50	x 1 =	50
FACW species	60	x 2 =	120
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	115 (A)		185 (B)

Prevalence Index = B/A = 1.6

Hydrophytic Vegetation Indicators:

__ 1 - Rapid Test for Hydrophytic Vegetation

✘ 2 - Dominance Test is >50%

✘ 3 - Prevalence Index is ≤3.0[1]

__ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ✘ **No** __

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

The criterion for hydrophytic vegetation is met.

SOIL Sampling Point: W-EVN-03_PFO-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 to 7	10YR 2/1	80	10YR 4/6	20	C	M/PL	Clay Loam	
7 to 16	10YR 4/1	55	10YR 4/6	25	C	M	Clay	
7 to 16	10B 3/1	20				M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✘ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Muck Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
Type: Gravel
Depth (inches): 16

Hydric Soil Present? Yes ✘ **No** ___

Remarks:
The criterion for hydric soil is met.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Bayshore-Davis Besse 345kV Rebuild City/County: Oak Harbor, Ottawa County Sampling Date: 2024-11-20
Applicant/Owner: FirstEnergy State: OH Sampling Point: W-EVN-03_UPL-1
Investigator(s): Erin Van Nort, Emma Given Section, Township, Range: 05 7N 15E
Landform (hillslope, terrace, etc): Berm Local relief (concave, convex, none): None Slope (%): 1 to 3
Subregion (LRR or MLRA): MLRA 99 of LRR L Lat: 41.5948763537 Long: -83.1604094245 Datum: WGS84
Soil Map Unit Name: Toledo silty clay, 0 to 1 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✘ No ____ (If no, explain in Remarks.)
Are Vegetation ____ , Soil ____ , or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✘ No ____
Are Vegetation ____ , Soil ____ , or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes ____ No ✘
Hydric Soil Present? Yes ✘ No ____
Wetland Hydrology Present? Yes ____ No ✘

Is the Sampled Area within a Wetland? **Yes** ____ **No** ✘

If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)
Covertype is UPL. Based on the absence of two of three parameters, this area is an upland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ✘ Depth (inches): ____
Water Table Present? Yes ____ No ✘ Depth (inches): ____
Saturation Present? (includes capillary fringe) Yes ____ No ✘ Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** ✘

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

Remarks:
The criterion for wetland hydrology is not met.

VEGETATION ─ Use scientific names of plants. Sampling Point: W-EVN-03_UPL-1

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Herb Stratum (Plot size: 5 ft radius)				
1.	*Poa annua*	55	Yes	FACU
2.	*Solidago canadensis*	25	Yes	FACU
3.	*Daucus carota*	10	No	UPL
4.	*Dipsacus fullonum*	5	No	FACU
5.	*Taraxacum officinale*	5	No	FACU
6.				
7.				
8.				
9.				
10.				
11.				
12.				
	100	= Total Cover		

Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	90	x 4 =	360
UPL species	10	x 5 =	50
Column Totals:	100 (A)		410 (B)

Prevalence Index = B/A = 4.1

Hydrophytic Vegetation Indicators:

__ 1 - Rapid Test for Hydrophytic Vegetation

__ 2 - Dominance Test is >50%

__ 3 - Prevalence Index is ≤3.0[1]

__ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree ─ Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub ─ Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb ─ All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines ─ All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ____ **No** ✘

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

The criterion for hydrophytic vegetation is not met.

SOIL Sampling Point: W-EVN-03_UPL-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 to 20	10YR 4/1	95	10YR 6/8	5	C	M	Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ✘ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Muck Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✘ **No** ___

Remarks:

The criterion for hydric soil is met.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Bayshore-Davis Besse 345kV Rebuild City/County: Oak Harbor, Ottawa County Sampling Date: 2024-11-20
Applicant/Owner: FirstEnergy State: OH Sampling Point: W-EVN-04_PEM-1
Investigator(s): Erin Van Nort, Emma Given Section, Township, Range: 05 7N 15E
Landform (hillslope, terrace, etc): Depression Local relief (concave, convex, none): None Slope (%): 0 to 1
Subregion (LRR or MLRA): MLRA 99 of LRR L Lat: 41.5950769333 Long: -83.1592549167 Datum: WGS84
Soil Map Unit Name: Toledo silty clay, 0 to 1 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✘ No ____ (If no, explain in Remarks.)
Are Vegetation ____ , Soil ____ , or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✘ No ____
Are Vegetation ____ , Soil ____ , or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes ✘ No ____
Hydric Soil Present? Yes ✘ No ____
Wetland Hydrology Present? Yes ✘ No ____

Is the Sampled Area within a Wetland? **Yes** ✘ **No** ____

If yes, optional Wetland Site ID: W-EVN-04

Remarks: (Explain alternative procedures here or in a separate report.)
Covertype is PEM. Based on the presence of all three parameters, this area is a wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)
- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ✘ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ✘ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ✘ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)
- ✘ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ✘ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✘ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✘ FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? Yes ____ No ✘ Depth (inches): ____
Water Table Present? Yes ____ No ✘ Depth (inches): ____
Saturation Present? (includes capillary fringe) Yes ____ No ✘ Depth (inches): ____

Wetland Hydrology Present? **Yes** ✘ **No** ____

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

Remarks:
The criterion for wetland hydrology is met.

VEGETATION ─ Use scientific names of plants. Sampling Point: W-EVN-04_PEM-1

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Juncus effusus*	30	Yes	OBL
2. *Carex tribuloides*	25	Yes	FACW
3. *Scirpus cyperinus*	20	Yes	OBL
4. *Juncus dudleyi*	10	No	FACW
5. *Persicaria hydropiperoides*	10	No	OBL
6. *Ludwigia alternifolia*	5	No	OBL
7.			
8.			
9.			
10.			
11.			
12.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	65	x 1 =	65
FACW species	35	x 2 =	70
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		135 (B)

Prevalence Index = B/A = 1.4

Hydrophytic Vegetation Indicators:

✘ 1 - Rapid Test for Hydrophytic Vegetation

✘ 2 - Dominance Test is >50%

✘ 3 - Prevalence Index is ≤3.0[1]

__ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree ─ Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub ─ Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb ─ All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines ─ All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ✘ **No** __

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

The criterion for hydrophytic vegetation is met.

SOIL Sampling Point: W-EVN-04_PEM-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 to 20	10YR 4/1	95	10YR 5/6	5	C	PL	Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ✘ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Muck Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✘ **No** ___

Remarks:

The criterion for hydric soil is met.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Bayshore-Davis Besse 345kV Rebuild City/County: Oak Harbor, Ottawa County Sampling Date: 2024-11-20
Applicant/Owner: FirstEnergy State: OH Sampling Point: W-EVN-04_UPL-1
Investigator(s): Emma Given, Erin Van Nort Section, Township, Range: 05 7N 15E
Landform (hillslope, terrace, etc): Hillslope Local relief (concave, convex, none): None Slope (%): 10 to 20
Subregion (LRR or MLRA): MLRA 99 of LRR L Lat: 41.5948544667 Long: -83.1586130167 Datum: WGS84
Soil Map Unit Name: Toledo silty clay, 0 to 1 percent slopes, flooded NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✘ No ____ (If no, explain in Remarks.)
Are Vegetation ____ , Soil ____ , or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✘ No ____
Are Vegetation ____ , Soil ____ , or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes ____ No ✘
Hydric Soil Present? Yes ✘ No ____
Wetland Hydrology Present? Yes ____ No ✘

Is the Sampled Area within a Wetland? **Yes** ____ **No** ✘

If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)
Covertype is UPL. Based on the absence of two of three parameters, this area is an upland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)
- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)
- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? Yes ____ No ✘ Depth (inches): ____
Water Table Present? Yes ____ No ✘ Depth (inches): ____
Saturation Present? (includes capillary fringe) Yes ____ No ✘ Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** ✘

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

Remarks:
The criterion for wetland hydrology is not met.

VEGETATION ─ Use scientific names of plants. Sampling Point: W-EVN-04_UPL-1

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Elaeagnus angustifolia*	20	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	20	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Herb Stratum (Plot size: 5 ft radius)			
1. *Festuca rubra*	70	Yes	FACU
2. *Solidago canadensis*	10	No	FACU
3. *Symphyotrichum pilosum*	5	No	FACU
4. *Daucus carota*	5	No	UPL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90	= Total Cover	

Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	105	x 4 =	420
UPL species	5	x 5 =	25
Column Totals:	110 (A)		445 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

__ 1 - Rapid Test for Hydrophytic Vegetation

__ 2 - Dominance Test is >50%

__ 3 - Prevalence Index is ≤3.0[1]

__ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree ─ Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub ─ Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb ─ All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines ─ All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** _____ **No** ✘

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

The criterion for hydrophytic vegetation is not met.

SOIL Sampling Point: W-EVN-04_UPL-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 to 8	10YR 3/1	95	10YR 5/8	5	C	M	Clay Loam	
8 to 18	10YR 4/2	80	10YR 5/4	20	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ✘ Depleted Matrix (F3)
- ✘ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Muck Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
Type: Gravel
Depth (inches): 18

Hydric Soil Present? Yes ✘ **No** ___

Remarks:
The criterion for hydric soil is met.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Bayshore-Davis Besse 345kV Rebuild City/County: Oak Harbor, Ottawa County Sampling Date: 2024-11-20
Applicant/Owner: FirstEnergy State: OH Sampling Point: W-EVN-05_PEM-1
Investigator(s): Erin Van Nort, Emma Given Section, Township, Range: 06 7N 15E
Landform (hillslope, terrace, etc): Depression Local relief (concave, convex, none): None Slope (%): 0 to 1
Subregion (LRR or MLRA): MLRA 99 of LRR L Lat: 41.59506245 Long: -83.1646165833 Datum: WGS84
Soil Map Unit Name: Nappanee silty clay loam, 0 to 3 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✘ No _____ (If no, explain in Remarks.)
Are Vegetation _____ , Soil _____ , or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✘ No _____
Are Vegetation _____ , Soil _____ , or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes ✘ No _____
Hydric Soil Present? Yes ✘ No _____
Wetland Hydrology Present? Yes ✘ No _____

Is the Sampled Area within a Wetland? Yes ✘ No _____

If yes, optional Wetland Site ID: W-EVN-05

Remarks: (Explain alternative procedures here or in a separate report.)
Covertype is PEM. Based on the presence of all three parameters, this area is a wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ✘ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✘ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✘ Depth (inches): _____
Water Table Present? Yes _____ No ✘ Depth (inches): _____
Saturation Present? (includes capillary fringe) Yes _____ No ✘ Depth (inches): _____

Wetland Hydrology Present? Yes ✘ No _____

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

Remarks:
The criterion for wetland hydrology is met.

VEGETATION – Use scientific names of plants. Sampling Point: W-EVN-05_PEM-1

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Panicum capillare*	30	Yes	FAC
2. *Setaria parviflora*	30	Yes	FAC
3. *Juncus effusus*	25	Yes	OBL
4. *Verbena urticifolia*	15	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	25	x 1 =	25
FACW species	0	x 2 =	0
FAC species	75	x 3 =	225
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		250 (B)

Prevalence Index = B/A = 2.5

Hydrophytic Vegetation Indicators:

__ 1 - Rapid Test for Hydrophytic Vegetation

✘ 2 - Dominance Test is >50%

✘ 3 - Prevalence Index is ≤3.0[1]

__ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ✘ **No** __

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

The criterion for hydrophytic vegetation is met.

SOIL Sampling Point: W-EVN-05_PEM-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 to 20	10YR 5/1	90	10YR 5/8	10	C	PL	Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ✘ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Muck Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✘ **No** ___

Remarks:

The criterion for hydric soil is met.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Bayshore-Davis Besse 345kV Rebuild City/County: Oak Harbor, Ottawa County Sampling Date: 2024-11-20
Applicant/Owner: FirstEnergy State: OH Sampling Point: W-EVN-05_UPL-1
Investigator(s): Erin Van Nort, Emma Given Section, Township, Range: 06 7N 15E
Landform (hillslope, terrace, etc): Knoll Local relief (concave, convex, none): None Slope (%): 0 to 1
Subregion (LRR or MLRA): MLRA 99 of LRR L Lat: 41.5950017167 Long: -83.1648924333 Datum: WGS84
Soil Map Unit Name: Nappanee silty clay loam, 0 to 3 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✘ No _____ (If no, explain in Remarks.)
Are Vegetation _____ , Soil _____ , or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✘ No _____
Are Vegetation _____ , Soil _____ , or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No ✘
Hydric Soil Present? Yes _____ No ✘
Wetland Hydrology Present? Yes _____ No ✘

Is the Sampled Area within a Wetland? **Yes** _____ **No** ✘

If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)
Covertype is UPL. Based on the absence of all three parameters, this area is an upland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✘ Depth (inches): _____
Water Table Present? Yes _____ No ✘ Depth (inches): _____
Saturation Present? (includes capillary fringe) Yes _____ No ✘ Depth (inches): _____

Wetland Hydrology Present? **Yes** _____ **No** ✘

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

Remarks:
The criterion for wetland hydrology is not met.

VEGETATION ─ Use scientific names of plants. Sampling Point: W-EVN-05_UPL-1

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Setaria faberi*	45	Yes	FACU
2. *Trifolium repens*	35	Yes	FACU
3. *Cerastium nutans*	15	No	FACU
4. *Symphyotrichum ericoides*	5	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	100 (A)		400 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

__ 1 - Rapid Test for Hydrophytic Vegetation

__ 2 - Dominance Test is >50%

__ 3 - Prevalence Index is ≤3.0[1]

__ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree ─ Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub ─ Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb ─ All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines ─ All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ____ **No** ✘

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

The criterion for hydrophytic vegetation is not met.

SOIL Sampling Point: W-EVN-05_UPL-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 to 14	10YR 4/2	100					Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- __ Histosol (A1)
- __ Histic Epipedon (A2)
- __ Black Histic (A3)
- __ Hydrogen Sulfide (A4)
- __ Stratified Layers (A5)
- __ Depleted Below Dark Surface (A11)
- __ Thick Dark Surface (A12)
- __ Iron Monosulfide (A18)
- __ Sandy Mucky Mineral (S1)
- __ Sandy Gleyed Matrix (S4)
- __ Sandy Redox (S5)
- __ Stripped Matrix (S6)
- __ Dark Surface (S7) **(LRR R, MLRA 149B)**
- __ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- __ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- __ Loamy Mucky Mineral (F1) **(LRR K, L)**
- __ Loamy Gleyed Matrix (F2)
- __ Depleted Matrix (F3)
- __ Redox Dark Surface (F6)
- __ Depleted Dark Surface (F7)
- __ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- __ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- __ Coast Prairie Redox (A16) **(LRR K, L, R)**
- __ 5 cm Muck Peat or Peat (S3) **(LRR K, L, R)**
- __ Dark Surface (S7) **(LRR K, L)**
- __ Polyvalue Below Surface (S8) **(LRR K, L)**
- __ Thin Dark Surface (S9) **(LRR K, L)**
- __ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- __ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- __ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- __ Red Parent Material (F21)
- __ Very Shallow Dark Surface (TF12)
- __ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
Type: Fill
Depth (inches): 14

Hydric Soil Present? Yes ____ **No** ✘

Remarks:
The criterion for hydric soil is not met.

OEPA ORAM Field Forms

Background Information

Name: Erin Van Nort
Date: 11/19/2024
Affiliation: TRC Companies, Inc.
Address: 1382 West Ninth Street, Suite 400, Cleveland, OH 44113
Phone Number: (216)347-3342
e-mail address: EVanNort@trccompanies.com
Name of Wetland: W-EVN-1
Vegetation Communit(ies): PEM/PFO/PSS
HGM Class(es): Depression
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc. See Figure 5: Delineated Resources Map and Surface Water Delineation Report for further details.

Lat/Long or UTM Coordinate	41.594670, -83.140122
USGS Quad Name	Oak Harbor
County	Ottawa
Township	7N, R15E
Section and Subsection	03
Hydrologic Unit Code	041000100701
Site Visit	11/19/2024
National Wetland Inventory Map	See Report
Ohio Wetland Inventory Map	See Report
Soil Survey	See Report
Delineation report/map	See Report

Name of Wetland: W-EVN-1	
Wetland Size (acres, hectares):	~5.0 acres (2.02 hectare)

Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.

See Figure 5: Delineated Resources Map and Surface Water Delineation Report for further details.

Comments, Narrative Discussion, Justification of Category Changes:

Final score : 26.5	**Category:** 1

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. *Areas with a high degree of hydrologic interaction should be scored as a single wetland*. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	X	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	X	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	X	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	X	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		X
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	X	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap . The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	
1	**Critical Habitat.** Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2	(NO) Go to Question 2
2	**Threatened or Endangered Species.** Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3	(NO) Go to Question 3
3	**Documented High Quality Wetland.** Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland Go to Question 4	(NO) Go to Question 4
4	**Significant Breeding or Concentration Area.** Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland Go to Question 5	(NO) Go to Question 5
5	**Category 1 Wetlands.** Is the wetland less than 0.5 hectares (1 acre) in size and **hydrologically isolated** and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by *Phalaris arundinacea, Lythrum salicaria,* or *Phragmites australis*, or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	(NO) Go to Question 6
6	**Bogs.** Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly *Sphagnum* spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	(NO) Go to Question 7
7	**Fens.** Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland Go to Question 8a	(NO) Go to Question 8a
8a	**"Old Growth Forest."** Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b	(NO) Go to Question 8b

8b	**Mature forested wetlands**. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES Wetland should be evaluated for possible Category 3 status. Go to Question 9a	NO Go to Question 9a
9a	**Lake Erie coastal and tributary wetlands**. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES Go to Question 9b	NO Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES Wetland should be evaluated for possible Category 3 status Go to Question 10	NO Go to Question 9c
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES Wetland is a Category 3 wetland Go to Question 10	NO Go to Question 9e
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status Go to Question 10	NO Go to Question 10
10	**Lake Plain Sand Prairies (Oak Openings)** Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES Wetland is a Category 3 wetland. Go to Question 11	NO Go to Question 11
11	**Relict Wet Prairies**. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	YES Wetland should be evaluated for possible Category 3 status Complete Quantitative Rating	NO Complete Quantitative Rating

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	*Zygadenus elegans var. glaucus*	*Calla palustris*	*Carex cryptolepis*	*Calamagrostis canadensis*
Myriophyllum spicatum	*Cacalia plantaginea*	*Carex atlantica var. capillacea*	*Carex lasiocarpa*	*Calamogrostis stricta*
Najas minor	*Carex flava*	*Carex echinata*	*Carex stricta*	*Carex atherodes*
Phalaris arundinacea	*Carex sterilis*	*Carex oligosperma*	*Cladium mariscoides*	*Carex buxbaumii*
Phragmites australis	*Carex stricta*	*Carex trisperma*	*Calamagrostis stricta*	*Carex pellita*
Potamogeton crispus	*Deschampsia caespitosa*	*Chamaedaphne calyculata*	*Calamagrostis canadensis*	*Carex sartwellii*
Ranunculus ficaria	*Eleocharis rostellata*	*Decodon verticillatus*	*Quercus palustris*	*Gentiana andrewsii*
Rhamnus frangula	*Eriophorum viridicarinatum*	*Eriophorum virginicum*		*Helianthus grosseserratus*
Typha angustifolia	*Gentianopsis spp.*	*Larix laricina*		*Liatris spicata*
Typha xglauca	*Lobelia kalmii*	*Nemopanthus mucronatus*		*Lysimachia quadriflora*
	Parnassia glauca	*Schechzeria palustris*		*Lythrum alatum*
	Potentilla fruticosa	*Sphagnum spp.*		*Pycnanthemum virginianum*
	Rhamnus alnifolia	*Vaccinium macrocarpon*		*Silphium terebinthinaceum*
	Rhynchospora capillacea	*Vaccinium corymbosum*		*Sorghastrum nutans*
	Salix candida	*Vaccinium oxycoccos*		*Spartina pectinata*
	Salix myricoides	*Woodwardia virginica*		*Solidago riddellii*
	Salix serissima	*Xyris difformis*		
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.

Site: FirstEnergy , Bayshore-Davis Besse	Rater(s): Erin Van Nort, Emma Given	Date: 2024-11-19

Metric 1. Wetland Area (size).

3 (max 6 pts.) | 3 (subtotal)

Select one size class and assign score.

- [ ] >50 acres (>20.2ha) (6 pts)
- [ ] 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- [ ] 10 to <25 acres (4 to <10.1ha) (4 pts)
- [x] 3 to <10 acres (1.2 to <4ha) (3 pts)
- [ ] 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- [ ] 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- [ ] <0.1 acres (0.04ha) (0 pts)

Metric 2. Upland buffers and surrounding land use.

2 (max 14 pts.) | 5 (subtotal)

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- [ ] WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- [ ] MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- [ ] NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- [x] VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- [ ] VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- [ ] LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- [x] MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- [x] HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

Metric 3. Hydrology.

8 (max 30 pts.) | 13 (subtotal)

3a. Sources of Water. Score all that apply.

- [ ] High pH groundwater (5)
- [ ] Other groundwater (3)
- [x] Precipitation (1)
- [ ] Seasonal/Intermittent surface water (3)
- [ ] Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

- [x] 100 year floodplain (1)
- [ ] Between stream/lake and other human use (1)
- [x] Part of wetland/upland (e.g. forest), complex (1)
- [ ] Part of riparian or upland corridor (1)

3c. Maximum water depth. Select only one and assign score.

- [ ] >0.7 m (>27.6 in) (3)
- [ ] 0.4 to 0.7 m (15.7 to 27.6 in) (2)
- [x] <0.4 m (<15.7 in) (1)

3d. Duration inundation/saturation. Score one or dbl check.

- [ ] Semi- to permanently inundated/saturated (4)
- [ ] Regularly inundated/saturated (3)
- [x] Seasonally inundated (2)
- [ ] Seasonally saturated in upper 30cm (12in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- [ ] None or none apparent (12)
- [ ] Recovered (7)
- [x] Recovering (3)
- [x] Recent or no recovery (1)

Check all disturbances observed

[x] ditch	[ ] point source (nonstormwater)
[ ] tile	[ ] filling/grading
[ ] dike	[x] road bed/RR track
[ ] weir	[ ] dredging
[ ] stormwater input	[ ] other

Metric 4. Habitat Alteration and Development.

11.5 (max 20 pts.) | 24.5 (subtotal)

4a. Substrate disturbance. Score one or double check and average.

- [ ] None or none apparent (4)
- [x] Recovered (3)
- [ ] Recovering (2)
- [ ] Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- [ ] Excellent (7)
- [ ] Very good (6)
- [ ] Good (5)
- [x] Moderately good (4)
- [ ] Fair (3)
- [ ] Poor to fair (2)
- [ ] Poor (1)

4c. Habitat alteration. Score one or double check and average.

- [ ] None or none apparent (9)
- [x] Recovered (6)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

[x] mowing	[ ] shrub/sapling removal
[ ] grazing	[ ] herbaceous/aquatic bed removal
[ ] clearcutting	[ ] sedimentation
[ ] selective cutting	[ ] dredging
[ ] woody debris removal	[ ] farming
[ ] toxic pollutants	[x] nutrient enrichment

24.5 subtotal this page

TRC Environmental Corp.
781 Science Boulevard, Suite 200
Gahanna, Ohio 43230

Site: FirstEnergy , Bayshore-Davis Besse	Rater(s): Erin Van Nort, Emma Given	Date: 2024-11-19

24.5
subtotal first page

0 | 24.5
max 10 pts. | subtotal

Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- [ ] Bog (10)
- [ ] Fen (10)
- [ ] Old growth forest (10)
- [ ] Mature forested wetland (5)
- [ ] Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- [ ] Lake Erie coastal/tributary wetland-restricted hydrology (5)
- [ ] Lake Plain Sand Prairies (Oak Openings) (10)
- [ ] Relict Wet Prairies (10)
- [ ] Known occurrence state/federal threatened or endangered species (10)
- [ ] Significant migratory songbird/water fowl habitat or usage (10)
- [ ] Category 1 Wetland. See Question 1 Qualitative Rating (-10)

2 | 26.5
max 20 pts. | subtotal

Metric 6. Plant communities, interspersion, microtopography.

6a. Wetland Vegetation Communities.
Score all present using 0 to 3 scale.

- [ ] Aquatic Bed
- [1] Emergent
- [1] Shrub
- [1] Forest
- [ ] Mudflats
- [ ] Open water
- [ ] Other _____

6b. horizontal (plan view) Interspersion.
Select only one.

- [ ] High (5)
- [ ] Moderately high (4)
- [ ] Moderate (3)
- [x] Moderately low (2)
- [ ] Low (1)
- [ ] None (0)

Invasive Species Present:
phragmites
reed canary grass

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- [ ] Extensive >75% cover (-5)
- [x] Moderate 25-75% cover (-3)
- [ ] Sparse 5-25% cover (-1)
- [ ] Nearly absent <5% cover (0)
- [ ] Absent (1)

6d. Microtopography.
Score all present using 0 to 3 scale.

- [0] Vegetated hummucks/tussucks
- [0] Coarse woody debris >15cm (6in)
- [0] Standing dead >25cm (10in) dbh
- [0] Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

26.5

CATEGORY 1

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES (NO)	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES (NO)	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES (NO)	If yes, Category 3.
	Question 4. Significant bird habitat	YES (NO)	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES (NO)	If yes, Category 1.
	Question 6. Bogs	YES (NO)	If yes, Category 3.
	Question 7. Fens	YES (NO)	If yes, Category 3.
	Question 8a. Old Growth Forest	YES (NO)	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES (NO)	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	3	
	Metric 2. Buffers and surrounding land use	2	
	Metric 3. Hydrology	8	
	Metric 4. Habitat	11.5	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	2	
	TOTAL SCORE	26.5	Category based on score breakpoints Cat 1

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one		Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	(NO)	Is quantitative rating score *less* than the Category 2 scoring threshold (*excluding* gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-categorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	(NO)	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	(NO)	Is quantitative rating score *greater* than the Category 2 scoring threshold *(including* any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	(YES) Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the *"gray zone"* for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	(NO)	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit *moderate OR superior* hydrologic OR habitat, OR recreational functions AND the wetland was *not* categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	(NO) Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Final Category

Choose one	(Category 1)	Category 2	Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name: Erin Van Nort
Date: 11/20/2024
Affiliation: TRC Companies, Inc.
Address: 1382 West Ninth Street, Suite 400, Cleveland, OH 44113
Phone Number: (216)347-3342
e-mail address: EVanNort@trccompanies.com
Name of Wetland: W-EVN-2
Vegetation Communit(ies): PEM
HGM Class(es): Depression
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc. See Figure 5: Delineated Resources Map and Surface Water Delineation Report for further details.

Lat/Long or UTM Coordinate	41.595158, -83.164024
USGS Quad Name	Oak Harbor
County	Ottawa
Township	7N, R15E
Section and Subsection	05
Hydrologic Unit Code	041000100701
Site Visit	11/20/2024
National Wetland Inventory Map	See Report
Ohio Wetland Inventory Map	See Report
Soil Survey	See Report
Delineation report/map	See Report

Name of Wetland: W-EVN-2	
Wetland Size (acres, hectares):	~8.0 acres (3.24 hectare)

Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.

See Figure 5: Delineated Resources Map and Surface Water Delineation Report for further details.

Comments, Narrative Discussion, Justification of Category Changes:

ORAM Category based on scoring breakpoints from Table 2 of the ORAM v. 5.0 Quantitative Score Calibration; scores falling within a “gray zone” or “modified” category were rounded up.

Final score : 35	**Category:**	2

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. *Areas with a high degree of hydrologic interaction should be scored as a single wetland*. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	X	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	X	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	X	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	X	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		X
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	X	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap . The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	
1	**Critical Habitat.** Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2	(NO) Go to Question 2
2	**Threatened or Endangered Species.** Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3	(NO) Go to Question 3
3	**Documented High Quality Wetland.** Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland Go to Question 4	(NO) Go to Question 4
4	**Significant Breeding or Concentration Area.** Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland Go to Question 5	(NO) Go to Question 5
5	**Category 1 Wetlands.** Is the wetland less than 0.5 hectares (1 acre) in size and **hydrologically isolated** and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by *Phalaris arundinacea, Lythrum salicaria,* or *Phragmites australis*, or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	(NO) Go to Question 6
6	**Bogs.** Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly *Sphagnum* spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	(NO) Go to Question 7
7	**Fens.** Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland Go to Question 8a	(NO) Go to Question 8a
8a	**"Old Growth Forest."** Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b	(NO) Go to Question 8b

8b	**Mature forested wetlands**. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES Wetland should be evaluated for possible Category 3 status. Go to Question 9a	NO Go to Question 9a
9a	**Lake Erie coastal and tributary wetlands**. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES Go to Question 9b	NO Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES Wetland should be evaluated for possible Category 3 status Go to Question 10	NO Go to Question 9c
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES Wetland is a Category 3 wetland Go to Question 10	NO Go to Question 9e
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status Go to Question 10	NO Go to Question 10
10	**Lake Plain Sand Prairies (Oak Openings)** Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES Wetland is a Category 3 wetland. Go to Question 11	NO Go to Question 11
11	**Relict Wet Prairies**. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	YES Wetland should be evaluated for possible Category 3 status Complete Quantitative Rating	NO Complete Quantitative Rating

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	*Zygadenus elegans var. glaucus*	*Calla palustris*	*Carex cryptolepis*	*Calamagrostis canadensis*
Myriophyllum spicatum	*Cacalia plantaginea*	*Carex atlantica var. capillacea*	*Carex lasiocarpa*	*Calamogrostis stricta*
Najas minor	*Carex flava*	*Carex echinata*	*Carex stricta*	*Carex atherodes*
Phalaris arundinacea	*Carex sterilis*	*Carex oligosperma*	*Cladium mariscoides*	*Carex buxbaumii*
Phragmites australis	*Carex stricta*	*Carex trisperma*	*Calamagrostis stricta*	*Carex pellita*
Potamogeton crispus	*Deschampsia caespitosa*	*Chamaedaphne calyculata*	*Calamagrostis canadensis*	*Carex sartwellii*
Ranunculus ficaria	*Eleocharis rostellata*	*Decodon verticillatus*	*Quercus palustris*	*Gentiana andrewsii*
Rhamnus frangula	*Eriophorum viridicarinatum*	*Eriophorum virginicum*		*Helianthus grosseserratus*
Typha angustifolia	*Gentianopsis spp.*	*Larix laricina*		*Liatris spicata*
Typha xglauca	*Lobelia kalmii*	*Nemopanthus mucronatus*		*Lysimachia quadriflora*
	Parnassia glauca	*Schechzeria palustris*		*Lythrum alatum*
	Potentilla fruticosa	*Sphagnum spp.*		*Pycnanthemum virginianum*
	Rhamnus alnifolia	*Vaccinium macrocarpon*		*Silphium terebinthinaceum*
	Rhynchospora capillacea	*Vaccinium corymbosum*		*Sorghastrum nutans*
	Salix candida	*Vaccinium oxycoccos*		*Spartina pectinata*
	Salix myricoides	*Woodwardia virginica*		*Solidago riddellii*
	Salix serissima	*Xyris difformis*		
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.

Site: FirstEnergy, Bayshore-Davis Besse	Rater(s): Erin Van Nort, Emma Given	Date: 2024-11-20

Metric 1. Wetland Area (size).

3 (max 6 pts.) | 3 (subtotal)

Select one size class and assign score.

- [ ] >50 acres (>20.2ha) (6 pts)
- [ ] 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- [ ] 10 to <25 acres (4 to <10.1ha) (4 pts)
- [x] 3 to <10 acres (1.2 to <4ha) (3 pts)
- [ ] 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- [ ] 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- [ ] <0.1 acres (0.04ha) (0 pts)

Metric 2. Upland buffers and surrounding land use.

9 (max 14 pts.) | 12 (subtotal)

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- [ ] WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- [x] MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- [ ] NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- [ ] VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- [ ] VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- [x] LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- [ ] MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- [ ] HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

Metric 3. Hydrology.

11 (max 30 pts.) | 23 (subtotal)

3a. Sources of Water. Score all that apply.

- [ ] High pH groundwater (5)
- [ ] Other groundwater (3)
- [x] Precipitation (1)
- [ ] Seasonal/Intermittent surface water (3)
- [ ] Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

- [x] 100 year floodplain (1)
- [ ] Between stream/lake and other human use (1)
- [x] Part of wetland/upland (e.g. forest), complex (1)
- [ ] Part of riparian or upland corridor (1)

3c. Maximum water depth. Select only one and assign score.

- [ ] >0.7 m (>27.6 in) (3)
- [ ] 0.4 to 0.7 m (15.7 to 27.6 in) (2)
- [x] <0.4 m (<15.7 in) (1)

3d. Duration inundation/saturation. Score one or dbl check.

- [ ] Semi- to permanently inundated/saturated (4)
- [ ] Regularly inundated/saturated (3)
- [x] Seasonally inundated (2)
- [ ] Seasonally saturated in upper 30cm (12in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- [ ] None or none apparent (12)
- [x] Recovered (7)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

[ ] ditch	[ ] point source (nonstormwater)
[ ] tile	[x] filling/grading
[ ] dike	[x] road bed/RR track
[ ] weir	[ ] dredging
[ ] stormwater input	[ ] other

Metric 4. Habitat Alteration and Development.

10 (max 20 pts.) | 33 (subtotal)

4a. Substrate disturbance. Score one or double check and average.

- [ ] None or none apparent (4)
- [x] Recovered (3)
- [x] Recovering (2)
- [ ] Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- [ ] Excellent (7)
- [ ] Very good (6)
- [ ] Good (5)
- [ ] Moderately good (4)
- [x] Fair (3)
- [ ] Poor to fair (2)
- [ ] Poor (1)

4c. Habitat alteration. Score one or double check and average.

- [ ] None or none apparent (9)
- [x] Recovered (6)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

[x] mowing	[x] shrub/sapling removal
[ ] grazing	[ ] herbaceous/aquatic bed removal
[x] clearcutting	[ ] sedimentation
[x] selective cutting	[ ] dredging
[ ] woody debris removal	[ ] farming
[ ] toxic pollutants	[ ] nutrient enrichment

33 subtotal this page

TRC Environmental Corp.
781 Science Boulevard, Suite 200
Gahanna, Ohio 43230

Site: FirstEnergy, Bayshore-Davis Besse	Rater(s): Erin Van Nort, Emma Given	Date: 2024-11-20

33
subtotal first page

0 (max 10 pts.) | 33 (subtotal)

Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- [ ] Bog (10)
- [ ] Fen (10)
- [ ] Old growth forest (10)
- [ ] Mature forested wetland (5)
- [ ] Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- [ ] Lake Erie coastal/tributary wetland-restricted hydrology (5)
- [ ] Lake Plain Sand Prairies (Oak Openings) (10)
- [ ] Relict Wet Prairies (10)
- [ ] Known occurrence state/federal threatened or endangered species (10)
- [ ] Significant migratory songbird/water fowl habitat or usage (10)
- [ ] Category 1 Wetland. See Question 1 Qualitative Rating (-10)

2 (max 20 pts.) | 35 (subtotal)

Metric 6. Plant communities, interspersion, microtopography.

6a. Wetland Vegetation Communities.
Score all present using 0 to 3 scale.

- [ ] Aquatic Bed
- [2] Emergent
- [1] Shrub
- [ ] Forest
- [ ] Mudflats
- [ ] Open water
- [ ] Other _____

6b. horizontal (plan view) Interspersion.
Select only one.

- [ ] High (5)
- [ ] Moderately high (4)
- [ ] Moderate (3)
- [ ] Moderately low (2)
- [x] Low (1)
- [ ] None (0)

Invasive Species Present:
phragmites
purple loosestrife
reed canary grass

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- [ ] Extensive >75% cover (-5)
- [x] Moderate 25-75% cover (-3)
- [ ] Sparse 5-25% cover (-1)
- [ ] Nearly absent <5% cover (0)
- [ ] Absent (1)

6d. Microtopography.
Score all present using 0 to 3 scale.

- [1] Vegetated hummucks/tussucks
- [ ] Coarse woody debris >15cm (6in)
- [ ] Standing dead >25cm (10in) dbh
- [ ] Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

35

CATEGORY 2

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES (NO)	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES (NO)	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES (NO)	If yes, Category 3.
	Question 4. Significant bird habitat	YES (NO)	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES (NO)	If yes, Category 1.
	Question 6. Bogs	YES (NO)	If yes, Category 3.
	Question 7. Fens	YES (NO)	If yes, Category 3.
	Question 8a. Old Growth Forest	YES (NO)	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES (NO)	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	3	
	Metric 2. Buffers and surrounding land use	9	
	Metric 3. Hydrology	11	
	Metric 4. Habitat	10	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	2	
	TOTAL SCORE	35	Category based on score breakpoints Cat 2

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one		Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	(NO)	Is quantitative rating score *less* than the Category 2 scoring threshold (*excluding* gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-categorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	(NO)	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	(NO)	Is quantitative rating score *greater* than the Category 2 scoring threshold *(including* any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	(YES) Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the *"gray zone"* for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	(NO)	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit *moderate OR superior* hydrologic OR habitat, OR recreational functions AND the wetland was *not* categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	(NO) Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Final Category

Choose one	Category 1	(Category 2)	Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name: Erin Van Nort
Date: 11/20/2024
Affiliation: TRC Companies, Inc.
Address: 1382 West Ninth Street, Suite 400, Cleveland, OH 44113
Phone Number: (216)347-3342
e-mail address: EVanNort@trccompanies.com
Name of Wetland: W-EVN-3
Vegetation Communit(ies): PFO/PSS/PEM
HGM Class(es): Depression/Riverine
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc. See Figure 5: Delineated Resources Map and Surface Water Delineation Report for further details.

Lat/Long or UTM Coordinate	41.594910, -83.160429
USGS Quad Name	Oak Harbor
County	Ottawa
Township	7N, R15E
Section and Subsection	05
Hydrologic Unit Code	041000100701
Site Visit	11/20/2024
National Wetland Inventory Map	See Report
Ohio Wetland Inventory Map	See Report
Soil Survey	See Report
Delineation report/map	See Report

Name of Wetland: W-EVN-3	
Wetland Size (acres, hectares):	~30.0 acres (12.14 hectare)

Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.

See Figure 5: Delineated Resources Map and Surface Water Delineation Report for further details.

Comments, Narrative Discussion, Justification of Category Changes:

Final score : 54	**Category:** 2

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. *Areas with a high degree of hydrologic interaction should be scored as a single wetland*. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	X	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	X	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	X	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	X	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		X
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	X	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap . The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	
1	**Critical Habitat.** Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2	(NO) Go to Question 2
2	**Threatened or Endangered Species.** Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3	(NO) Go to Question 3
3	**Documented High Quality Wetland.** Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland Go to Question 4	(NO) Go to Question 4
4	**Significant Breeding or Concentration Area.** Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland Go to Question 5	(NO) Go to Question 5
5	**Category 1 Wetlands.** Is the wetland less than 0.5 hectares (1 acre) in size and **hydrologically isolated** and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by *Phalaris arundinacea, Lythrum salicaria,* or *Phragmites australis*, or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	(NO) Go to Question 6
6	**Bogs.** Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly *Sphagnum* spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	(NO) Go to Question 7
7	**Fens.** Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland Go to Question 8a	(NO) Go to Question 8a
8a	**"Old Growth Forest."** Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b	(NO) Go to Question 8b

8b	**Mature forested wetlands**. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES Wetland should be evaluated for possible Category 3 status. Go to Question 9a	NO Go to Question 9a
9a	**Lake Erie coastal and tributary wetlands**. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES Go to Question 9b	NO Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES Wetland should be evaluated for possible Category 3 status Go to Question 10	NO Go to Question 9c
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES Wetland is a Category 3 wetland Go to Question 10	NO Go to Question 9e
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status Go to Question 10	NO Go to Question 10
10	**Lake Plain Sand Prairies (Oak Openings)** Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES Wetland is a Category 3 wetland. Go to Question 11	NO Go to Question 11
11	**Relict Wet Prairies**. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	YES Wetland should be evaluated for possible Category 3 status Complete Quantitative Rating	NO Complete Quantitative Rating

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	*Zygadenus elegans var. glaucus*	*Calla palustris*	*Carex cryptolepis*	*Calamagrostis canadensis*
Myriophyllum spicatum	*Cacalia plantaginea*	*Carex atlantica var. capillacea*	*Carex lasiocarpa*	*Calamogrostis stricta*
Najas minor	*Carex flava*	*Carex echinata*	*Carex stricta*	*Carex atherodes*
Phalaris arundinacea	*Carex sterilis*	*Carex oligosperma*	*Cladium mariscoides*	*Carex buxbaumii*
Phragmites australis	*Carex stricta*	*Carex trisperma*	*Calamagrostis stricta*	*Carex pellita*
Potamogeton crispus	*Deschampsia caespitosa*	*Chamaedaphne calyculata*	*Calamagrostis canadensis*	*Carex sartwellii*
Ranunculus ficaria	*Eleocharis rostellata*	*Decodon verticillatus*	*Quercus palustris*	*Gentiana andrewsii*
Rhamnus frangula	*Eriophorum viridicarinatum*	*Eriophorum virginicum*		*Helianthus grosseserratus*
Typha angustifolia	*Gentianopsis spp.*	*Larix laricina*		*Liatris spicata*
Typha xglauca	*Lobelia kalmii*	*Nemopanthus mucronatus*		*Lysimachia quadriflora*
	Parnassia glauca	*Schechzeria palustris*		*Lythrum alatum*
	Potentilla fruticosa	*Sphagnum spp.*		*Pycnanthemum virginianum*
	Rhamnus alnifolia	*Vaccinium macrocarpon*		*Silphium terebinthinaceum*
	Rhynchospora capillacea	*Vaccinium corymbosum*		*Sorghastrum nutans*
	Salix candida	*Vaccinium oxycoccos*		*Spartina pectinata*
	Salix myricoides	*Woodwardia virginica*		*Solidago riddellii*
	Salix serissima	*Xyris difformis*		
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.

Site: FirstEnergy , Bayshore-Davis Besse | **Rater(s):** Erin Van Nort, Emma Given | **Date:** 2024-11-20

5	5
max 6 pts.	subtotal

Metric 1. Wetland Area (size).

Select one size class and assign score.

- [ ] >50 acres (>20.2ha) (6 pts)
- [x] 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- [ ] 10 to <25 acres (4 to <10.1ha) (4 pts)
- [ ] 3 to <10 acres (1.2 to <4ha) (3 pts)
- [ ] 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- [ ] 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- [ ] <0.1 acres (0.04ha) (0 pts)

9	14
max 14 pts.	subtotal

Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- [ ] WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- [x] MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- [ ] NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- [ ] VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- [ ] VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- [x] LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- [ ] MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- [ ] HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

19	33
max 30 pts.	subtotal

Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- [ ] High pH groundwater (5)
- [ ] Other groundwater (3)
- [x] Precipitation (1)
- [x] Seasonal/Intermittent surface water (3)
- [ ] Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

- [x] 100 year floodplain (1)
- [ ] Between stream/lake and other human use (1)
- [x] Part of wetland/upland (e.g. forest), complex (1)
- [ ] Part of riparian or upland corridor (1)

3c. Maximum water depth. Select only one and assign score.

- [ ] >0.7 m (>27.6 in) (3)
- [x] 0.4 to 0.7 m (15.7 to 27.6 in) (2)
- [ ] <0.4 m (<15.7 in) (1)

3d. Duration inundation/saturation. Score one or dbl check.

- [x] Semi- to permanently inundated/saturated (4)
- [ ] Regularly inundated/saturated (3)
- [ ] Seasonally inundated (2)
- [ ] Seasonally saturated in upper 30cm (12in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- [ ] None or none apparent (12)
- [x] Recovered (7)
- [ ] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

[ ]	ditch	[ ]	point source (nonstormwater)
[ ]	tile	[x]	filling/grading
[x]	dike	[x]	road bed/RR track
[ ]	weir	[x]	dredging
[ ]	stormwater input	[ ]	other

14	47
max 20 pts.	subtotal

Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- [ ] None or none apparent (4)
- [x] Recovered (3)
- [ ] Recovering (2)
- [ ] Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- [ ] Excellent (7)
- [ ] Very good (6)
- [x] Good (5)
- [ ] Moderately good (4)
- [ ] Fair (3)
- [ ] Poor to fair (2)
- [ ] Poor (1)

4c. Habitat alteration. Score one or double check and average.

- [ ] None or none apparent (9)
- [x] Recovered (6)
- [ ] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

[ ]	mowing	[ ]	shrub/sapling removal
[ ]	grazing	[ ]	herbaceous/aquatic bed removal
[ ]	clearcutting	[x]	sedimentation
[x]	selective cutting	[x]	dredging
[ ]	woody debris removal	[ ]	farming
[ ]	toxic pollutants	[ ]	nutrient enrichment

47
subtotal this page

TRC Environmental Corp.
781 Science Boulevard, Suite 200
Gahanna, Ohio 43230

Site: FirstEnergy , Bayshore-Davis Besse	Rater(s): Erin Van Nort, Emma Given	Date: 2024-11-20

47
subtotal first page

Metric 5. Special Wetlands.

0 max 10 pts. | 47 subtotal

Check all that apply and score as indicated.

- [ ] Bog (10)
- [ ] Fen (10)
- [ ] Old growth forest (10)
- [ ] Mature forested wetland (5)
- [ ] Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- [ ] Lake Erie coastal/tributary wetland-restricted hydrology (5)
- [ ] Lake Plain Sand Prairies (Oak Openings) (10)
- [ ] Relict Wet Prairies (10)
- [ ] Known occurrence state/federal threatened or endangered species (10)
- [ ] Significant migratory songbird/water fowl habitat or usage (10)
- [ ] Category 1 Wetland. See Question 1 Qualitative Rating (-10)

Metric 6. Plant communities, interspersion, microtopography.

7 max 20 pts. | 54 subtotal

6a. Wetland Vegetation Communities.
Score all present using 0 to 3 scale.

- [ ] Aquatic Bed
- [2] Emergent
- [1] Shrub
- [1] Forest
- [ ] Mudflats
- [1] Open water
- [ ] Other _____

6b. horizontal (plan view) Interspersion.
Select only one.

- [ ] High (5)
- [ ] Moderately high (4)
- [ ] Moderate (3)
- [x] Moderately low (2)
- [ ] Low (1)
- [ ] None (0)

Invasive Species Present:
phragmites
reed canary grass

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- [ ] Extensive >75% cover (-5)
- [x] Moderate 25-75% cover (-3)
- [ ] Sparse 5-25% cover (-1)
- [ ] Nearly absent <5% cover (0)
- [ ] Absent (1)

6d. Microtopography.
Score all present using 0 to 3 scale.

- [0] Vegetated hummucks/tussucks
- [1] Coarse woody debris >15cm (6in)
- [0] Standing dead >25cm (10in) dbh
- [2] Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

54

CATEGORY 2

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES (NO)	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES (NO)	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES (NO)	If yes, Category 3.
	Question 4. Significant bird habitat	YES (NO)	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES (NO)	If yes, Category 1.
	Question 6. Bogs	YES (NO)	If yes, Category 3.
	Question 7. Fens	YES (NO)	If yes, Category 3.
	Question 8a. Old Growth Forest	YES (NO)	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES (NO)	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	5	
	Metric 2. Buffers and surrounding land use	9	
	Metric 3. Hydrology	19	
	Metric 4. Habitat	14	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	7	
	TOTAL SCORE	54	Category based on score breakpoints Cat 2

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one		Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	(NO)	Is quantitative rating score *less* than the Category 2 scoring threshold (*excluding* gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-categorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	(NO)	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	(NO)	Is quantitative rating score *greater* than the Category 2 scoring threshold *(including* any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	(YES) Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the *"gray zone"* for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	(NO)	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit *moderate OR superior* hydrologic OR habitat, OR recreational functions AND the wetland was *not* categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	(NO) Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Final Category

Choose one	Category 1	(Category 2)	Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name: Erin Van Nort
Date: 11/20/2024
Affiliation: TRC Companies, Inc.
Address: 1382 West Ninth Street, Suite 400, Cleveland, OH 44113
Phone Number: (216)347-3342
e-mail address: EVanNort@trccompanies.com
Name of Wetland: W-EVN-4
Vegetation Communit(ies): PSS/PEM
HGM Class(es): Depression/Riverine
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc. See Figure 5: Delineated Resources Map and Surface Water Delineation Report for further details.

Lat/Long or UTM Coordinate	41.595077, -83.159255
USGS Quad Name	Oak Harbor
County	Ottawa
Township	7N, R15E
Section and Subsection	05
Hydrologic Unit Code	041000100701
Site Visit	11/20/2024
National Wetland Inventory Map	See Report
Ohio Wetland Inventory Map	See Report
Soil Survey	See Report
Delineation report/map	See Report

Name of Wetland: W-EVN-4	
Wetland Size (acres, hectares):	~15.0 acres (6.07 hectare)

Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.

See Figure 5: Delineated Resources Map and Surface Water Delineation Report for further details.

Comments, Narrative Discussion, Justification of Category Changes:

Final score : 45.5	**Category:** 2

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. *Areas with a high degree of hydrologic interaction should be scored as a single wetland*. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	X	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	X	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	X	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	X	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		X
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	X	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap . The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	
1	**Critical Habitat.** Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2	(NO) Go to Question 2
2	**Threatened or Endangered Species.** Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3	(NO) Go to Question 3
3	**Documented High Quality Wetland.** Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland Go to Question 4	(NO) Go to Question 4
4	**Significant Breeding or Concentration Area.** Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland Go to Question 5	(NO) Go to Question 5
5	**Category 1 Wetlands.** Is the wetland less than 0.5 hectares (1 acre) in size and **hydrologically isolated** and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by *Phalaris arundinacea, Lythrum salicaria,* or *Phragmites australis*, or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	(NO) Go to Question 6
6	**Bogs.** Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly *Sphagnum* spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	(NO) Go to Question 7
7	**Fens.** Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland Go to Question 8a	(NO) Go to Question 8a
8a	**"Old Growth Forest."** Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b	(NO) Go to Question 8b

8b	**Mature forested wetlands**. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES Wetland should be evaluated for possible Category 3 status. Go to Question 9a	NO Go to Question 9a
9a	**Lake Erie coastal and tributary wetlands**. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES Go to Question 9b	NO Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES Wetland should be evaluated for possible Category 3 status Go to Question 10	NO Go to Question 9c
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES Wetland is a Category 3 wetland Go to Question 10	NO Go to Question 9e
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status Go to Question 10	NO Go to Question 10
10	**Lake Plain Sand Prairies (Oak Openings)** Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES Wetland is a Category 3 wetland. Go to Question 11	NO Go to Question 11
11	**Relict Wet Prairies**. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	YES Wetland should be evaluated for possible Category 3 status Complete Quantitative Rating	NO Complete Quantitative Rating

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	*Zygadenus elegans var. glaucus*	*Calla palustris*	*Carex cryptolepis*	*Calamagrostis canadensis*
Myriophyllum spicatum	*Cacalia plantaginea*	*Carex atlantica var. capillacea*	*Carex lasiocarpa*	*Calamogrostis stricta*
Najas minor	*Carex flava*	*Carex echinata*	*Carex stricta*	*Carex atherodes*
Phalaris arundinacea	*Carex sterilis*	*Carex oligosperma*	*Cladium mariscoides*	*Carex buxbaumii*
Phragmites australis	*Carex stricta*	*Carex trisperma*	*Calamagrostis stricta*	*Carex pellita*
Potamogeton crispus	*Deschampsia caespitosa*	*Chamaedaphne calyculata*	*Calamagrostis canadensis*	*Carex sartwellii*
Ranunculus ficaria	*Eleocharis rostellata*	*Decodon verticillatus*	*Quercus palustris*	*Gentiana andrewsii*
Rhamnus frangula	*Eriophorum viridicarinatum*	*Eriophorum virginicum*		*Helianthus grosseserratus*
Typha angustifolia	*Gentianopsis spp.*	*Larix laricina*		*Liatris spicata*
Typha xglauca	*Lobelia kalmii*	*Nemopanthus mucronatus*		*Lysimachia quadriflora*
	Parnassia glauca	*Schechzeria palustris*		*Lythrum alatum*
	Potentilla fruticosa	*Sphagnum spp.*		*Pycnanthemum virginianum*
	Rhamnus alnifolia	*Vaccinium macrocarpon*		*Silphium terebinthinaceum*
	Rhynchospora capillacea	*Vaccinium corymbosum*		*Sorghastrum nutans*
	Salix candida	*Vaccinium oxycoccos*		*Spartina pectinata*
	Salix myricoides	*Woodwardia virginica*		*Solidago riddellii*
	Salix serissima	*Xyris difformis*		
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.

Site: FirstEnergy , Bayshore-Davis Besse	Rater(s): Erin Van Nort, Emma Given	Date: 2024-11-20

4	4
max 6 pts.	subtotal

Metric 1. Wetland Area (size).

Select one size class and assign score.

- [ ] >50 acres (>20.2ha) (6 pts)
- [ ] 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- [x] 10 to <25 acres (4 to <10.1ha) (4 pts)
- [ ] 3 to <10 acres (1.2 to <4ha) (3 pts)
- [ ] 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- [ ] 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- [ ] <0.1 acres (0.04ha) (0 pts)

9	13
max 14 pts.	subtotal

Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- [ ] WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- [x] MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- [ ] NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- [ ] VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- [ ] VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- [x] LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- [ ] MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- [ ] HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

18	31
max 30 pts.	subtotal

Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- [ ] High pH groundwater (5)
- [ ] Other groundwater (3)
- [x] Precipitation (1)
- [x] Seasonal/Intermittent surface water (3)
- [ ] Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

- [x] 100 year floodplain (1)
- [x] Between stream/lake and other human use (1)
- [x] Part of wetland/upland (e.g. forest), complex (1)
- [ ] Part of riparian or upland corridor (1)

3c. Maximum water depth. Select only one and assign score.

- [x] >0.7 m (>27.6 in) (3)
- [ ] 0.4 to 0.7 m (15.7 to 27.6 in) (2)
- [ ] <0.4 m (<15.7 in) (1)

3d. Duration inundation/saturation. Score one or dbl check.

- [ ] Semi- to permanently inundated/saturated (4)
- [x] Regularly inundated/saturated (3)
- [ ] Seasonally inundated (2)
- [ ] Seasonally saturated in upper 30cm (12in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- [ ] None or none apparent (12)
- [x] Recovered (7)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [ ] ditch
- [ ] tile
- [ ] dike
- [ ] weir
- [ ] stormwater input
- [ ] point source (nonstormwater)
- [x] filling/grading
- [x] road bed/RR track
- [x] dredging
- [ ] other

11.5	42.5
max 20 pts.	subtotal

Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- [ ] None or none apparent (4)
- [x] Recovered (3)
- [ ] Recovering (2)
- [ ] Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- [ ] Excellent (7)
- [ ] Very good (6)
- [ ] Good (5)
- [x] Moderately good (4)
- [ ] Fair (3)
- [ ] Poor to fair (2)
- [ ] Poor (1)

4c. Habitat alteration. Score one or double check and average.

- [ ] None or none apparent (9)
- [x] Recovered (6)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [x] mowing
- [ ] grazing
- [ ] clearcutting
- [x] selective cutting
- [ ] woody debris removal
- [ ] toxic pollutants
- [ ] shrub/sapling removal
- [ ] herbaceous/aquatic bed removal
- [ ] sedimentation
- [ ] dredging
- [ ] farming
- [ ] nutrient enrichment

42.5
subtotal this page

TRC Environmental Corp.
781 Science Boulevard, Suite 200
Gahanna, Ohio 43230

Site: FirstEnergy , Bayshore-Davis Besse	Rater(s): Erin Van Nort, Emma Given	Date: 2024-11-20

42.5
subtotal first page

0 | 42.5
max 10 pts. | subtotal

Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- [ ] Bog (10)
- [ ] Fen (10)
- [ ] Old growth forest (10)
- [ ] Mature forested wetland (5)
- [ ] Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- [ ] Lake Erie coastal/tributary wetland-restricted hydrology (5)
- [ ] Lake Plain Sand Prairies (Oak Openings) (10)
- [ ] Relict Wet Prairies (10)
- [ ] Known occurrence state/federal threatened or endangered species (10)
- [ ] Significant migratory songbird/water fowl habitat or usage (10)
- [ ] Category 1 Wetland. See Question 1 Qualitative Rating (-10)

3 | 45.5
max 20 pts. | subtotal

Metric 6. Plant communities, interspersion, microtopography.

6a. Wetland Vegetation Communities.
Score all present using 0 to 3 scale.

- [ ] Aquatic Bed
- [2] Emergent
- [2] Shrub
- [ ] Forest
- [ ] Mudflats
- [ ] Open water
- [ ] Other _____

6b. horizontal (plan view) Interspersion.
Select only one.

- [ ] High (5)
- [ ] Moderately high (4)
- [ ] Moderate (3)
- [ ] Moderately low (2)
- [x] Low (1)
- [ ] None (0)

Invasive Species Present:
hybrid cattail
phragmites
reed canary grass

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- [ ] Extensive >75% cover (-5)
- [x] Moderate 25-75% cover (-3)
- [ ] Sparse 5-25% cover (-1)
- [ ] Nearly absent <5% cover (0)
- [ ] Absent (1)

6d. Microtopography.
Score all present using 0 to 3 scale.

- [1] Vegetated hummucks/tussucks
- [0] Coarse woody debris >15cm (6in)
- [0] Standing dead >25cm (10in) dbh
- [0] Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

45.5

CATEGORY 2

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES (NO)	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES (NO)	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES (NO)	If yes, Category 3.
	Question 4. Significant bird habitat	YES (NO)	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES (NO)	If yes, Category 1.
	Question 6. Bogs	YES (NO)	If yes, Category 3.
	Question 7. Fens	YES (NO)	If yes, Category 3.
	Question 8a. Old Growth Forest	YES (NO)	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES (NO)	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	4	
	Metric 2. Buffers and surrounding land use	9	
	Metric 3. Hydrology	18	
	Metric 4. Habitat	11.5	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	3	
	TOTAL SCORE	45.5	Category based on score breakpoints Cat 2

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one		Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	(NO)	Is quantitative rating score *less* than the Category 2 scoring threshold (*excluding* gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-categorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	(NO)	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	(NO)	Is quantitative rating score *greater* than the Category 2 scoring threshold *(including* any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	(YES) Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the *"gray zone"* for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	(NO)	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit *moderate OR superior* hydrologic OR habitat, OR recreational functions AND the wetland was *not* categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	(NO) Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Final Category

Choose one	Category 1	(Category 2)	Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name: Erin Van Nort
Date: 11/20/2024
Affiliation: TRC Companies, Inc.
Address: 1382 West Ninth Street, Suite 400, Cleveland, OH 44113
Phone Number: (216)347-3342
e-mail address: EVanNort@trccompanies.com
Name of Wetland: W-EVN-5
Vegetation Communit(ies): PFO/PEM
HGM Class(es): Depression
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc. See Figure 5: Delineated Resources Map and Surface Water Delineation Report for further details.

Lat/Long or UTM Coordinate	41.595115, -83.165313
USGS Quad Name	Oak Harbor
County	Ottawa
Township	7N, R15E
Section and Subsection	06
Hydrologic Unit Code	041000100701
Site Visit	11/20/2024
National Wetland Inventory Map	See Report
Ohio Wetland Inventory Map	See Report
Soil Survey	See Report
Delineation report/map	See Report

Name of Wetland: W-EVN-5	
Wetland Size (acres, hectares):	~1.5 acres (0.61 hectare)

Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.

See Figure 5: Delineated Resources Map and Surface Water Delineation Report for further details.

Comments, Narrative Discussion, Justification of Category Changes:

Final score : 27	**Category:** 1

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. *Areas with a high degree of hydrologic interaction should be scored as a single wetland*. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	X	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	X	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	X	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	X	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		X
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	X	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap . The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	
1	**Critical Habitat.** Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2	(NO) Go to Question 2
2	**Threatened or Endangered Species.** Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3	(NO) Go to Question 3
3	**Documented High Quality Wetland.** Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland Go to Question 4	(NO) Go to Question 4
4	**Significant Breeding or Concentration Area.** Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland Go to Question 5	(NO) Go to Question 5
5	**Category 1 Wetlands.** Is the wetland less than 0.5 hectares (1 acre) in size and **hydrologically isolated** and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by *Phalaris arundinacea, Lythrum salicaria,* or *Phragmites australis*, or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	(NO) Go to Question 6
6	**Bogs.** Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly *Sphagnum* spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	(NO) Go to Question 7
7	**Fens.** Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland Go to Question 8a	(NO) Go to Question 8a
8a	**"Old Growth Forest."** Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b	(NO) Go to Question 8b

8b	**Mature forested wetlands**. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES Wetland should be evaluated for possible Category 3 status. Go to Question 9a	NO Go to Question 9a
9a	**Lake Erie coastal and tributary wetlands**. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES Go to Question 9b	NO Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES Wetland should be evaluated for possible Category 3 status Go to Question 10	NO Go to Question 9c
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES Wetland is a Category 3 wetland Go to Question 10	NO Go to Question 9e
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status Go to Question 10	NO Go to Question 10
10	**Lake Plain Sand Prairies (Oak Openings)** Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES Wetland is a Category 3 wetland. Go to Question 11	NO Go to Question 11
11	**Relict Wet Prairies**. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	YES Wetland should be evaluated for possible Category 3 status Complete Quantitative Rating	NO Complete Quantitative Rating

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	*Zygadenus elegans var. glaucus*	*Calla palustris*	*Carex cryptolepis*	*Calamagrostis canadensis*
Myriophyllum spicatum	*Cacalia plantaginea*	*Carex atlantica var. capillacea*	*Carex lasiocarpa*	*Calamogrostis stricta*
Najas minor	*Carex flava*	*Carex echinata*	*Carex stricta*	*Carex atherodes*
Phalaris arundinacea	*Carex sterilis*	*Carex oligosperma*	*Cladium mariscoides*	*Carex buxbaumii*
Phragmites australis	*Carex stricta*	*Carex trisperma*	*Calamagrostis stricta*	*Carex pellita*
Potamogeton crispus	*Deschampsia caespitosa*	*Chamaedaphne calyculata*	*Calamagrostis canadensis*	*Carex sartwellii*
Ranunculus ficaria	*Eleocharis rostellata*	*Decodon verticillatus*	*Quercus palustris*	*Gentiana andrewsii*
Rhamnus frangula	*Eriophorum viridicarinatum*	*Eriophorum virginicum*		*Helianthus grosseserratus*
Typha angustifolia	*Gentianopsis spp.*	*Larix laricina*		*Liatris spicata*
Typha xglauca	*Lobelia kalmii*	*Nemopanthus mucronatus*		*Lysimachia quadriflora*
	Parnassia glauca	*Schechzeria palustris*		*Lythrum alatum*
	Potentilla fruticosa	*Sphagnum spp.*		*Pycnanthemum virginianum*
	Rhamnus alnifolia	*Vaccinium macrocarpon*		*Silphium terebinthinaceum*
	Rhynchospora capillacea	*Vaccinium corymbosum*		*Sorghastrum nutans*
	Salix candida	*Vaccinium oxycoccos*		*Spartina pectinata*
	Salix myricoides	*Woodwardia virginica*		*Solidago riddellii*
	Salix serissima	*Xyris difformis*		
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.

Site: FirstEnergy , Bayshore-Davis Besse	Rater(s): Erin Van Nort, Emma Given	Date: 2024-11-20

Metric 1. Wetland Area (size).

2 (max 6 pts.) | 2 (subtotal)

Select one size class and assign score.

- [ ] >50 acres (>20.2ha) (6 pts)
- [ ] 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- [ ] 10 to <25 acres (4 to <10.1ha) (4 pts)
- [ ] 3 to <10 acres (1.2 to <4ha) (3 pts)
- [x] 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- [ ] 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- [ ] <0.1 acres (0.04ha) (0 pts)

Metric 2. Upland buffers and surrounding land use.

8 (max 14 pts.) | 10 (subtotal)

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- [ ] WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- [x] MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- [ ] NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- [ ] VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- [ ] VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- [x] LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- [x] MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- [ ] HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

Metric 3. Hydrology.

9 (max 30 pts.) | 19 (subtotal)

3a. Sources of Water. Score all that apply.

- [ ] High pH groundwater (5)
- [ ] Other groundwater (3)
- [x] Precipitation (1)
- [ ] Seasonal/Intermittent surface water (3)
- [ ] Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

- [x] 100 year floodplain (1)
- [ ] Between stream/lake and other human use (1)
- [x] Part of wetland/upland (e.g. forest), complex (1)
- [ ] Part of riparian or upland corridor (1)

3c. Maximum water depth. Select only one and assign score.

- [ ] >0.7 m (>27.6 in) (3)
- [ ] 0.4 to 0.7 m (15.7 to 27.6 in) (2)
- [x] <0.4 m (<15.7 in) (1)

3d. Duration inundation/saturation. Score one or dbl check.

- [ ] Semi- to permanently inundated/saturated (4)
- [ ] Regularly inundated/saturated (3)
- [x] Seasonally inundated (2)
- [ ] Seasonally saturated in upper 30cm (12in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- [ ] None or none apparent (12)
- [ ] Recovered (7)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

[x]	ditch	[ ]	point source (nonstormwater)
[ ]	tile	[x]	filling/grading
[ ]	dike	[x]	road bed/RR track
[ ]	weir	[ ]	dredging
[ ]	stormwater input	[ ]	other

Metric 4. Habitat Alteration and Development.

6 (max 20 pts.) | 25 (subtotal)

4a. Substrate disturbance. Score one or double check and average.

- [ ] None or none apparent (4)
- [ ] Recovered (3)
- [ ] Recovering (2)
- [x] Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- [ ] Excellent (7)
- [ ] Very good (6)
- [ ] Good (5)
- [ ] Moderately good (4)
- [ ] Fair (3)
- [x] Poor to fair (2)
- [ ] Poor (1)

4c. Habitat alteration. Score one or double check and average.

- [ ] None or none apparent (9)
- [ ] Recovered (6)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

[x]	mowing	[ ]	shrub/sapling removal
[ ]	grazing	[ ]	herbaceous/aquatic bed removal
[ ]	clearcutting	[ ]	sedimentation
[x]	selective cutting	[ ]	dredging
[ ]	woody debris removal	[ ]	farming
[ ]	toxic pollutants	[ ]	nutrient enrichment

25 subtotal this page

TRC Environmental Corp.
781 Science Boulevard, Suite 200
Gahanna, Ohio 43230

Site: FirstEnergy , Bayshore-Davis Besse	Rater(s): Erin Van Nort, Emma Given	Date: 2024-11-20

25
subtotal first page

Metric 5. Special Wetlands.

0 max 10 pts. | 25 subtotal

Check all that apply and score as indicated.

- [ ] Bog (10)
- [ ] Fen (10)
- [ ] Old growth forest (10)
- [ ] Mature forested wetland (5)
- [ ] Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- [ ] Lake Erie coastal/tributary wetland-restricted hydrology (5)
- [ ] Lake Plain Sand Prairies (Oak Openings) (10)
- [ ] Relict Wet Prairies (10)
- [ ] Known occurrence state/federal threatened or endangered species (10)
- [ ] Significant migratory songbird/water fowl habitat or usage (10)
- [ ] Category 1 Wetland. See Question 1 Qualitative Rating (-10)

Metric 6. Plant communities, interspersion, microtopography.

2 max 20 pts. | 27 subtotal

6a. Wetland Vegetation Communities.
Score all present using 0 to 3 scale.

- [ ] Aquatic Bed
- [1] Emergent
- [ ] Shrub
- [0] Forest
- [ ] Mudflats
- [ ] Open water
- [ ] Other _____

6b. horizontal (plan view) Interspersion.
Select only one.

- [ ] High (5)
- [ ] Moderately high (4)
- [ ] Moderate (3)
- [ ] Moderately low (2)
- [x] Low (1)
- [ ] None (0)

Invasive Species Present:
phragmites

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- [ ] Extensive >75% cover (-5)
- [ ] Moderate 25-75% cover (-3)
- [ ] Sparse 5-25% cover (-1)
- [x] Nearly absent <5% cover (0)
- [ ] Absent (1)

6d. Microtopography.
Score all present using 0 to 3 scale.

- [0] Vegetated hummucks/tussucks
- [0] Coarse woody debris >15cm (6in)
- [0] Standing dead >25cm (10in) dbh
- [0] Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

27

CATEGORY 1

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES (NO)	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES (NO)	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES (NO)	If yes, Category 3.
	Question 4. Significant bird habitat	YES (NO)	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES (NO)	If yes, Category 1.
	Question 6. Bogs	YES (NO)	If yes, Category 3.
	Question 7. Fens	YES (NO)	If yes, Category 3.
	Question 8a. Old Growth Forest	YES (NO)	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES (NO)	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	2	
	Metric 2. Buffers and surrounding land use	8	
	Metric 3. Hydrology	9	
	Metric 4. Habitat	6	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	2	
	TOTAL SCORE	27	Category based on score breakpoints Cat 1

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one		Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	(NO)	Is quantitative rating score *less* than the Category 2 scoring threshold (*excluding* gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-categorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	(NO)	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	(NO)	Is quantitative rating score *greater* than the Category 2 scoring threshold *(including* any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	(YES) Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the *"gray zone"* for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	(NO)	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit *moderate OR superior* hydrologic OR habitat, OR recreational functions AND the wetland was *not* categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	(NO) Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Final Category

Choose one	(Category 1)	Category 2	Category 3

End of Ohio Rapid Assessment Method for Wetlands.

EXHIBIT 11A

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, BUFFALO DISTRICT
478 MAIN STREET
BUFFALO, NEW YORK 14202-3278

JUNE 9, 2026

Regulatory Division

SUBJECT: Department of the Army Processing No. LRB-2026-00468, Nationwide Permit No. 57 as Published in the Federal Register, Volume 91, No. 5 on Jan. 8, 2026.

Amy Ruszala
American Transmissions Systems, Inc.
341 White Pond Drive, Build B3
Akron, OH 44320

Dear Ms. Ruszala:

This pertains to your proposal to permanently fill 0.002-acre of Wetland W-EVN-2 to install new foundations for two existing powerline towers, temporarily place timber mats in wetlands LRB-2026-00468 W-EVN-2, 3, 4 and 5, and replace the existing transmission lines over Turtle Creek. The project is within an approximately 70.8-acre corridor located south of State Route 2, extending from N. Benton Carroll Road east to approximately 0.25-miles east of N. Zetzer Road in Carroll and Clay Townships, Ottawa County, Ohio (Latitude 41.5952 and Longitude -83.1824 to Latitude 41.35946 and Longitude -83.1113)

I have evaluated the impacts associated with your proposal and have concluded that they are authorized by the enclosed Nationwide Permit (NWP) provided that the attached conditions are satisfied.

Verification of the applicability of this NWP is valid until March 15, 2031 unless the NWP is modified, suspended, revoked, or the activity complies with any subsequent permit modification. Please note in accordance with 33 CFR part 330.6(b), that if you commence or are under contract to commence an activity in reliance of the permit prior to the date this NWP expires, is suspended or revoked, or is modified such that the activity no longer complies with the terms and conditions, you have twelve months from the date of permit modification, expiration, or revocation to complete the activity under the present terms and conditions of the permit, unless the permit has been subject to the provisions of discretionary authority.

It is your responsibility to remain informed of changes to the NWP program. A public notice announcing any changes will be issued when they occur and will be available for viewing at our website: https://www.lrd.usace.army.mil/Missions/Regulatory/Ohio/. Finally, note that if your activity is not undertaken within the defined period or the project specifications have changed, you must immediately notify this office to determine the need for further approval or reverification.

Your initiation of work as authorized by the enclosed NWP acknowledges your acceptance of the general and special conditions contained therein. This affirmation is

limited to the attached NWP and does not obviate the need to obtain any other project specific Federal, state, or local authorization.

In addition to the general conditions and specific regional conditions attached to the NWP, your attention is directed to the following Special Conditions which are also appended at the end of the NWP.

1. At the request of an authorized representative of the Buffalo District, U.S. Army Corps of Engineers, the permittee must allow access to the project site to determine compliance with the conditions of this permit.

2. The permittee must provide a copy of the permit to all contractors, subcontractors, and/or workers performing the work associated with the permit authorization and ensure they have knowledge of the terms and conditions of the permit, including all General and Special Conditions. Prior to commencing work associated with this permit authorization, a copy of the permit and drawings must be visibly posted at the construction site.

3. Disturbance to the Wetlands LRB-2026-00468 W-EVN-2, 3, 4 and 5 must be limited to those areas shown on the attached project plans (Sheets 2 to 13 of 13).

4. The mechanical equipment used to execute the work associated with this permit authorization must be operated in such a way as to minimize turbidity that could degrade water quality and adversely affect aquatic plant and animal life.

5. The permittee must remove all the temporary timber mats immediately upon completing the work authorized by this permit.

A copy of this letter has been sent to Rachel Secrest of the Ohio Environmental Protection Agency Division of Surface Water, Mr. Steve Holland of the Ohio Department of Natural Resources Office of Coastal Management and Maggie Molnar of TRC Environmental Corporation.

Questions pertaining to this matter should be directed to me at 419-898-3491, by writing to the following address: U.S. Army Corps of Engineers Regulatory Division, Oak Harbor Field Office, 478 Main Street, Buffalo, New York 14202, or by e-mail at: brian.p.swartz@usace.army.mil.

Sincerely,

Brian Swartz

Brian Swartz
Biologist

Enclosures

U.S. Army Corps of Engineers (USACE)

CERTIFICATION OF COMPLIANCE WITH DEPARTMENT OF THE ARMY PERMIT

For use of this form, see Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act of 1899, and Section 103 of the Marine Protection, Research, and Sanctuaries Act; the proponent agency is CECW-COR.

Form Approved - OMB No. 0710-0003 Expires 2027-10-31

The Agency Disclosure Notice (ADN)

The Public reporting burden for this collection of information, 0710-0003, is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

PURPOSE: This form is used by recipients of U.S. Army Corps of Engineer Regulatory permits to certify compliance with the permit terms and conditions.

Your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit, you are subject to permit suspension, modification, or revocation.

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the U.S. Army Corps of Engineers, Buffalo District, Regulatory Office.

The certification can be submitted by email at LRB.Regulatory.PermitCompliance@usace.army.mil or by mail at the below address:

U.S. Army Corps of Engineers
Buffalo District Office
Street Address: 478 Main Street
City: Buffalo State: New York Zip Code: 14202

COMPLETED BY THE CORPS

Corps Action Number: LRB-2026-00468

Permit Type: General Permit

General Permit Number and Name (*if applicable*): NWP 57 (Electric Utility Line and Telecommunications Activities)

Name of Permittee: Amy Ruszala

Project Name: Bayshore-Davis Besse 345kV Rebuild Project

Project Location (*physical address*): N. Benton Carroll Road east to approximately 0.25-miles east of N. Zetzer Road
Oak Harbor, Ohio

PERMITTEE'S CERTIFICATION

Date Work Started: _____

Date Work Completed: _____

Enclose photographs showing the completed project (*if available*).

I _____ hereby certify that the work authorized by the above referenced permit has been completed in accordance with all of the permit terms and conditions, and that any required compensatory mitigation has been completed in accordance with the permit conditions.

Name	Date	Signature