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

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

ODNR appreciates the opportunity to provide these comments. Please contact John Kessler at (614) 265-6621 if you have questions about these comments or need additional information.

John Kessler ODNR Office of Real Estate 2045 Morse Road, Building E-2 Columbus, Ohio 43229-6693 John.Kessler@dnr.state.oh.us



## UNITED STATES DEPARTMENT OF THE INTERIOR

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



April 22, 2015

AECOM Attn: Aaron Geckle 525 Vine Street, Suite 1800 Cincinnati, Ohio 45202

TAILS# 03E15000-2015-TA-1014

Re: Yager Station and Associated Electric Transmission Line Interconnection Projects, Carroll, Harrison and Tuscarawas Counties, Ohio

Dear Mr. Geckle,

We have received your recent correspondence regarding potential impacts to federally listed species in the vicinity of the above referenced project. The project involves the construction of two new electric stations with associated electric transmission lines: 2 mile 138kV line between Yager Station and Tappan Distribution Station, 6 mile 138kV line between Yager and Leesville stations, 7 mile 138kV line between Tappan Distribution and Azalea Station, and a rebuild of a current 69kV 13 mile line to a 138 kV 13 mile line between Dennison Station and Desert Road Station. There are no federal wilderness areas, wildlife refuges or designated critical habitat within the vicinity of the project area. We recommend that proposed activities minimize water quality impacts, including fill in streams and wetlands. Best management practices should be utilized to minimize erosion and sedimentation.

FEDERALLY LISTED, PROPOSED, AND CANDIDATE SPECIES COMMENTS: Due to the project type, size, location, and the proposed implementation of seasonal tree cutting (only clearing between October 1 and March 31) to avoid impacts to Indiana bats and northern longeared bats, we do not anticipate adverse effects to any federally endangered, threatened, proposed or candidate species. Should the project design change, or during the term of this action, additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, consultation with the Service should be initiated to assess any potential impacts.

MIGRATORY BIRD COMMENTS: The Dennison to Desert Rd. line rebuild project lies within the range of the **bald eagle** (*Haliaeetus leucocephalus*). Bald eagles are protected under the Migratory Bird Treaty Act (16 U.S.C. 703-712; MBTA), and are afforded additional legal protection under the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d, BGEPA). BGEPA prohibits, among other things, the killing and disturbance of eagles. To evaluate your project's potential to affect bald eagles, please visit: http://www.fws.gov/midwest/MidwestBird/EaglePermits/baeatake/index.html.

Our records indicate that a bald eagle nest is located along Little Stillwater Creek in Union Township, Tuscarawas County, within approximately 300 feet of the project area. Our database of nest locations may not be complete because new nests are built each year, and nesting pairs sometimes build multiple nests. Therefore, we recommend that the site and surrounding area be evaluated to determine if any additional eagle nests are present and to validate the actual nest location.

In order to avoid take of bald eagles, we recommend that no tree clearing occur within 660 feet of a bald eagle nest or within any woodlot supporting a nest tree. Further we request that work within 660 feet of a nest or within the direct line-of-site of a nest be restricted from January 15 through July 31. This will prevent disturbance of the eagles from the egg-laying period until the young fledge, which encompasses their most vulnerable times. Once site specific eagle nest information is available, we can work with you to determine the appropriate buffer from the nest(s) relative to your proposed activities.

If these recommendations cannot be implemented and take of bald eagles is likely, a bald eagle take permit for this project may be necessary. Further information on eagle take permits can be found at: <a href="http://www.fws.gov/midwest/MidwestBird/EaglePermits/index.html">http://www.fws.gov/midwest/MidwestBird/EaglePermits/index.html</a>.

If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), no tree clearing on any portion of the parcel should occur until consultation under section 7 of the Endangered Species Act, between the Service and the federal action agency, is completed. We recommend that the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence.

If you have questions, or if we may be of further assistance in this matter, please contact Charlie Allen at <a href="mailto:charles\_allen@fws.gov">charles\_allen@fws.gov</a> or extension 29 in this office.

Sincerely,

Dan Everson Field Supervisor

# APPENDIX D

# AREAS OF ECOLOGICAL CONCERN, WETLAND DELIINATION, AND STREAM ASSESSMENT REPORT

# YAGER-AZALEA 138 KV TRANSMISSION LINE PROJECT

# AREAS OF ECOLOGICAL CONCERN, WETLAND DELINEATION, AND STREAM ASSESSMENT REPORT

### Prepared for:

American Electric Power Ohio Transmission Company 700 Morrison Road Gahanna, Ohio 45230



## Prepared by:



525 Vine Street, Suite 1800 Cincinnati, Ohio 45202

Project #: 60423281

October 2015





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#### 1.0 PROJECT DESCRIPTION

This document presents the results of the wetland delineation and stream assessment conducted by AECOM for AEP Ohio Transmission Company, Inc.'s (AEP Ohio Transco) proposed Yager-Azalea 138 kV Transmission Line Project (Project). The Project is required to meet the needs of a specific customer. In response to the customer's needs, AEP Ohio Transco is proposing to install the new Yager-Azalea 138 kV line between the proposed Yager Station in Harrison County, Ohio, and the existing Azalea Station in Carroll County, Ohio.

As part of the Ohio Power Siting Board (OPSB) Letter of Notification (LON) requirements, AEP Ohio Transco is required to describe the investigation concerning the presence or absence of areas of ecological concern as stated in Ohio Administrative Code (OAC) Rule 4906-15-11-01(E)(2). This rule states:

- (E) Environmental data. Describe the environmental impacts of the proposed project. This description shall include the following information:
  - (2) A description of the applicant's investigation concerning the presence or absence of areas of ecological concern (including national and state forests and parks, floodplains, wetlands, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, and wildlife sanctuaries) that may be located within the areas likely to be disturbed by the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.

AEP Ohio Transco retained AECOM to review areas of ecological concern, as defined above, within the proposed Project vicinity and conduct a field survey of wetlands and streams within 100 feet of the proposed transmission line. This report will be used to assist AEP Ohio Transco's efforts to avoid impacts to areas of ecological concern present in the study area during construction.

#### 2.0 METHODS

#### 2.1 Special Status Ecological Areas

URS reviewed maps and geographical information system (GIS) data in order to identify national and state forests and parks, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, and wildlife sanctuaries in the Project vicinity. GIS data sources included the Ohio Department of Natural Resources (ODNR) Natural Heritage Database and federal land and parks layers available from Environmental Systems Research Institute (ESRI). Property ownership within 1,000 feet of the Project was reviewed to identify parcels that may have special status. AECOM also noted land use during the field reconnaissance conducted during October 5-6, 2015.

Floodplains were evaluated based on the Federal Emergency Management Agency's (FEMA) Flood Map Viewer (https://hazards.fema.gov/wps/portal/mapviewer).



#### 2.2 Wetland Assessment

National Wetland Inventory (NWI) wetlands are areas of potential wetland that have been identified from U.S. Fish and Wildlife Service (USFWS) aerial photo-interpretation and which have typically not been field verified. Forested and heavy scrub/shrub wetlands are often difficult to interpret on NWI maps without a site visit, as foliage effectively hides the visual signature that indicates the presence of standing water and moist soils from an aerial view. In addition, many NWI-mapped wetlands are not verified during field surveys. As a result, NWI maps may not show all the wetlands found in a particular area nor do they necessarily provide accurate wetland boundaries. NWI maps are useful for providing indications of potential wetland areas, which are often supported by soil mapping and hydrologic predictions, based upon topographical analysis using U.S. Geological Survey (USGS) topographic maps.

As requested by AEP, URS restricted the wetland assessments to: 1) identifying wetlands to their appropriate Cowardin classification (Cowardin, et al., 1979) and identification of boundaries, and 2) wetland evaluations using the Ohio Rapid Assessment Method (ORAM) protocol. The Project area was reviewed for the presence of wetlands using the procedures outlined in the United States Army Corps of Engineers (USACE) Wetlands Delineation Manual (1987 Manual) (Environmental Laboratory, 1987) in conjunction with the procedures outlined in the USACE Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Regional Supplement) (2012). Since the Project survey only included a wetland determination, AECOM did not conduct detailed examinations of the three wetland parameters that are documented in USACE Regional Supplement data sheets. However, enough information was gathered to make the onsite determination whether a wetland was present or not based on a three-factor approach involving indicators of hydrophytic vegetation, hydric soil, and wetland hydrology and to identify the approximate boundaries.

AECOM ecologists identified wetlands through a pedestrian site reconnaissance of the study corridor, including identifying the vegetation communities, soils identification where necessary, conducting a geomorphologic assessment of hydrology, and notation of disturbance. Determined wetland boundaries were noted where one or more of these criteria gave way to upland characteristics. The determined wetland boundaries were recorded with a handheld Trimble GeoXH global positioning system (GPS) unit where the proposed Project enters and exits a wetland.

The field survey results presented herein apply to the existing and reasonably foreseeable site conditions at the time of our assessment. They cannot apply to site changes of which AECOM is unaware and has not had the opportunity to review. Changes in the condition of a property may occur with time due to natural processes or human impacts at the project site or on adjacent properties. Changes in applicable standards may also occur as a result of legislation or the expansion of knowledge over time. Accordingly, the findings of this report may become invalidated, wholly or in part, by changes beyond the control of AECOM.

<u>Wetland Classifications:</u> For this study, wetlands were classified based on the naming convention found in *Classification of Wetlands and Deepwater Habitats of the United States (*Cowardin et al, 1979).



Ohio Rapid Assessment Method v. 5.0: The Ohio Environmental Protection Agency's (Ohio EPA) Ohio Rapid Assessment Method (ORAM) for Wetlands Version 5.0 was developed to determine the relative ecological quality and level of disturbance of a particular wetland in order to meet requirements under Section 401 of the Clean Water Act (CWA). Wetlands are scored on the basis of hydrology, upland buffer, habitat alteration, special wetland communities, and vegetation communities. Each of these subject areas is further divided into subcategories resulting in a score that describes the wetland using a range from 0 (low quality and high disturbance) to 100 (high quality and low disturbance). Wetlands scored from 0 to 29.9 are grouped into "Category 1," 30 to 59.9 are "Category 2," and 60 to 100 are "Category 3." Transitional zones exist between "Categories 1 and 2" from 30 to 34.9 and between "Categories 2 and 3" from 60 to 64.9. However, according to the Ohio EPA, if the wetland score falls into the transitional range, it must be given the higher Category unless scientific data can prove it should be in a lower Category (Mack, 2001). The ORAM scores for the wetlands that were delineated are discussed in Section 3.2 of this report.

#### 2.3 Stream and River Crossings

Regulatory activities under the CWA provide authority for states to issue water quality standards and "designated uses" to all "Waters of the U.S." upstream to the highest reaches of the tributary streams. In addition, the CWA of 1972 and its 1977 and 1987 amendments require knowledge of the potential fish or biological communities that can be supported in a stream or river, including upstream headwaters. Streams were identified by the presence of a defined bed and bank, and evidence of an ordinary high water mark (OHWM). Similar to the wetland assessments, AECOM stream assessments were limited to GPS recording of channels and basic classification based on flow regime (perennial, intermittent, or ephemeral).

#### 3.0 RESULTS

#### 3.1 Special Status Ecological Areas

AECOM conducted a review of published resources and agency consultations to identify national or state forests and parks designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, wildlife sanctuaries and floodplains crossed by and in the immediate vicinity of the Project. No national forests or parks designated or proposed wilderness areas, national wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, or wildlife sanctuaries were identified within 1,000 feet of the proposed Project.

According to the FEMA National Flood Hazard Layer (NFHL) (GIS shapefile), the Project is not located within any 100-year flood zones. The project is located on Panels 39019C0278C, 39019C0300C, and 39019C0270C (effective dates: May 4, 2009 and June 4, 2010), and is entirely located within Flood Zone X, an area with minimal flood hazard. No changes in flood elevations are anticipated as a result of the Project.



#### 3.2 Wetland Assessment

<u>National Wetland Inventory Map Review:</u> According to the NWI map of the Bowerston and Uhrichsville, Ohio quadrangles, the Project area includes three mapped NWI wetlands. Two of the mapped NWI wetlands are classified as freshwater ponds, and are listed as PUBG (Palustrine, unconsolidated bottom, intermittently exposed). The third mapped NWI wetland is classified as PEM1C (Palustrine, emergent, persistent, seasonally flooded). One of the PUBG and the PEM1C NWI areas were identified as a PEM wetland (Wetland 5) during the field reconnaissance. The third mapped NWI area was not identified as a wetland during the field assessment.

<u>Wetland Delineation:</u> AECOM identified six wetlands within the Project ecological survey area, ranging in size from 0.01 to 1.02-acres, as shown in Table 1. Wetlands 1, 2, 5, and 6 are palustrine emergent (PEM), Wetlands 3 and 4 are palustrine emergent and scrub-shrub (PEM/PSS).

Three of the wetlands are Category 1 wetlands with ORAM scores ranging from 25 to 27. The other three wetlands are Category 2 wetlands, with ORAM scores ranging from 33.5 to 43. These wetlands exhibit limited plant community development and had habitat and hydrology that were recovered or in the early stages of recovering from assumed previous manipulations such as clear cutting, selective cutting, and mowing.

The location and approximate extents of the wetlands, as delineated within the Project survey area are shown on Figure 1. Color photographs taken of the wetlands are provided in Attachment A. Completed ORAM forms are provided in Attachment B.

TABLE 1
WETLANDS IDENTIFIED WITHIN THE SURVEY CORRIDOR

| Wetland Name | Cowardin<br>Wetland<br>Type <sup>a</sup> | NWI<br>Classification <sup>b</sup> | ORAM<br>Score | ORAM<br>Category | Acreage within Study Area |
|--------------|--|------------------------------------|---------------|------------------|---------------------------|
| Wetland 1    | PEM                                      | NC                                 | 25            | Category 1       | 0.02                      |
| Wetland 2    | PEM                                      | NC                                 | 27            | Category 1       | 0.01                      |
| Wetland 3    | PEM/PSS                                  | NC                                 | 42            | Category 2       | 1.02                      |
| Wetland 4    | PEM/PSS                                  | NC                                 | 43            | Category 2       | 0.07                      |
| Wetland 5    | PEM                                      | PEM1C/PUBG                         | 33.5          | Category 2       | 0.86                      |
| Wetland 6    | PEM                                      | NC                                 | 25            | Category 1       | 0.02                      |
| Total: 7     |  | PEM: 4, PEM                        | 2.00          |                  |                           |

Cowardin Wetland Type<sup>a</sup>: PEM = palustrine emergent, PSS = palustrine scrub-shrub

NWI Classification<sup>b</sup>: NC (not classified as a NWI wetland)

#### 3.3 Stream and River Crossings

Twenty-four streams were identified within the survey area, totaling 5,600 linear feet. These streams were assessed at the determination level and are summarized in Table 2. Thirteen streams were



classified as ephemeral, ten are intermittent, and one is a perennial stream. Color photographs were taken of representative streams during the field survey and are provided in Attachment A.

TABLE 2 STREAMS IDENTIFIED WITHIN THE SURVEY CORRIDOR

|                | STREAMS IDENTIFIED WITHIN THE SURVEY CORRIDOR   |              |                             |                                   |  |  |  |  |  |
|----------------|---|--------------|-----------------------------|-----------------------------------|--|--|--|--|--|
| Report<br>Name | Waterbody                                       | Flow Regime  | Bankfull<br>Width<br>(feet) | Maximum<br>Pool Depth<br>(inches) | Length<br>within<br>Survey<br>Corridor<br>(feet) |  |  |  |  |
| Stream 1       | Unnamed tributary to Little Stillwater<br>Creek | Ephemeral    | 1.5                         | 2                                 | 97   |  |  |  |  |
| Stream 2       | Unnamed tributary to Little Stillwater<br>Creek | Perennial    | 4                           | 16                                | 223  |  |  |  |  |
| Stream 3       | Unnamed tributary to Little Stillwater<br>Creek | Intermittent | 3                           | 2                                 | 237  |  |  |  |  |
| Stream 4       | Unnamed tributary to Little Stillwater<br>Creek | Ephemeral    | 2.5                         | 0                                 | 222  |  |  |  |  |
| Stream 5       | Unnamed tributary to Little Stillwater<br>Creek | Intermittent | 3.5                         | 3                                 | 292  |  |  |  |  |
| Stream 6       | Unnamed tributary to Little Stillwater<br>Creek | Intermittent | 0                           | 2                                 | 315  |  |  |  |  |
| Stream 7       | Unnamed tributary to Little Stillwater<br>Creek | Ephemeral    | 1.5                         | 0                                 | 206  |  |  |  |  |
| Stream 8       | Unnamed tributary to Little Stillwater<br>Creek | Intermittent | 0                           | 3                                 | 195  |  |  |  |  |
| Stream 9       | Unnamed tributary to Little Stillwater<br>Creek | Ephemeral    | 1.5                         | 0                                 | 210  |  |  |  |  |
| Stream 10      | Unnamed tributary to Little Stillwater<br>Creek | Ephemeral    | 0                           | 1                                 | 220  |  |  |  |  |
| Stream 11      | Unnamed tributary to Little Stillwater<br>Creek | Ephemeral    | 2                           | 1                                 | 15   |  |  |  |  |
| Stream 12      | Unnamed tributary to Little Stillwater<br>Creek | Intermittent | 2                           | 0.5                               | 58   |  |  |  |  |
| Stream 13      | Unnamed tributary to Little Stillwater<br>Creek | Ephemeral    | 0                           | 1                                 | 116  |  |  |  |  |
| Stream 14      | Unnamed tributary to Little Stillwater<br>Creek | Ephemeral    | 5                           | 2                                 | 231  |  |  |  |  |
| Stream 15      | Unnamed tributary to Little Stillwater<br>Creek | Intermittent | 7                           | 0.5                               | 102  |  |  |  |  |
| Stream 16      | Unnamed tributary to Conotton Creek             | Ephemeral    | 1.5                         | 0.5                               | 696  |  |  |  |  |
| Stream 17      | Unnamed tributary to Conotton Creek             | Ephemeral    | 0                           | 1                                 | 409  |  |  |  |  |
| Stream 18      | Unnamed tributary to Conotton Creek             | Intermittent | 0                           | 3                                 | 427  |  |  |  |  |
| Stream 19      | Unnamed tributary to Conotton Creek             | Intermittent | 3                           | 9                                 | 361  |  |  |  |  |
| Stream 20      | Unnamed tributary to Conotton Creek             | Ephemeral    | 2.5                         | 2                                 | 140  |  |  |  |  |



TABLE 2 STREAMS IDENTIFIED WITHIN THE SURVEY CORRIDOR

| Report<br>Name | Waterbody                           | Flow Regime  | Bankfull<br>Width<br>(feet) | Maximum<br>Pool Depth<br>(inches) | Length<br>within<br>Survey<br>Corridor<br>(feet) |
|----------------|-------------------------------------|--------------|-----------------------------|-----------------------------------|--|
| Stream 21      | Unnamed tributary to Conotton Creek | Intermittent | 2                           | 3                                 | 216  |
| Stream 22      | Unnamed tributary to Conotton Creek | Intermittent | 2.5                         | 3                                 | 41   |
| Stream 23      | Unnamed tributary to Conotton Creek | Ephemeral    | 1.5                         | 0                                 | 248  |
| Stream 24      | Unnamed tributary to Conotton Creek | Ephemeral    | 0                           | 1                                 | 323  |
| Total: 24      |                                     |              |                             |                                   | 5,600  |

These streams within the study corridor appear to be jurisdictional (i.e., waters of the U.S.), as they all appear to be tributaries that flow into other waters of the U.S.

#### 4.0 PONDS

No ponds were identified within the Project survey area, although one was observed adjacent to Wetland 5 beyond the survey corridor.

#### 5.0 SUMMARY

No national forests or parks designated or proposed wilderness areas, National or State Wild and Scenic Rivers, wildlife areas, wildlife refuges, wildlife management areas, or wildlife sanctuaries were identified within 1,000 feet of the proposed Project.

The Project is not located within any 100-year flood zones. The project is entirely located within Flood Zone X, an area with minimal flood hazard. No changes in flood elevations are anticipated as a result of the Project.

Three PEM Category 1 wetlands totaling 0.05-acre, one PEM Category 2 wetland totaling 0.86-acre, and two PEM/PSS Category 2 wetlands totaling 1.09-acres were identified during the field survey. Twenty-four streams were identified totaling 5,600-linear feet within the survey corridor. Impacts to the wetlands and streams are expected to be minimized through the use of timber matting for construction access.

#### 6.0 CONCLUSION

This report will be used to assist AEP Ohio Transco's efforts to avoid special status ecological areas, wetlands, and streams to the extent possible during construction of the Project, thereby minimizing impacts to these features identified within the Project area. Based on the preliminary Project footprint and identified features, no construction activity within streams or wetlands is anticipated. Erosion control methods including silt fencing are expected to be used where appropriate to minimize runoff-related impacts to stream channels. As a consequence, significant impacts to these "waters of the U.S." are not



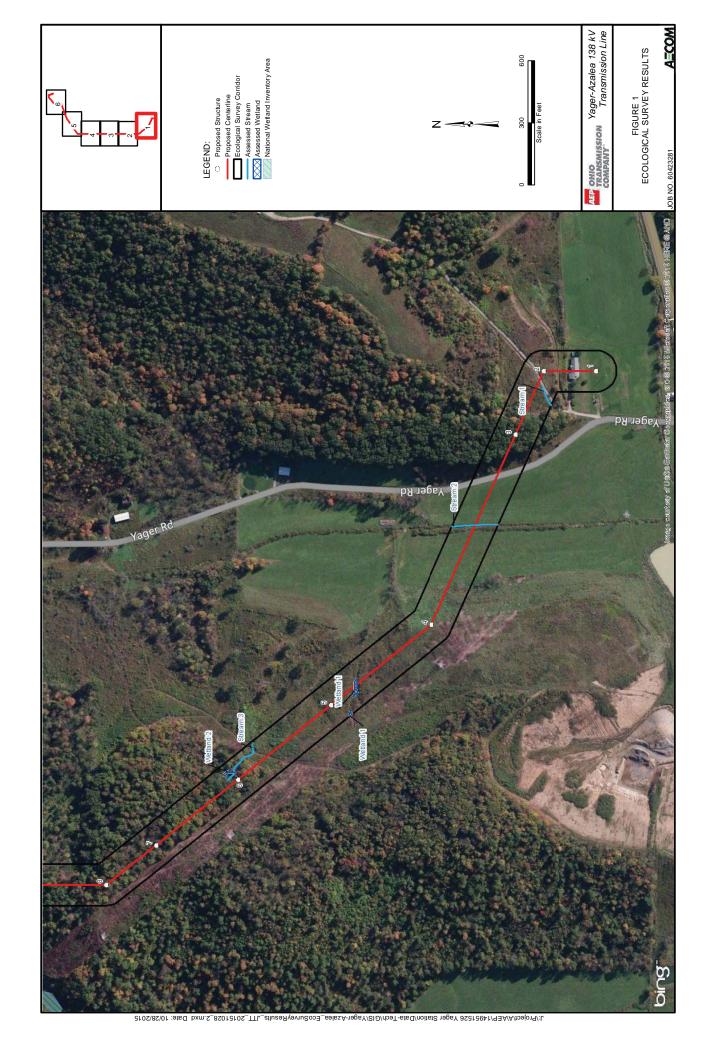


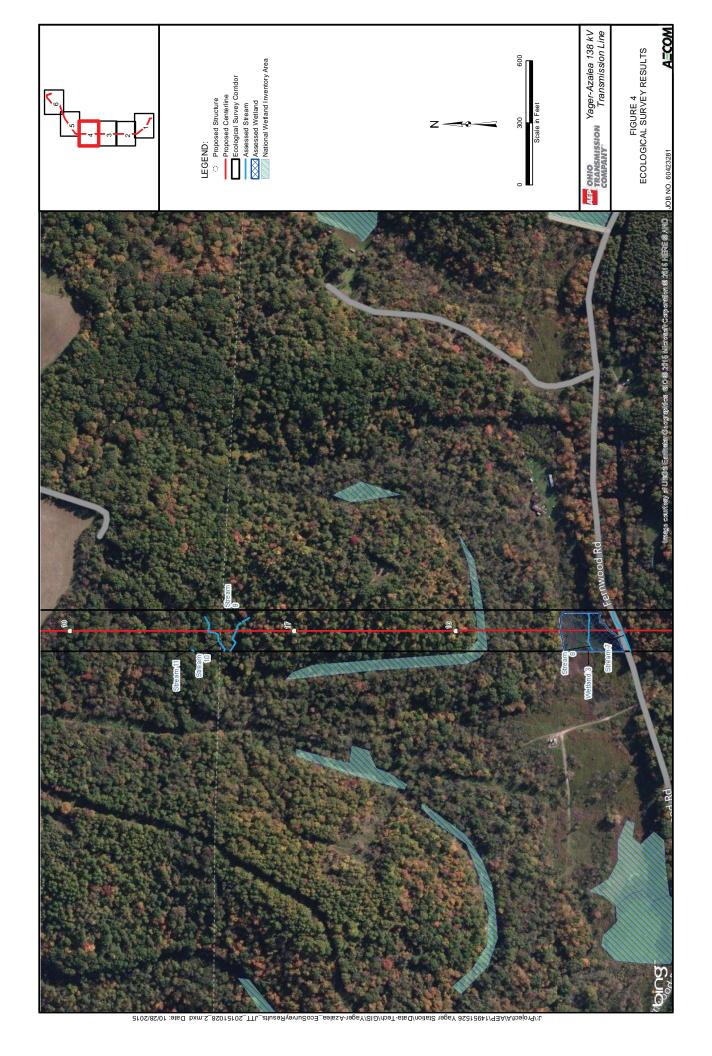
anticipated. Notification or permit applications under Sections 401 and/or 404 of the CWA are not expected to be required by either the Ohio EPA or the USACE for this Project.

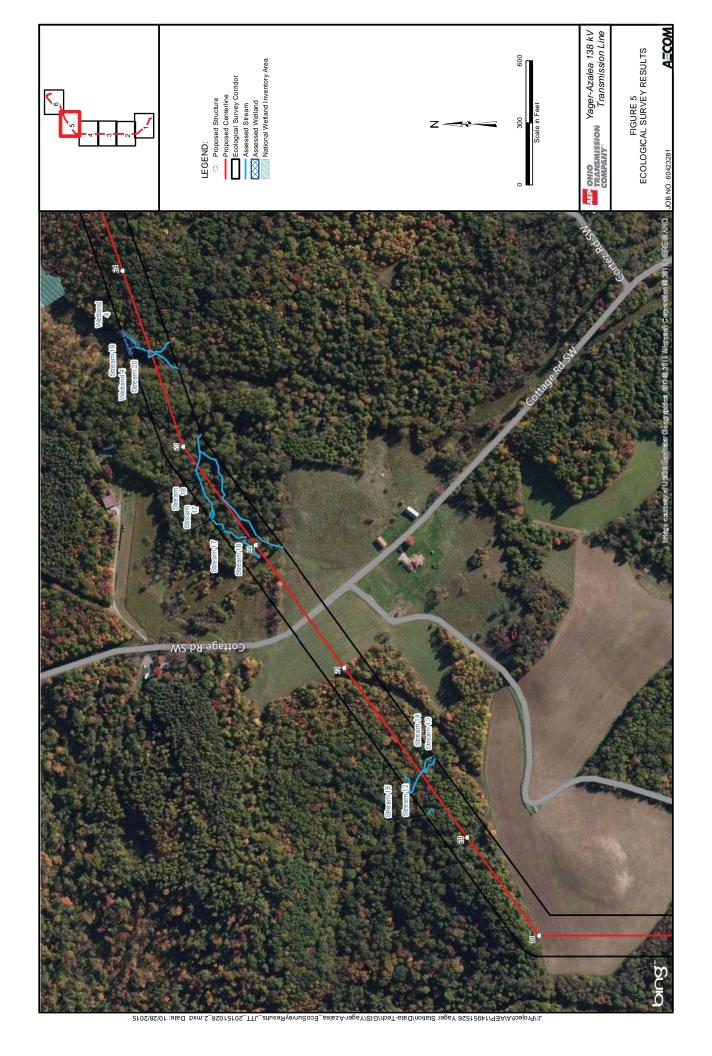


#### 7.0 REFERENCES

- Cowardin, L.M., V. Carter, F.C. Golet and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. Office of Biological Services, U.S. Fish and Wildlife Service, Washington, D.C.
- Environmental Laboratory. 1987. U.S. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station: Vicksburg, Mississippi.
- Mack, John J. 2001. Ohio Rapid Assessment Method for Wetlands v. 5.0, User's Manual and Scoring Forms. Ohio EPA Technical Report WET/2001-1. Ohio Environmental Protection Agency, Division of Surface Water, 401/Wetland Ecology Unit, Columbus, Ohio.
- U.S. Army Corps of Engineers. 2012. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region Version 2.0, ed. J. F. Berkowitz, J. S. Wakeley, R. W. Lichvar, C. V. Noble. ERDC/EL TR-12-9. Vicksburg, MS: U.S. Army Engineer Research and Development Center.







# ATTACHMENT A

**PHOTOGRAPHS** 



# PHOTOGRAPHIC RECORD

Client Name:

AEP Ohio Transco

Site Location:

Yager-Azalea 138 kV Project

Project No.

60423281

Photo No. 1

Date:

October 27, 2015

**Description:** 

Wetland 5

Typical PEM Wetland

Category 2



Photo No. 2

Date:

October 5, 2015

**Description:** 

Wetland 4

Typical PEM/PSS Wetland

Category 2





# PHOTOGRAPHIC RECORD

**Client Name:** 

AEP Ohio Transco

Site Location:

Yager-Azalea 138 kV Project

Project No.

60423281

Photo No. 3

Date:

October 6, 2015

**Description:** 

Stream 15

Typical intermittent stream



Photo No. 4

Date:

October 5, 2015

**Description:** 

Stream 20

Typical ephemeral stream





# PHOTOGRAPHIC RECORD

Client Name:

AEP Ohio Transco

Site Location:

Yager-Azalea 138 kV Project

Project No.

60423281

Photo No. 5

Date:

October 6, 2015

**Description:** 

Stream 2

Perennial stream



# ATTACHMENT B

WETLAND FORMS

| CIVAIVIV        | . J.O T ICIU          | COIIII      | Quantitative Nating  | 1 100  | 7   | <u> </u>  |
|-----------------|-----------------------|-------------|--|--|---|---|
| Site:           | HEP '                 | lage        | ur-Azalea  | Rater(s): BAN INATE  |   | Date: 10/6/5  |
| D               | 0                     | ]м          | etric 1. Wetland A   | Area (size).   | W-bao   | -100615-1   |
| max 6 pts       | subtotal              | Sel         | >50 acres (>20.2ha) (6 pts) >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <2 10 to <25 acres (4 to <10.1 3 to <10 acres (1.2 to <4ha) 0.3 to <3 acres (0.12 to <1 0.1 to <0.3 acres (0.04 to < <1.2 to <1.2 to <1 0.1 to <0.3 acres (0.04ha) (0 pts)                                  | s)<br>20.2ha) (5 pts)<br>1ha) (4 pts)<br>a) (3 pts)<br>I.2ha) (2pts)<br><0.12ha) (1 pt)  |   | Wetland 1   |
| 8               | 8                     | М           | etric 2. Upland bu   | uffers and surround  | ling land use.  |   |
| max 14 pts      | s subtotal            | <b>2</b> a. | Calculate average buffer width.  WIDE. Buffers average 50  MEDIUM. Buffers average NARROW. Buffers average VERY NARROW. Buffers Intensity of surrounding land use VERY LOW. 2nd growth of LOW. Old field (>10 years MODERATELY HIGH. Re  | Select only one and assign score. 10m (164ft) or more around wetland pee 25m to <50m (82 to <164ft) around ge 10m to <25m (32ft to <82ft) around average <10m (<32ft) around wetlate. Select one or double check and corrolder forest, prairie, savannah, will so, shrubland, young second growth desidential, fenced pasture, park, conspen pasture, row cropping, mining, of | Do not double check. serimeter (7) d wetland perimeter (4) nd wetland perimeter (1) nd perimeter (0) average. dlife area, etc. (7) forest. (5) servation tillage, new falle |   |
| 8               | 16                    | $ _{M}$     | etric 3. Hydrology   | ٧.   |   |   |
| max 30 pts      | subtotal              | 3a.<br>3c.  | Sources of Water. Score all that High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surfa Perennial surface water (la Maximum water depth. Select o >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) < 0.4m (<15.7in) (1) Modifications to natural hydrolog | ace water (3) ake or stream) (5) only one and assign score.  | Part of wetland/u Part of riparian of Duration inundation/sat Semi- to permand Regularly inundation/seasonally inundation/seasonally saturation                             | in (1) lake and other human use (1) pland (e.g. forest), complex (1) rupland corridor (1) uration. Score one or dbl check. ently inundated/saturated (4) ted/saturated (3) ated (2) ated in upper 30cm (12in) (1) |
|                 | т —                   | 1           |  | stormwater input   | other   |   |
| 9<br>max 20 pts | 25<br>subtotal        | -4          | Substrate disturbance. Score or  |  | opment.   |   |
|                 | 2                     | 2           | None or none apparent (4)  Recovered (3)  Recovering (2)  Recent or no recovery (1)  Habitat development. Select onl  Excellent (7)  Very good (6)  Good (5)  Moderately good (4)  Fair (3)  Poor to fair (2)  Poor (1)  Habitat alteration. Score one or                                    | ly one and assign score.   |   |   |
|                 | 25<br>subtotal this p | 1,5<br>1    | None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)   | Check all disturbances observed mowing grazing clearcutting selective cutting woody debris removal toxic pollutants  | shrub/sapling ren herbaceous/aqua sedimentation dredging farming nutrient enrichme  | tic bed removal   |

last revised 1 February 2001 jjm ORAM v. 5.0 Field Form Quantitative Rating

| Site:      | AEP-                    | Yager         | - Ayalea  | Rater(s)  | : BAD/   | BAE   | Date: 10/06/15                |
|------------|-------------------------|---------------|---|---|--|---|-------------------------------|
|            | 25<br>subtotal first pa | age           |   |   |  |   | 100615-1<br>Hand 1            |
| (1)        | 25                      | Metr          | ic 5. Special V   | Vetland   | S.   | 1 1   | 1 1 1                         |
| max 10 pts | subtotal                | 8             | that apply and score as in  |   |  | MO  | dand 1                        |
| 10 00      | 33301                   |               | Bog (10) Fen (10) Old growth forest (10) Mature forested wetland ( Lake Erie coastal/tributary Lake Erie coastal/tributary Lake Plain Sand Prairies Relict Wet Prairies (10) Known occurrence state/fi Significant migratory song Category 1 Wetland. See | 5)<br>/ wetland-unre<br>/ wetland-rest<br>(Oak Opening<br>ederal threate<br>/bird/water fov | ricted hydrolo<br>ps) (10)<br>ened or endan<br>wl habitat or u   | gy (5) gered species (10) sage (10)                                 |                               |
| 0          | 25                      | Metr          | ic 6. Plant con   |   |  | erspersion, microto   | pography.                     |
| max 20 pts | subtotal                |               | and Vegetation Communiti  |   | The second secon | ommunity Cover Scale  |                               |
|            |                         | Score all     | present using 0 to 3 scale.   | -   | 0  | Absent or comprises <0.1ha (0.24                                    |                               |
|            |                         | -             | Aquatic bed<br>Emergent   |   | Т.   | Present and either comprises sma<br>vegetation and is of moderate q |                               |
|            |                         | , 1           | Shrub   |   |  | significant part but is of low qua                                  |                               |
|            |                         | 1 —           | Forest  | 0.55  | 2  | Present and either comprises sign                                   |                               |
|            |                         |               | Mudflats  |   | =  | vegetation and is of moderate q                                     |                               |
|            |                         |               | Open water  |   |  | part and is of high quality   |                               |
|            |                         |               | Other   |   | 3  | Present and comprises significant                                   | t part, or more, of wetland's |
|            |                         | 6b. horiz     | ontal (plan view) Interspers  | sion.   |  | vegetation and is of high quality                                   | 6)                            |
|            |                         | Select or     | nly one.  |   |  |   |                               |
|            |                         |               | High (5)  | 1   |  | scription of Vegetation Quality                                     |                               |
|            |                         |               | Moderately high(4)  |   | low  | Low spp diversity and/or predoming disturbance tolerant native spec |                               |
|            |                         | 0             | Moderate (3) Moderately low (2)   | 77  | mod  | Native spp are dominant compone                                     |                               |
|            |                         | -             | Low (1)   |   | mod  | although nonnative and/or distu                                     |                               |
|            |                         | $\overline{}$ | None (0)  |   |  | can also be present, and specie                                     |                               |
|            |                         | 6c. Cove      | erage of invasive plants. R   | efer  |  | moderately high, but generally v                                    |                               |
|            |                         |               | 1 ORAM long form for list.  |   |  | threatened or endangered spp  |                               |
|            |                         | or deduct     | t points for coverage   |   | high   | A predominance of native species                                    |                               |
|            |                         |               | Extensive >75% cover (-5  |   |  | and/or disturbance tolerant nativ                                   |                               |
|            |                         | 1             | Moderate 25-75% cover (   | -3)   |  | absent, and high spp diversity a                                    | DF 985 50                     |
|            | 34                      |               | Sparse 5-25% cover (-1)   |   |  | the presence of rare, threatened                                    | d, or endangered spp          |
|            |                         |               | Nearly absent <5% cover   |   |  |   |                               |
|            |                         | C-I NOT-S     | Absent (1)  | 1   |  | Open Water Class Quality  | E                             |
|            |                         |               | otopography.<br>present using 0 to 3 scale.   | 14  | 1  | Absent <0.1ha (0.247 acres)<br>Low 0.1 to <1ha (0.247 to 2.47       | •                             |
|            |                         | Score all     | Vegetated hummucks/tus  |   | 2  | Moderate 1 to <4ha (2.47 to   | •                             |
|            |                         | 0             | Coarse woody debris >15   |   | 3  | High 4ha (9.88 acres) or more                                       | •                             |
|            |                         | 0             | Standing dead >25cm (10   |   |  |   |                               |
|            |                         | D             | Amphibian breeding pools  |   | Microtopogra   | aphy Cover Scale  |                               |
|            |                         |               | •   |   | 0  | Absent  |                               |
|            |                         |               |   |   | 1  | Present very small amounts or if                                    | more common                   |
|            |                         |               |   | -   |  | of marginal quality   | A DESCRIPTION ACCORDING TO    |
|            | _                       |               |   |   | 2  | Present in moderate amounts, bu                                     |                               |
| /          | at 1                    |               |   | 100   | 2  | quality or in small amounts of h                                    |                               |
|            |                         |               |   |   | 3  | Present in moderate or greater ar                                   | Hourita                       |

GRAND TOTAL (max 100 pts)

and of highest quality

| ORAM v. 5   | .0 Field F | orm Quantitative Rating  |  |   |
|-------------|------------|--|--|---|
| Site:       | HEP        | lagur-Azalea   | Rater(s): BAO/BAE  | Date: 10/6/15   |
| max 6 pts.  | Subtotal   | Metric 1. Wetland A Select one size class and assign soc  >50 acres (>20.2ha) (6 pts  25 to <50 acres (10.1 to <  10 to <25 acres (4 to <10.  3 to <10 acres (1.2 to <4h  0.3 to <3 acres (0.12 to <  0.1 to <0.3 acres (0.04 to  <0.1 acres (0.04ha) (0 pts   | ore. s) 20.2ha) (5 pts) 1ha) (4 pts) a) (3 pts) 1.2ha) (2pts) <0.12ha) (1 pt)  | 1-600-100615-2<br>Wetland 2   |
| max 14 pts, | Subtotal   | 2a. Calculate average buffer width.  WIDE. Buffers average 5  MEDIUM. Buffers average NARROW. Buffers average VERY NARROW. Buffers average VERY NARROW. Buffers average VERY LOW. 2nd growth LOW. Old field (>10 years MODERATELY HIGH. Reference to the control of t | Select only one and assign score. Do not 0m (164ft) or more around wetland perime e 25m to <50m (82 to <164ft) around wetland ge 10m to <25m (32ft to <82ft) around wetland perime e average <10m (<32ft) around wetland perime e. Select one or double check and avera or older forest, prairie, savannah, wildlife as, shrubland, young second growth forest esidential, fenced pasture, park, conservationen pasture, row cropping, mining, constitution. | ot double check. eter (7) land perimeter (4) etland perimeter (1) erimeter (0) age. area, etc. (7) t. (5) tion tillage, new fallow field. (3)   |
| max 30 pts. | subtotal   | Metric 3. Hydrology  3a. Sources of Water. Score all that High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surful Perennial surface water (I Sc. Maximum water depth. Select of Source (27.6 of Source) O.7 (27.6 of (27.6 | face water (3) lake or stream) (5) only one and assign score.  In) (2) gic regime. Score one or double check ar  2) Check all disturbances observed ditch tile   | nnectivity. Score all that apply.  100 year floodplain (1)  Between stream/lake and other human use (1)  Part of wetland/upland (e.g. forest), complex (1)  Part of riparian or upland corridor (1)  ation inundation/saturation. Score one or dbl check  Semi- to permanently inundated/saturated (4)  Regularly inundated/saturated (3)  Seasonally inundated (2)  Seasonally saturated in upper 30cm (12in) (1)  nd average.  point source (nonstormwater)  filling/grading road bed/RR track dredging other |
| max 20 pts. |            | 4a. Substrate disturbance. Score of None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1)  4b. Habitat development. Select or Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1)  4c. Habitat alteration. Score one o None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)   | only one and assign score.  or double check and average.  Otherwise Check all disturbances observed mowing grazing   | shrub/sapling removal herbaceous/aquatic bed removal sedimentation dredging farming nutrient enrichment   |

last revised 1 February 2001 jjm ORAM v. 5.0 Field Form Quantitative Rating

| Site:       | AEP-                     | Youse    | en-azalea   | Rater(s):  | BAO  | /BAE  | Date: 10/06/15            |
|-------------|--------------------------|----------|---|--|--|---|---------------------------|
|             | 2.5<br>subtotal first pa | age      | -   |  |  | W-BAO-1   | 00615-2                   |
| 0           | 25                       | Met      | ric 5. Special V  | Vetlands.  |  | 1, )0 Al  | and 2                     |
| max 10 pts. | subtotal                 | 4        | Ball that apply and score as in Bog (10) Fen (10) Old growth forest (10) Mature forested wetland ( Lake Erie coastal/tributant Lake Plain Sand Prairies Relict Wet Prairies (10) Known occurrence state/ff Significant migratory song Category 1 Wetland. See | dicated.  5) y wetland-unrestry wetland-restrict (Oak Openings) ederal threatene bird/water fowl h | ricted hydr<br>ted hydrold<br>(10)<br>d or endar<br>nabitat or u | ology (10) pgy (5) ngered species (10) usage (10)   |                           |
| 2           | 27                       |          |   |  |  | erspersion, microto   | pography.                 |
| max 20 pts. | subtotal                 |          | tland Vegetation Communiti  |  |  | ommunity Cover Scale  |                           |
|             |                          | Score a  | Il present using 0 to 3 scale.  | 8  | 0  | Absent or comprises <0.1ha (0.24  |                           |
|             |                          | ,        | Aquatic bed Emergent Shrub  |  | 1  | Present and either comprises sma<br>vegetation and is of moderate qual<br>significant part but is of low qual | uality, or comprises a    |
|             |                          |          | Forest Mudflats Open water  | _  | 2  | Present and either comprises sign<br>vegetation and is of moderate quality<br>part and is of high quality     |                           |
|             |                          |          | Other   | _  | 3  | Present and comprises significant   |                           |
|             |                          |          | izontal (plan view) Interspers  | sion.  |  | vegetation and is of high quality   |                           |
|             |                          | Select   | only one.   | Mari   |  |   |                           |
|             |                          | -        | High (5) Moderately high(4)   | Nar  | low  | scription of Vegetation Quality Low spp diversity and/or predomin   | anno of possestive or     |
|             |                          |          | Moderate (3)  |  | low  | disturbance tolerant native spec  |                           |
|             |                          | 0        | Moderately low (2)  | -  | mod  | Native spp are dominant compone   |                           |
|             |                          |          | Low (1)   |  |  | although nonnative and/or distur  | bance tolerant native spp |
|             |                          | X        | None (0)  |  |  | can also be present, and specie   | -                         |
|             |                          |          | erage of invasive plants. Re  |  |  | moderately high, but generally w  | //o presence of rare      |
|             |                          |          | 1 ORAM long form for list.  | Add  | high   | threatened or endangered spp A predominance of native species   | with popportive con       |
|             |                          | Ol dedd. | Extensive >75% cover (-5  | )  | ingii  | and/or disturbance tolerant nativ   |                           |
|             |                          |          | Moderate 25-75% cover (-  |  |  | absent, and high spp diversity a  |                           |
|             |                          | 0        | Sparse 5-25% cover (-1)   |  |  | the presence of rare, threatened  |                           |
|             |                          | X        | Nearly absent <5% cover   |  |  |   |                           |
|             |                          | Cd Min   | Absent (1)  | Mu   |  | Open Water Class Quality  |                           |
|             |                          |          | rotopography.<br>Il present using 0 to 3 scale.   | -  | 1  | Absent <0.1ha (0.247 acres)<br>Low 0.1 to <1ha (0.247 to 2.47   |                           |
|             |                          | ि        | Vegetated hummucks/tus  |  | 2  | Moderate 1 to <4ha (2.47 to   |                           |
|             |                          | 1 1      | Coarse woody debris >156 Standing dead >25cm (10  | cm (6in)   | 3  | High 4ha (9.88 acres) or more   |                           |
|             |                          | 0        | Amphibian breeding pools  | •  | rotopogra  | aphy Cover Scale  |                           |
|             |                          |          |   |  |  | Absent  |                           |
|             |                          |          |   |  | 1  | Present very small amounts or if n  | nore common               |
| ,           | 1 1                      |          |   | ×  | 2  | of marginal quality  Present in moderate amounts, but   | not of highest            |
| (0          | +1                       |          |   |  | -  | quality or in small amounts of hig  | •                         |

0.7]0-

GRAND TOTAL (max 100 pts)

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories at the following address: http://www.epa\_state.oh.us/dsw/401/401.html last revised 1 February 2001 jjm

Present in moderate or greater amounts

and of highest quality

| ORAM v. 5.0 Field F     | Form Quantitative  | e Rating  |  | W-MOT-  | 100615-1   |
|-------------------------|--|---|--|---|--|
| Site: AEP               | Yayer-   | agolean   | Rater(s): MDT B(1)   | 2   | Date: 10/05/15   |
| H H max 6 pts. subtotal | Select one size  >50  25 tc  10 tc  3 to  0.3 t  0.1 t   | e class and assign sco<br>acres (>20.2ha) (6 pts<br>0 <50 acres (10.1 to <<br>0 <25 acres (4 to <10.<br><10 acres (1.2 to <4h<br>0 <3 acres (0.12 to <1<br>0 <0.3 acres (0.04 to<br>acres (0.04ha) (0 pts | ore.<br>\$)<br>20.2ha) (5 pts)<br>1ha) (4 pts)<br>a) (3 pts)<br>1.2ha) (2pts)<br><0.12ha) (1 pt)   | Wed   | Hand 3   |
| max 14 pts sublotal     | 2a. Calculate WID MEL NAR VER 2b. Intensity of VER LOW MOD                                       | average buffer width.  E. Buffers average 50  DIUM. Buffers average.  ROW. Buffers average.  Y NARROW. Buffers  f surrounding land use.  Y LOW. 2nd growth  J. Old field (>10 years  DERATELY HIGH. Re    | Select only one and assign score. In the select only one and assign score. In the select only one around wetland pose 25m to <50m (82 to <164ft) around ge 10m to <25m (32ft to <82ft) around select one or double check and a corrolder forest, prairie, savannah, wild so, shrubland, young second growth for esidential, fenced pasture, park, consopen pasture, row cropping, mining, compared to the select one or double check and a corrolder forest, prairie, savannah, wild so, shrubland, young second growth for esidential, fenced pasture, park, consopen pasture, row cropping, mining, consopen pasture, row cr | Do not double check. erimeter (7) wetland perimeter (4) nd wetland perimeter (1) nd perimeter (0) average. dlife area, etc. (7) forest. (5) servation tillage, new fall | *  |
| max 30 pts. sublotal    | 3a. Sources of High Other Prec Sea: Pere 3c. Maximum >0.7 0.4 t < 0.4 3e. Modification Reco Reco | (27.6in) (3)<br>o 0.7m (15.7 to 27.6ir<br>m (<15.7in) (1)   | at apply.  3b.  Face water (3) ake or stream) (5) only one and assign score.  3d. only one and assign score.  3) (2) Gic regime. Score one or double che 2) Check all disturbances observed ditch tile   | Part of wetland/u Part of riparian o Duration inundation/sat Semi- to perman Regularly inunda Seasonally inund Seasonally satur ck and average.                         | uin (1) lake and other human use (1) pland (e.g. forest), complex (1) r upland corridor (1) uration. Score one or dbl check. ently inundated/saturated (4) ted/saturated (3) lated (2) ated in upper 30cm (12in) (1) |
| 36 max 20 pts. subtotal | 4a. Substrate Non Rec Rec Rec Habitat de Very Goo Poo Ac. Habitat alt Non Rec Rec Rec Rec        | disturbance. Score of e or none apparent (4 overed (3) overing (2) ent or no recovery (1) evelopment. Select or ellent (7) or good (6) d (5) erately good (4) (3) r to fair (2) r (1)                     | r double check and average.  Check all disturbances observed mowing grazing  | P. T.   | atic bed removal   |

last revised 1 February 2001 jjm ORAM v. 5.0 Field Form Quantitative Rating

| Site:       | Yacres         | - 0   | izalea  | F  | Rater(s):  | MOT                                      | 1BCR  | Date: 10/0   | 6/15     |
|-------------|----------------|-------|---|--|--|--|---|--|----------|
|             | 36             |       | o.  |  |  |  |   | 1-mdt-100615   |          |
| 0           | 3 6            | Ĭ     | etric 5. Sp   | ecial W  | etlande  |  |   | JeHand 3   |          |
| max 10 nts  |                | 48    | =   |  |  |  |   |  |          |
| max 10 pts. | subtotal       | Chec  | Lake Erie coa Lake Plain Sa Relict Wet Pra Known occurr Significant mig | rest (10) ed wetland (5) stal/tributary w stal/tributary w nd Prairies (O: airies (10) ence state/fed- gratory songbii | retland-unrestri<br>retland-restricte<br>ak Openings) (<br>eral threatened<br>rd/water fowl ha | ed hydrol<br>10)<br>or enda<br>abitat or | ogy (5)  ngered species (10)  usage (10)                  | 650  |          |
|             |                | . [   | Category 1 W  | etland. See Q  | uestion 1 Qual   | itative R                                | ating (-10)   |  |          |
| max 20 pts  | 42<br>subtotal |       | etric 6. Pla  |  |  |  | erspersion, mic   | rotopography   | •        |
| max 20 pta  | Subtotal       |       | e all present using (   |  | veg  | 0  |   | ha (0.2471 acres) contiguo   | us area  |
|             |                |       | Aquatic bed 2 Emergent 2 Shrub  |  | \(\tau_{   | 1  | Present and either compri                                 | ses small part of wetland's<br>lerate quality, or comprises  | į.       |
|             |                | 5     | Forest Mudflats Open water  |  | *  | 2  | Present and either compri                                 | ses significant part of wetla<br>lerate quality or comprises   |          |
|             |                |       | Other   |  |  | 3  |   | nificant part, or more, of w   | etland's |
|             |                |       | norizontal (plan viev   | v) Interspersion   | n  |  | vegetation and is of high                                 | quality  |          |
|             |                | Selec | t only one. High (5)  |  | Morr   | ativa Da                                 | ecription of Vocatation O                                 | vality   |          |
|             |                | 2     | Moderately hig  | jh(4)  | Nati   | low                                      | Low spp diversity and/or p<br>disturbance tolerant nation | redominance of nonnative   | ог       |
|             |                | 51    | Moderately lov  | v (2)  | 0  | mod                                      |   | omponent of the vegetation   | n,       |
|             |                |       | Low (1)   |  |  |  | 1 -   | or disturbance tolerant nativ  |          |
|             |                | 60 [  | None (0)<br>Coverage of invasive  | a plante Dofo  | •  |  |   | species diversity moderate   |          |
|             |                |       | ble 1 ORAM long for   |  |  |  | threatened or endangere                                   | nerally w/o presence of rare   | ;        |
|             |                |       | duct points for cove  |  |  | high                                     |   | species, with nonnative sp   | p        |
|             |                |       | Extensive >75   | , ,  |  |  |   | ant native spp absent or virt  | -        |
|             |                | 7     | Moderate 25-7   | , ,  |  |  |   | ersity and often, but not alv  |          |
|             |                | 5 F   | Sparse 5-25%<br>Nearly absent   |  |  |  | the presence of rare, three                               | eatened, or endangered sp  | р        |
|             |                | ·     | Absent (1)  | -070 00401 (07   |  | flat and                                 | Open Water Class Quality                                  |  |          |
|             |                |       | licrotopography.  |  | position   | 0  | Absent <0.1ha (0.247 acre                                 |  |          |
|             |                | Score | all present using 0   |  |  | 1  | Low 0.1 to <1ha (0.247 to                                 |  |          |
|             |                |       | Vegetated hun   |  |  | 2  | Moderate 1 to <4ha (2.47                                  |  |          |
|             |                | 1     | Coarse woody / Standing dead  |  |  | 3  | High 4ha (9.88 acres) or m                                | ore  |          |
|             |                | -     | Amphibian bre   |  |  | otopogr                                  | aphy Cover Scale  |  |          |
|             |                | -     |   |  | I constant   | 0  | Absent  |  |          |
|             |                |       |   |  |  | 1  | Present very small amount of marginal quality             |  |          |
|             | (n+            | 7     |   |  | 1  | 2  | Present in moderate amou<br>quality or in small amour     | A CONTRACTOR OF THE PARTY OF TH |          |
|             | CAT            | -     |   |  |  | 3  | Present in moderate or gre                                |  |          |

GRAND TOTAL (max 100 pts)

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories at the following address: http://www.epa.state.oh.us/dsw/401/401.html last revised 1 February 2001 jjm

and of highest quality

| Site: ALP             | Vager-Azalea R  | ater(s): 8 10, 895, 1806  | Date: 0/5/15   |
|-----------------------|---|---|--|
|                       | 1   |   |  |
| max 6 pts subtotal    | Metric 1. Wetland Are Select one size class and assign score.   | ea (size).  | W-MO-100575-5  |
| max 6 pts. subtotal   | >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2l 10 to <25 acres (4 to <10.1ha) 3 to <10 acres (1.2 to <4ha) (3 0.3 to <3 acres (0.12 to <1.2ha 0.1 to <0.3 acres (0.04 to <0.1) <0.1 acres (0.04ha) (0 pts)   | (4 pts)<br>pts)<br>a) (2pts)  | W-000-100515-5° Wetland H  |
| 11 13                 | Metric 2. Upland buffe  | ers and surrounding   | land use.  |
| max 14 pts. subtotal  | MEDIUM. Buffers average 25r NARROW. Buffers average 10 VERY NARROW. Buffers ave 2b. Intensity of surrounding land use. S VERY LOW. 2nd growth or old LOW. Old field (>10 years), sh MODERATELY HIGH. Reside   | 164ft) or more around wetland perimete<br>m to <50m (82 to <164ft) around wetlan<br>0m to <25m (32ft to <82ft) around wetla<br>rage <10m (<32ft) around wetland perir | r (7) d perimeter (4) and perimeter (1) neter (0) . ia, etc. (7) 5) n tillage, new fallow field. (3)   |
| 15 2.8                | Metric 3. Hydrology.  |   |  |
| max 30 pts. subtotal  | 3a. Sources of Water. Score all that apply thigh pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surface of Perennial surface water (lake of Sc. Maximum water depth. Select only of Score (27.6in) (3) Out to 0.7m (15.7 to 27.6in) (2) Output (27.6in) (1)  3e. Modifications to natural hydrologic results (15.7in) (1) | water (3) or stream) (5) one and assign score.  3  agime. Score one or double check and Check all disturbances observed ditch tile dike weir                          | ctivity. Score all that apply.  100 year floodplain (1)  Between stream/lake and other human use (1)  Part of wetland/upland (e.g. forest), complex (1)  Part of riparian or upland corridor (1)  on inundation/saturation. Score one or dbl check.  Semi- to permanently inundated/saturated (4)  Regularly inundated/saturated (3)  Seasonally inundated (2)  Seasonally saturated in upper 30cm (12in) (1)  average.  point source (nonstormwater)  filling/grading road bed/RR track  dredging other |
| 10 20                 | 1   |   |  |
|                       | Recovered (6)  Recovering (3)   | tr double check and average.  The and assign score.  The check and average.  Check all disturbances observed mowing   | shrub/sapling removal  |
| 38<br>subtotal this o | Recent or no recovery (1)   | clearcutting     selective cutting     woody debris removal   | sedimentation<br>dredging<br>farming<br>nutrient enrichment  |

| Site:       | AEP.                  | Yage            | r-Agalea   | Rater(s)  | : BADI   | BAE/BER   | Date: 10/05/15                 |
|-------------|-----------------------|-----------------|--|---|--|---|--------------------------------|
| su          | 38<br>btotal first pa | ege             |  |   |  | W-BAO-100   |                                |
| 0           | 38                    | Metr            | ic 5. Special W  | letland   | S  | 2   | lettand 4                      |
| may 10 ata  |                       | d               | -  |   | <b>J</b> .   | $\mathcal{N}$   | 18400                          |
| max 10 pts. | subtotal              | Check al        | I that apply and score as inc<br>Bog (10)<br>Fen (10)<br>Old growth forest (10)<br>Mature forested wetland (5<br>Lake Erie coastal/tributary<br>Lake Erie coastal/tributary<br>Lake Plain Sand Prairies (10)<br>Known occurrence state/fe<br>Significant migratory song<br>Category 1 Wetland. See | 5)<br>wetland-unre<br>wetland-rest<br>Oak Opening<br>ederal threate<br>bird/water fov | ricted hydrolo<br>s) (10)<br>ned or endar<br>vl habitat or u | ngered species (10) sage (10)                                   |                                |
| 5           | 43                    | a               |  |   | •  | erspersion, micro   | topography.                    |
| max 20 pts. | subtotal              |                 | and Vegetation Communitie<br>present using 0 to 3 scale.   | es  | 0  | Absent or comprises <0.1ha (0                                   | 2471 acres) contiguous area    |
|             |                       |                 | Aquatic bed  | 14  | 1  | Present and either comprises s                                  | 100                            |
|             |                       | 2               | Emergent   |   |  | vegetation and is of moderate                                   | -                              |
|             |                       |                 | Shrub  | 12  |  | significant part but is of low q                                |                                |
|             |                       | 3 🗀             | Forest   |   | 2  | Present and either comprises s                                  | V.T.                           |
|             |                       |                 | Mudflats   |   |  |   | e quality or comprises a small |
|             |                       | **              | Open water   |   | 2  | part and is of high quality                                     |                                |
|             |                       | 6h horiz        | Other<br>contal (plan view) Interspers   | ion   | 3  | Present and comprises signific<br>vegetation and is of high qua |                                |
|             |                       | Select on       | , .  |   |  | vegetation and is of high qua                                   | iity                           |
|             |                       |                 | High (5)   | 1   | Narrative De   | scription of Vegetation Quality                                 | /                              |
|             |                       |                 | Moderately high(4)   |   | low  | Low spp diversity and/or predo                                  |                                |
|             |                       | 2 -             | Moderate (3)   | 12  |  | disturbance tolerant native sp                                  |                                |
|             |                       |                 | Moderately low (2)   |   | mod  | Native spp are dominant comp                                    | 12.50                          |
|             |                       |                 | Low (1)  |   |  | although nonnative and/or dis                                   |                                |
|             |                       | 60 COV          | None (0)  Prage of invasive plants. Re   | for   |  | can also be present, and spe<br>moderately high, but generall   | •                              |
|             |                       |                 | 1 ORAM long form for list.   |   |  | threatened or endangered sp                                     |                                |
|             |                       |                 | t points for coverage  |   | high   | A predominance of native spec                                   | No.                            |
|             |                       |                 | Extensive >75% cover (-5)  | 1   | 150  | and/or disturbance tolerant na                                  |                                |
|             |                       | $_{2}$ $\times$ | Moderate 25-75% cover (-   | 3)  |  | absent, and high spp diversity                                  |                                |
|             | _                     | 3 🖺             | Sparse 5-25% cover (-1)  |   |  | the presence of rare, threater                                  | ned, or endangered spp         |
|             |                       |                 | Nearly absent <5% cover (  |   |  | 0 14 4 01 0 0 17  |                                |
|             |                       | 6d Micro        | Absent (1)<br>otopography.   | Ī   | 0  | Open Water Class Quality Absent <0.1ha (0.247 acres)            | _                              |
|             |                       |                 | present using 0 to 3 scale.  |   | 1  | Low 0.1 to <1ha (0.247 to 2.47                                  | _                              |
|             |                       |                 | Vegetated hummucks/tuss  | sucks   | 2  | Moderate 1 to <4ha (2.47 to                                     | _                              |
|             | /                     |                 | Coarse woody debris >150   |   | 3  | High 4ha (9.88 acres) or more                                   |                                |
|             |                       | 3               | Standing dead >25cm (10i   |   |  | · · · · · · · · · · · · · · · · · · ·                           | - 1                            |
|             |                       |                 | Amphibian breeding pools   | Ī   |  | aphy Cover Scale  |                                |
|             |                       |                 |  | -   | 0  | Absent Present you small amounts or                             | if more common                 |
|             |                       |                 |  |   | 1  | Present very small amounts or<br>of marginal quality            | n more common                  |
|             |                       |                 |  | 1-  | 2  | Present in moderate amounts,                                    | but not of highest             |
| 1           | +2                    |                 |  |   |  | quality or in small amounts of                                  | D/590 (3rt)                    |
| La          | - \                   |                 |  | -   | 3  | Present in moderate or greater                                  |                                |

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories at the following address: http://www.epa\_state\_oh\_us/dsw/401/401.html last revised 1 February 2001 jjm

GRAND TOTAL (max 100 pts)

and of highest quality

| Site:       | FLT Y    | MUTER- HZALEA RATER(S): BHE /JTT   | Date: 10-27-15   |
|-------------|----------|--|--|
|             |          | 1  |  |
| 2           | 2        | Metric 1. Wetland Area (size).   |  |
| max 6 pts.  | 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)  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)  | etland 5   |
| 7           | 9        | Metric 2. Upland buffers and surrounding land use.   |  |
| max 14 pts. | 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)  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), shrubland, young second growth forest. (5)  MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow.  HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)   | ow field. (3)  |
| 17          | 26       | Metric 3. Hydrology.   |  |
| max 30 pts. | subtotal | 3a. Sources of Water. Score all that apply.  High pH groundwater (5)  Other groundwater (3)  Precipitation (1)  Seasonal/Intermittent surface water (3)  Perennial surface water (lake or stream) (5)  3c. Maximum water depth. Select only one and assign score.  >0.7 (27.6in) (3)  0.4 to 0.7m (15.7 to 27.6in) (2)  X = Modifications to natural hydrologic regime. Score one or double check and average.   | in (1) lake and other human use (1) pland (e.g. forest), complex (1) upland corridor (1) uration. Score one or dbl check ently inundated/saturated (4) ted/saturated (3) |
|             |          | None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1)  Check all disturbances observed    ditch  | ·  |
| 75          | 33.5     | Metric 4. Habitat Alteration and Development.  |  |
| max 20 pts. | subtotal | 4a. Substrate disturbance. Score one or double check and average.  None or none apparent (4)  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)  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) Recovered (6) Recovering (3)  Check all disturbances observed shrub/sapling remembers of the control of the con |  |
| SU          | 33.5     | Recent or no recovery (1)  clearcutting selective cutting woody debris removal toxic pollutants sedimentation dredging farming nutrient enrichme   | ent  |

| Site: A     | EP Y                   | AGER-    | AZALEA                     | Rater      | (s): BAE                             | Date: 10-27-   | 15   |  |
|-------------|------------------------|----------|----------------------------|------------|--------------------------------------|--|------|--|
| sub         | 33,5<br>ototal first p | ]<br>age |                            |            |                                      | W-bae-102715-  |      |  |
| Φ           | 33.5                   | Metr     | ric 5. Special             | Wetlan     | nds.                                 | Wetland 5  |      |  |
| max 10 pts. |                        |          |                            |            |                                      |  |      |  |
| 0           | 33.5                   | al .     |                            |            | THE STATE OF THE STATE OF            | erspersion, microtopography.                               |      |  |
| max 20 pts. | subtotal               |          | land Vegetation Commu      |            | Vegetation                           | Community Cover Scale                                      |      |  |
|             |                        | Score al | I present using 0 to 3 sca | ale.       | 0                                    | Absent or comprises <0.1ha (0.2471 acres) contiguous a     | ırea |  |
|             |                        |          | Aquatic bed                |            | 1                                    | Present and either comprises small part of wetland's       |      |  |
|             |                        |          | Emergent                   |            |                                      | vegetation and is of moderate quality, or comprises a      |      |  |
|             |                        |          | Shrub                      |            |                                      | significant part but is of low quality                     |      |  |
|             |                        |          | Forest                     |            | 2                                    | Present and either comprises significant part of wetland's | 3    |  |
|             |                        | ١        | Mudflats                   |            |                                      | vegetation and is of moderate quality or comprises a si    |      |  |
|             |                        | -        | Open water                 |            |                                      | part and is of high quality                                | .,   |  |
|             |                        | -        |                            |            |                                      |  | nd'o |  |
|             |                        |          | Other                      |            | 3                                    | Present and comprises significant part, or more, of wetla  | nas  |  |
|             |                        |          | zontal (plan view) Intersp | persion.   |                                      | vegetation and is of high quality                          |      |  |
|             |                        | Select o | nly one.                   |            |                                      |  |      |  |
|             |                        |          | High (5)                   |            | Narrative D                          | escription of Vegetation Quality                           |      |  |
|             |                        |          | Moderately high(4)         |            | low                                  | Low spp diversity and/or predominance of nonnative or      |      |  |
|             |                        |          | Moderate (3)               |            |                                      | disturbance tolerant native species                        |      |  |
|             |                        |          | Moderately low (2)         |            | mod                                  | Native spp are dominant component of the vegetation,       |      |  |
|             |                        | V        | Low (1)                    |            |                                      | although nonnative and/or disturbance tolerant native s    | gas  |  |
|             |                        |          | None (0)                   |            |                                      | can also be present, and species diversity moderate to     |      |  |
|             |                        | 6c Cov   | erage of invasive plants.  | Refer      |                                      | moderately high, but generally w/o presence of rare        |      |  |
|             |                        |          | 1 ORAM long form for lis   |            |                                      | threatened or endangered spp                               |      |  |
|             |                        |          | •                          | st. Add    | high                                 | A predominance of native species, with nonnative spp       |      |  |
|             |                        | or deduc | t points for coverage      | ( 5)       | high                                 |  | h.   |  |
|             |                        | X        | Extensive >75% cover       |            |                                      | and/or disturbance tolerant native spp absent or virtual   |      |  |
|             |                        | -  -     | Moderate 25-75% cove       | , ,        |                                      | absent, and high spp diversity and often, but not always   | s,   |  |
|             | -                      |          | Sparse 5-25% cover (-      | ,          |                                      | the presence of rare, threatened, or endangered spp        |      |  |
|             |                        |          | Nearly absent <5% cov      | ver (0)    |                                      |  |      |  |
|             |                        |          | Absent (1)                 |            | Mudflat and Open Water Class Quality |  |      |  |
|             |                        | 6d. Micr | otopography.               |            | 0                                    | Absent <0.1ha (0.247 acres)                                |      |  |
|             |                        | Score al | I present using 0 to 3 sca | ale.       | 1                                    | Low 0.1 to <1ha (0.247 to 2.47                             |      |  |
|             |                        |          | Vegetated hummucks/        | tussucks   | 2                                    | Moderate 1 to <4ha (2.47 to                                |      |  |
|             |                        | 2 1      | Coarse woody debris >      | 15cm (6in) | 3                                    | High 4ha (9.88 acres) or more                              |      |  |
|             |                        | 3        | Standing dead >25cm        |            |                                      |  |      |  |
|             |                        | T        | Amphibian breeding po      |            | Microtopoa                           | raphy Cover Scale  |      |  |
|             |                        |          | - 31                       |            | 0                                    | Absent   |      |  |
|             |                        |          |                            |            | 1                                    | Present very small amounts or if more common               |      |  |
|             |                        |          |                            |            | 120                                  | of marginal quality  |      |  |
|             |                        |          |                            |            | 2                                    | Present in moderate amounts, but not of highest            |      |  |
| at a        |                        |          |                            |            | 2                                    | quality or in small amounts of highest quality             |      |  |
| of 2        |                        |          |                            |            | 3                                    |  |      |  |
|             |                        |          |                            |            | 3                                    | Present in moderate or greater amounts                     |      |  |
| 2-1         |                        |          |                            |            |                                      | and of highest quality                                     |      |  |

33.5 GRAND TOTAL (max 100 pts)

| Site: HEP MIGER- AZALEA Rater  | r(s):BAE   | / Jitt   Date: 10-24-15  |
|--|--|--|
| 24   |  | w-bae-102715-0   |
| subtotal first page  |  |  |
|  | nds.   |  |
| max 10 pts. subtotal Check all that apply and score as indicated.        |  | \\/atlanal C   |
| Bog (10)<br>Fen (10)   |  | Wetland 6  |
| Old growth forest (10)   |  |  |
| Mature forested wetland (5)  |  |  |
| Lake Erie coastal/tributary wetland-                                     | -  |  |
| Lake Erie coastal/tributary wetland-                                     |  | logy (5)   |
| Lake Plain Sand Prairies (Oak Ope Relict Wet Prairies (10)               | enings) (10)   |  |
| Known occurrence state/federal thr                                       | eatened or enda  | angered species (10)   |
| Significant migratory songbird/wate                                      |  |  |
| Category 1 Wetland. See Question   | n 1 Qualitative R  | ating (-10)  |
|  |  |  |
| │  | -  | erspersion, microtopography.   |
| max 20 pts. subtotal 6a. Wetland Vegetation Communities,                 |  | Community Cover Scale  |
| Score all present using 0 to 3 scale.                                    | 0  | Absent or comprises <0.1ha (0.2471 acres) contiguous area  |
| Aquatic bed  \ Emergent  | 4  | Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a |
| Shrub  |  | significant part but is of low quality   |
| Forest   | 2  | Present and either comprises significant part of wetland's   |
| Mudflats   |  | vegetation and is of moderate quality or comprises a small   |
| Open water<br>Other  | 3  | part and is of high quality  Present and comprises significant part, or more, of wetland's                 |
| 6b. horizontal (plan view) Interspersion.                                | Ü  | vegetation and is of high quality  |
| Select only one.   |  |  |
| High (5)   | PROPERTY OF THE PARTY OF THE PA | escription of Vegetation Quality   |
| Moderately high(4) Moderate (3)  | low  | Low spp diversity and/or predominance of nonnative or disturbance tolerant native species                  |
| Moderately low (2)   | mod  | Native spp are dominant component of the vegetation,   |
| Low (1)  |  | although nonnative and/or disturbance tolerant native spp  |
| None (0)   |  | can also be present, and species diversity moderate to   |
| 6c. Coverage of invasive plants. Refer                                   |  | moderately high, but generally w/o presence of rare threatened or endangered spp                           |
| to Table 1 ORAM long form for list. Add<br>or deduct points for coverage | high   | A predominance of native species, with nonnative spp   |
| Extensive >75% cover (-5)  |  | and/or disturbance tolerant native spp absent or virtually   |
| Moderate 25-75% cover (-3)   |  | absent, and high spp diversity and often, but not always,  |
| Sparse 5-25% cover (-1)  |  | the presence of rare, threatened, or endangered spp  |
| Nearly absent <5% cover (0) Absent (1)                                   | Mudflat and  | Open Water Class Quality   |
| 6d. Microtopography.   | 0  | Absent <0.1ha (0.247 acres)  |
| Score all present using 0 to 3 scale.                                    | 1  | Low 0.1 to <1ha (0.247 to 2.47   |
| Vegetated hummucks/tussucks  | 2  | Moderate 1 to <4ha (2.47 to  |
| Coarse woody debris >15cm (6in)  Standing dead >25cm (10in) dbh          | 3  | High 4ha (9.88 acres) or more  |
| Amphibian breeding pools   | Microtopog   | raphy Cover Scale  |
| Amphibian procuring pools  | 0  | Absent   |
|  | 1  | Present very small amounts or if more common   |
|  |  | of marginal quality  |
| 7.1-1  | 2  | Present in moderate amounts, but not of highest quality or in small amounts of highest quality             |
| Cat 1  | 3  | Present in moderate or greater amounts   |
|  |  | and of highest quality   |



GRAND TOTAL (max 100 pts)

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This foregoing document was electronically filed with the Public Utilities

**Commission of Ohio Docketing Information System on** 

11/5/2015 1:56:43 PM

in

Case No(s). 15-1734-EL-BLN

Summary: Letter of Notification electronically filed by Mr. Hector Garcia on behalf of AEP Ohio Transmission Company