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Via Electronic Filing

Ms. Barcy McNeal Administration/Docketing Public Utilities Commission of Ohio 180 East Broad Street, 11<sup>th</sup> Floor Columbus, OH 43215-3793

Re: Construction Notice for Group 3 Line #12272 Project, OPSB Case No. 14-2272-GA-BNR

Dear Ms. McNeal:

On January 6, 2014, Dominion East Ohio Gas Company ("DEO") filed a Construction Notice for the Group 3 Line #12272 Project. As referenced in Section 4906-11-02(B) of the Construction Report, attached is a copy of the Wetlands and Other Waters Delineation Report for Group 3, Line 3282 (n/k/a Group 3, Line #12272).

If you have any questions please call at the number listed above.

Sally W Broomfule

Sincerely,

Sally W. Bloomfield

cc: Ed Steele (w/Attachment)

# Wetlands and Other Waters Delineation Report

Prepared for:

# The East Ohio Gas Company

320 Springside Drive, Suite 320 Akron, Ohio 44333

for:

**Group 3, Line 3252**Jackson Township, Stark County, Ohio

Prepared by:



5070 Stow Rd. Stow, OH 44224 800-940-4025 www.EnviroScienceInc.com

Date: December 30, 2013

# STATEMENT OF CERTIFICATION

The analyses, opinions and conclusions in this report are based entirely on EnviroScience's unbiased, professional judgment. EnviroScience's compensation is not in any way contingent on any action or event resulting from this study. Neither EnviroScience nor any EnviroScience employee has any vested interest in the property examined in this study.



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#### **EXECUTIVE SUMMARY**

EnviroScience, Inc. performed a delineation of wetlands and other waters in September 2013 for the East Ohio Gas Company (EOG) at the location of the Group 3, Line 3252 project in Jackson Township, Stark County, Ohio. The purpose of the project is to install approximately 4,000 feet of new natural gas pipeline (Line 12272) within existing utility right-of-way (ROW) located north of Strausser Street Northwest, east of Laura Avenue Northwest, and west of Weston Place Avenue Northwest. The project area detailed in this study is 4,078 feet long by 75 feet wide.

The project area exists primarily as maintained ROW with agricultural field, maintained lawn, and open field plant communities. The surrounding land exists as residential, agricultural, field, and forested areas. Five distinct vegetative communities were identified within the project area, including two wetland community types. The project area crosses six wetlands and one intermittent stream.

Six wetlands were identified within the project area and account for 0.538 acres. One intermittent stream was identified in the project area accounting for an additional 10 linear feet (0.001 acres) of waterway within the project area. No open water aquatic resources were identified within the project area. The wetlands are under the jurisdiction of the Ohio EPA or Corps. No filling may occur within these areas without their written permission. Please contact the Ohio EPA Division of Surface Water at (614) 644-2001 or the Huntington District, U.S. Army Corps of Engineers, at (304) 399-5210 before working in these areas.



## 1.0 INTRODUCTION AND SITE DESCRIPTION

EnviroScience, Inc. performed a delineation of wetlands and other waters in September 2013 for the East Ohio Gas Company (EOG) at the location of the Group 3, Line 3252 project in Jackson Township, Stark County, Ohio. The purpose of the project is to install approximately 4,000 feet of new natural gas pipeline (Line 12272) within existing utility right-of-way (ROW) located north of Strausser Street Northwest, east of Laura Avenue Northwest, and west of Weston Place Avenue Northwest. The project area detailed in this study is 4,078 feet long by 75 feet wide.

The project area exists primarily as maintained ROW with agricultural field, maintained lawn, and open field plant communities. The surrounding land exists as residential, agricultural, field, and forested areas. Five distinct vegetative communities were identified within the project area, including two wetland community types. The project area crosses six wetlands and one intermittent stream.

The project area is located in the Tuscarawas River drainage basin (Hydrologic # 05040001) which drains approximately 2,590 square miles in northeastern Ohio. It is within the Erie Drift Plain and Western Allegheny Plateau ecoregion (Woods *et al.* 1998) of Ohio. The project area is located within the area covered by the Northcentral and Northeast Regional Supplement (USACE 2012) and associated plant list (Lichvar 2012).

#### 2.0 METHODS

Government agencies regulate coastal and inland waters for commerce, flood control and water quality. These water bodies provide numerous functions and values necessary to protect and sustain our quality of life. Wetlands comprise a significant portion of regulated waters. The U.S. Army Corps of Engineers (Corps) and Environmental Protection Agency (EPA) jointly define wetlands as:

"Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

The remaining deepwater aquatic habitats (open waters) are defined by the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory, 1987) as:

". . . areas that are permanently inundated at mean annual water depths >6.6 ft or permanently inundated areas <6.6 ft in depth that do not support rooted emergent or woody plant species."

The methods used for determining and delineating wetlands and open waters strictly adhere to those found in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of* 



Engineers Wetland Delineation Manual: Northcentral and Northeast Region (USACE 2012). Wetlands and open water boundaries were determined by the disappearance of one or more of their diagnostic characteristics.

Ordinary high water marks (OHWM) defined the outermost regulatory boundaries of ephemeral and open waters.

Each sample plot and the perimeter of each wetland and other water was surveyed and marked in the field with plain pink flags and pink "wetland boundary" flags, respectively. A global positioning system (GPS) unit with submeter accuracy was used, in conjunction with aerial photography and topographic figures, for the survey. Computer Aided Design (CAD) software was used to determine wetland dimensions and produce a map of the project area showing wetlands and other waters.

#### 2.1 WETLANDS

#### 2.1.1 Determination

A review of secondary literature sources was performed to find known wetlands and other significant ecological resources and areas with high potential for wetlands in or near the proposed project area. Resources included some or all of the following:

- 1. U.S. Geological Survey (USGS) topographic maps;
- 2. National Wetlands Inventory (NWI) maps;
- 3. Web Soil Survey; and
- Aerial Photographs.

A field inspection of the project area was then completed to identify major plant communities and to visually locate potential wetlands. The routine, onsite (Level 2) wetland determination was used to perform the delineation. Wetland communities were classified according to the classification scheme of Cowardin *et al.* (1979) (Table 1). Mature nonwetland communities that had reached a stable equilibrium were classified according to Anderson (1982) and Gordon (1966, 1969). Disturbed and successional nonwetland communities were classified as one of the categories described in Table 2.

Table 1. Wetland Communities (Cowardin et al. 1979)

Community	Description						
PEM	Palustrine Emergent						
PSS	Palustrine Scrub-Shrub						
PFO	Palustrine Forested						
POW	Palustrine Open Water						



**Table 2. Disturbed and Successional Nonwetland Communities** 

Community		Description
ed	Urban	regularly maintained land; residential; industrial
Disturbed	Agricultural	land used for producing crops or raising livestock; cropland; pastureland
Dis	Cleared	disturbed areas devoid of most vegetation from recent clearing, grading or filling
	Open Field	herbaceous community without woody vegetation
onal	Old Field	herbaceous community having woody vegetation coverage of <50%
Successional	Scrub-	community dominated by woody vegetation <6 m (20 ft) tall
Suc	Shrub	, , , , , , , , , , , , , , , , , , , ,
	Forest	community dominated by woody vegetation >6 m (20 ft) tall

Sample plots were established within each natural community and potential wetland within the study area. Complete data for each sample plot were collected and recorded on the USACE's Routine Wetland Determination Data Forms contained in the applicable USACE Regional Supplement (USACE 2012). Vegetation, hydrology and soils were evaluated at each sample plot.

# 2.1.1.1 Vegetation

To detect the presence or absence of hydrophytic vegetation, four plant strata were evaluated within specific radii of the plot center. Each stratum was ranked by aerial cover in descending order of abundance. Table 3 provides information on each vegetative stratum.

Table 3. Vegetative Strata

Stratum	Definition	Survey Area
Tree	woody plants > or equal to 3 in. (7.6 cm) dbh, regardless of height	30 ft (9.1 m) radius
Sapling/shrub	woody plants <3 in. (7.6 cm) dbh and $\geq$ 3.28 ft (1 m) tall	15 ft (4.6 m) radius
Herbaceous	herbs and woody plants less than 3.28 ft (1 m) in height	5 ft (1.5 m) radius
Woody vines	woody vines >3.28 ft (1 m) in height	30 ft (9.1 m) radius

Percent dominance was obtained for each species and within each stratum. Dominant species are those which cumulatively totaled in order of abundance immediately exceed 50% and also include any individual species with an abundance of 20% or more (USACE 2012). Dominant taxa were identified using recognized local guides: nomenclature follows the *National List of Scientific Plant Names* (USDA 1982). Following the identification of each plant species present within the plot, all dominant



species within each stratum were assigned a wetland indicator status according to Lichvar (2012). Indicators are summarized in Table 4.

**Table 4. Plant Indicators** 

Indicator	Category	Definition			
OBL	Obligate Wetland	almost exclusively (>99% of occurrences)			
002	Obligato Wotland	found in wetlands			
FACW	Facultative	most likely found in wetlands (67-99% of			
17.0	Wetland	occurrences)			
FAC	Facultative	equally likely found in wetlands or			
1 / (0	radananvo	nonwetlands (34-66%)			
FACU	Facultative	most likely found in nonwetlands (1-33%			
. 7100	Upland	occurrence in wetlands)			
UPL	Obligate Upland	almost exclusively found in nonwetlands			
0, 5	Obligate Opialia	(<1% occurrence in wetlands)			

An 'NI' (no indicator) designation represents species where not enough information is available to assign an indicator; an 'NL' (no listing) designation is given to species whose identification was not determined sufficiently enough to assign an indicator. Once the indicator status is assigned to each dominant species, the evaluator can perform the percent dominance test according to the protocol outlined within the applicable Regional Supplement (USACE 2012) to determine if the plot meets the criterion for hydrophytic vegetation.

# 2.1.1.2 Hydrology

To detect the presence or absence of wetland hydrology, surface and subsurface hydrologic indicators were evaluated at the sample plot and throughout the adjacent community. Primary sources of wetland hydrology include direct precipitation, headwater flooding, backwater flooding, groundwater or any combination of these. When obtaining data at each sample plot, the evaluator observes evidence of hydrology. Primary indicators of hydrology (only one of these is necessary to indicate sufficient wetland hydrology) include the presence of surface water, water marks, sediment deposits, drift deposits, etc. (USACE 2012). Secondary indicators of hydrology (which requires two or more at each sample plot) include surface soil cracks, drainage patterns, crayfish burrows, etc. (USACE 2012).

# 2.1.1.3 Soils

The upper horizons of the soil at each sample plot were examined to detect the presence or absence of hydric soils indicators. Current USACE guidance requires the evaluator to assess the upper 20 inches of soil for hydric soil characteristics. Most indicators of hydric soils require an assessment of soil matrix color and mottle characteristics (Environmental Laboratory 1987, USACE 2012) for each horizon. These



characteristics were determined by comparing a moist sample with *Munsell Soil Color Chart* (Munsell Color 2009) or *The Globe Soil Color Book* (Visual Color Systems, 2004).

# 2.1.2 ORAM Categorization

Each wetland system was categorized in accordance with version 5.0 of the Ohio EPA's Ohio Rapid Assessment Method for Wetlands (ORAM) (Mack 2001). Field scoring forms are contained in Appendix D

Ohio EPA has established three primary and three intermediate categories of wetland quality which are based on a wetland's size, its hydrologic function, the types of plant communities present, the physical structure of the wetland plant community and the wetland's level of disturbance (OAC 3745-1-54). The relationship between the various wetland categories and their respective ORAM scores is presented in Table 5. ES also evaluated the project area for the presence of state threatened and endangered species as part of the ORAM evaluation.

**Table 5. ORAM Scores and Categories** 

ORAM Score	ORAM Category	Description
0-29.9	Category 1	Lowest quality, and are generally characterized by hydrological isolation, lack of plant species diversity, insufficient habitat availability, and limited potential to perform major wetland functions.
30-34.9	Category 1 or 2 (Gray Zone)	ORAM score is insufficient to categorize wetland. In absence of a nonrapid method such as VIBI, assign the wetland to the higher functional category (Category 2)
35-44.9	Modified Category 2	Category 2 wetlands that may be of lower quality or degraded but have reasonable potential to be restored.
45-59.9	Category 2	Wetlands that have the capability to support a moderate wildlife community or maintain mid-level hydrological functions.
60-64.9	Category 2 or 3 (Gray Zone)	ORAM score is insufficient to categorize wetland. In absence of a nonrapid method such as VIBI, assign the wetland to the higher functional category (Category 3)
65-100	Category 3	Highest quality, generally characterized by a high level of biological diversity and topographical variation, threatened or endangered species, large numbers of native species, or a high level of functional importance to its surroundings.

Category 3 wetlands have the highest quality, and are generally characterized by a high level of biological diversity and topographical variation, large numbers of native species, or a high level of functional importance to its surroundings. Category 2 wetlands have the capability to support a moderate wildlife community or maintain mid-level hydrological functions. Category 2 also includes wetlands that may be of lower quality or degraded but have reasonable potential to be restored (Modified Category 2).



Category 1 wetlands are of the lowest quality, and are generally characterized by hydrological isolation, lack of plant species diversity, insufficient habitat availability, and limited potential to perform major wetland functions (OAC 3745-1-54).

Since the ORAM is a rapid assessment method, there are certain wetland scores which fail to clearly differentiate the wetland's functional category. The so-called "gray zone" wetlands fall between the definite scoring breaks between the categories. Ohio EPA requires that "gray zone" wetlands be considered as the higher category unless more detailed functional assessments such as the VIBI or AmphIBI are conducted on those wetlands. As a result of this requirement, wetlands whose scores fall between the breakpoints for Categories 1 and 2 (1 or 2 gray zone wetlands) wetlands will be considered as Category 2 wetland for purposes of this report. Wetlands whose scores fall between the breakpoints for Categories 2 and 3 wetlands (2 or 3 gray zone wetlands) will be considered a Category 3 wetland for purposes of this report.

#### 2.1.4 Cowardin Wetland Classification

The USFWS National Wetlands Inventory uses the *Classification of Wetlands and Deepwater Habitats of the United States* to classify wetland habitat types (Cowardin et al 1979). This classification system is hierarchical and defines five major systems – Marine, Estuarine, Riverine, Lacustrine, and Palustrine. The Palustrine system was the only type of wetland system identified within the study area and is defined as including all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean driven-derived salts is below 0.5 percent (Cowardin et al 1979).

#### 2.2 OTHER WATERS

Other waters include ephemeral and open waters. These waters are broken down into two categories: 1) ponds and lakes; and 2) streams and rivers.

#### 2.2.1 Ponds and Lakes

Palustrine systems other than wetlands, and lacustrine waters are addressed as ponds and lakes, respectively. These non-linear open waters may harbor important aquatic communities such as vegetated shallows (aquatic bed) and mud flats. They are classified according to Cowardin *et al.* (1979).

#### 2.2.2 Streams and Rivers

Riverine systems are linear flowing waters bounded by a channel. Cowardin *et al.* (1979) divides these system into four groups, however, for the purpose of this report streams are placed into three regulatory types, listed below.



Ephemeral: An ephemeral stream only conveys runoff precipitation and meltwater. It is permanently located above the water table and is most often dry.

Intermittent: An intermittent stream is located below the water table for parts of the year, but does have dry periods.

Perennial: A perennial stream typically has flowing water throughout the entire year.

In addition to flow characteristics, the USACE has defined other regulatory categories that apply to streams, which are listed below (USACE and USEPA, 2007).

<u>Traditional Navigable Waters (TNW)</u>: all waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.

Relatively Permanent Waters (RPW): non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months).

Non-Relatively Permanent Waters (Non-RPW): non-navigable tributaries of traditional navigable waters that are not relatively permanent where the tributaries typically do not have continuous flow at least seasonally (e.g., typically three months).

The Corps and USEPA will assert jurisdiction under the Clean Water Act on Traditional Navigable Waters (TNWs) and all wetlands adjacent to them, non-navigable tributaries of TNWs that are Relatively Permanent Waters (RPW) [i.e., tributaries that typically flow year-round or have continuous flow at least seasonally]; and wetlands that directly abut such tributaries. In addition, the agencies will assert jurisdiction over every water body that is not an RPW if that water body is determined (on the basis of a fact-specific analysis) to have a significant nexus with a TNW.

"A significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or an insubstantial effect on the chemical, physical, and/or biological, integrity of a TNW. Principal considerations when evaluating significant nexus include the volume, duration, and frequency of the flow of water in the tributary and the proximity of the tributary to a TNW, plus the hydrologic, ecologic, and other functions performed by the tributary and all of its adjacent wetlands."



## 2.2.3 HHEI and QHEI

Data collection for all streams included the completion of either the Ohio EPA Headwater Habitat Evaluation Index (HHEI) for primary headwater habitat (PHWH) streams or the Qualitative Habitat Evaluation Index (QHEI) for larger streams. Biologists are Ohio EPA trained to assess streams using the QHEI and HHEI. Following the Ohio EPA guidance, any stream with a drainage area of less than or equal to one mi² (2.589 km²) and pools with a maximum water depths less than or equal to 15.75 in (40 cm) were evaluated using the HHEI (Ohio EPA 2002). The QHEI was used to evaluate streams with drainage areas greater than one mi² and pools with maximum water depths greater than 15.75 in (40 cm). The assessment location is representative of the stream/headwater within the study area.

#### 3.0 LITERATURE REVIEW

#### 3.1 USGS TOPOGRAPHIC MAP

The U.S. Geological Survey (USGS) 7.5-minute topographic series (North Canton and Canal Fulton Quadrangles) is shown on Figure 2 (Appendix A). The project area gradually slopes downwards toward the western portion of the site with elevations ranging from approximately 1080 feet above mean sea level (AMSL) in the western portion to approximately 1150 feet AMSL in the eastern portion of the project area. An intermittent stream is shown crossing through the central portion of the project area.

# 3.2 NWI MAP

The National Wetlands Inventory (NWI) map (North Canton and Canal Fulton Quadrangles) of the project area is shown on Figure 3 in Appendix A. No previously mapped wetland systems are indicated within the project area, however; there are several wetland systems mapped in the adjacent areas.

#### 3.3 COUNTY SOIL SURVEY

The project area is found on the *Soil Survey of Stark County, Ohio* and was accessed on the Soil Survey Geographic (SSURGO) Database (USDA Web Soil Survey, 2011) (Figure 4; Appendix A). Twelve soil types are depicted within the project area and are listed in Table 6. Two soil types, Se and Wd, are listed as hydric soils within Stark County. Two soil types, CdB and FcA, are listed as having hydric inclusions.



**Table 6. Soil Types Mapped in Project Area.** 

Symbol	Soil Type	Status	Common Landform	Percent Hydric	Acres in Project Area	Percent Within Project Area
CdB	Canfield silt loam, 2 to 6 percent slopes	Predominantly non-hydric	NA	5	0.97	13.6
CdC2	Canfield silt loam, 6 to 12 percent slopes, moderately eroded	Non-Hydric	NA	0	0.09	1.3
CdD2	Canfield silt loam, 12 to 18 percent slopes, moderately eroded	Non-Hydric	till plains, moraines	0	0.45	6.3
CoD2	Chili gravelly loam, 12 to 18 percent slopes, moderately eroded	Non-Hydric	terraces	0	0.68	9.6
СрС	Chili silt loam, 6 to 12 percent slopes	Non-Hydric	terraces	0	0.21	2.9
CpC2	Chili silt loam, 6 to 12 percent slopes, moderately eroded	Non-Hydric	terraces	0	0.16	2.2
FcA	Fitchville silt loam, 0 to 2 percent slopes	Predominantly non-hydric	lake plains, terraces	5	2.18	30.6
ReB	Ravenna silt loam, 2 to 6 percent slopes	Non-Hydric	till plains, moraines	0	0.39	5.4
Se	Sebring silt loam, till substratum	Predominantly Hydric	drainageways	90	0.17	2.3
Wd	Wayland silt loam	Predominantly Hydric	flood plains	95	0.01	0.0
WrB	Wheeling silt loam, 2 to 6 percent slopes	Non-Hydric	terraces	0	0.49	6.9
WuC2	Wooster silt loam, 6 to 12 percent slopes, moderately eroded	Non-Hydric	terraces	0	1.35	19.0

# 3.4 U.S. FISH AND WILDLIFE SERVICE

The project area was examined for suitable habitat for federally listed species whose known ranges include Stark County. These species are the federally endangered Indiana bat (*Myotis sodalis*), the proposed federally endangered northern long-eared bat



(Myotis septentrionalis), and the federal species of concern bald eagle (Haliaeetus leucocephalus).

Living or dead trees with shedding or peeling bark or cavities may serve as roosting trees for the Indiana bat and the northern long-eared bat. Twenty-six potential habitat trees for the Indiana bat and the northern long-eared bat exist within and near the project area. The potential habitat trees (PRT) are eastern cottonwood (*Populus deltoides*), black cherry (*Prunus serotina*), shagbark hickory (*Carya ovata*), white oak (*Quercus alba*), silver maple (*Acer saccharinum*), and standing dead with diameters at breast height (dbh) ranging from 8 to 38 inches. The PRTs had 50 to 100 percent solar exposure, peeling bark and/or crevices. Because of the size and solar exposure, nineteen of these trees may be considered potential maternity roost trees (PMRTs) by the U.S. Fish and Wildlife Service (USFWS). Photographs of typical trees are located in Appendix B. If any of these trees will be cleared, coordination with USFWS is recommended. No potential winter hibernaculum is located within the project area.

The bald eagle nests in large trees near water. No bald eagle habitat was observed within the project area. Moreover, according to the EOG Categorical Exclusion Agreement with the USFWS dated December 19, 2011, Jackson Township in Stark County has no known occurrences of bald eagle nesting sites. Therefore, no further coordination in regards to the bald eagle is required for this project.

#### 3.5 AERIAL PHOTOGRAPHY

A recent aerial photograph of the project area is shown on Figure 5 (Appendix A). The project area is depicted primarily as maintained ROW with agricultural field and maintained lawn plant communities with several trees along the edge of the ROW. The surrounding land exists as residential, agricultural, field, and forest. The eastern terminus of the project area ends at an existing EOG natural gas station. Several open water ponds are visible adjacent to the project area.

#### 4.0 RESULTS

Eight sample plots were established within five natural communities. Two of these communities are considered wetland. Table 7 summarizes the sample plot data.

Each sample plot, delineated wetlands, and other waters are illustrated on Figure 5 (Appendix A). The following section describes general conditions found within each plant community and summarizes relevant information from the data forms, located in Appendix C.



Table 7. Sample Plot Results.

Sample Plot	Photo*	Community**	Hydrophytic Vegetation	Wetlands Hydrology	Hydric Soil	Status	Location	
1	1	Agricultural Field				Non- Wetland	SP 1	
2	2	PEM	Х	X	Χ	Wetland	W-2	
3	3	PFO	Х	Х	Х	Wetland	W-4	
4	4	PEM	Х	Х	Х	Wetland	W-4	
5	5	Maintained Lawn				Non- Wetland	SP 5	
6	6	Open Field				Non- Wetland	SP6	
7	7	PFO	X	X	X	Wetland	W-6	
8	8	PEM	Х	Х	Х	Wetland	W-6	

<sup>\*</sup>photos are located in Appendix B

# 4.1 NONWETLANDS

Three upland communities exist within the project area and include agricultural field, maintained lawn, and open field plant communities. The agricultural field is represented by Sample Plot 1. This plant community is dominated by corn (*Zea mays*, UPL) in the herbaceous layer.

The maintained lawn plant community is represented by Sample Plot 5 and includes common dandelion (*Taraxacum officinale*, FACU), Canadian thistle (*Cirsium arvense*, FAC), orchard grass (*Dactylis glomerata*, FACU), and Kentucky bluegrass (*Poa pratensis*, FACU) in the herbaceous layer. Although not dominant, several trees are growing within the maintained lawn, including eastern white pine (*Pinus strobus*, FACU) and choke cherry (*Prunus virginiana*, FACU).

The open field vegetative community is represented by Sample Plot 6 and includes reed canary grass (*Phalaris arundinacea*, FACW), orchard grass, Canadian thistle, and Kentucky bluegrass within the herbaceous layer.

# 4.2 WETLANDS

Six wetlands were identified and delineated within the project area. The onsite portions of these wetlands consist of palustrine emergent (PEM) and palustrine forested (PFO) vegetative communities. The delineated wetlands have been categorized using the Ohio Rapid Assessment Method for Wetlands v.5.0 (ORAM); scoring forms are included



<sup>\*\*</sup> PEM=Palustrine Emergent, PFO=Palustrine Forested

in Appendix D. Wetland results are given in Table 8 and are briefly described in the following section. Wetland size has been determined for areas within the project area. Wetlands are illustrated on Figure 5 (Appendix A).

Table 8. Wetland Results within the Project Area.

Wetland	Photo*	Cowardin Classification	ORAM Score	ORAM Category	Size within Project Area (acres)	Length of Wetland Crossing (feet)
W-1	9	PEM	10	1	0.041	41
W-2	10	PEM	11	1	0.020	30
W-3	11	PEM	10	1	0.018	60
W-4	12	12 PEM 31 1	24	1 or 2 gray	0.049	112
VV- <del>4</del>			zone	0.021	89	
W-5	13	PEM	11	1	0.025	58
W-6	4.4	PEM	25.5	Modified 2	0.342	254
VV-0	14	PFO 35.5 Mod		Modified 2	0.022	66
		0.538	710			

\*photos are located in Appendix B

W-1, W-2, W-3, and W-5 are entirely dominated by PEM vegetation. W-4 and W-6 have a PEM component. These wetlands are represented by Sample Plots 2, 4, and 8. Vegetation growing within the herbaceous layer of onsite PEM wetlands includes reed canary grass (*Phalaris arundinacea*, FACW), black bent (*Agrostis gigantea*, FACW), Japanese bristlegrass (*Setaria faberi*, UPL), giant ironweed (*Veronia gigantea*, FAC), fox sedge (*Carex vulpinoidea*, OBL), milkweed species (*Asclepias* sp., ND), common boneset (*Eupatorium perfoliatum*, FACW), farewell-summer (*Symphyotirchum lateriflorum*, FAC), creeping jenny (*Lysimachia nummularia*, FACW), and white vervain (*Verbena urticifolia*, FAC). Although not dominant, woody species were growing within PEM wetlands. These include American elm (*Ulmus americana*, FACW), rambler rose (*Rosa multiflora*, FACU), and silky dogwood (*Cornus amomum*, FACW) in the shrub layer and green ash (*Fraxinus pennsylvanica*, FACW), red maple (*Acer rubrum*, FAC), silver maple (*Acer saccharinum*, FACW), and black cherry (*Prunus serotina*, FACU) in the tree layer.

W-4 and W-6 have a PFO component represented by Sample Plots 3 and 7. The tree layer of the PFO wetlands is dominated by swamp white oak (*Quercus bicolor*, FACW), pin oak (*Quercus palustris*, FACW), silver maple, and green ash. Growing in the sapling/shrub layer is green ash, silky dogwood, and Tatarian honeysuckle (*Lonicera*)



*tatarica*, FACU). Vegetation growing in the herbaceous layer of PFO wetlands includes rough avens (*Geum laciniatum*, FACW), jumpseed (*Persicaria virginiana*, FAC), eastern poison ivy (*Toxicodendron radicans*, FAC), and American red raspberry (*Rubus idaeus*, FACU).

W-1, W-2, W-3, and W-5 assessed within the range of Category 1 wetlands using the ORAM scoring method. W-1 and W-5 assessed low due to extensive invasive species, poor habitat development, and narrow buffers. W-2 and W-3 assessed low due to recent substrate and hydrologic disturbance, narrow buffers, and high intensity of surrounding land use. W-4 and W-6 assessed within the range of 1 or 2 gray zone and Modified Category 2 wetlands respectively. These wetlands have sparse amounts of invasive species, moderately good to poor habitat development, and narrow buffers.

#### 4.3 Streams and Rivers

One intermittent stream was identified and delineated within the project area. The results are depicted in Table 9 and illustrated on Figure 5 (Appendix A). This stream has been assessed using the Headwater Habitat Evaluation Index (HHEI); the scoring form is included in Appendix E.

Table 9. Stream Results within the Project Area.

Stream	Photos*	Туре	OHWM Width (feet)	Depth at Time of Survey (inch)	Length Within Project Area (linear feet)	Area Within Project Area (acres)	HHEI Score
S-1	15-17	Intermittent	1	1	10	0.001	19
		10	0.001				

<sup>\*</sup>photos are located in Appendix B

S-1 is flowing east and then north into an offsite wetland/pond complex. This stream assessed within the range for a Modified Class I Primary Headwater Habitat (PHWH) stream using the HHEI scoring method.

#### 4.4 Ponds and Lakes

No ponds or lakes are present within the project area.



## 5.0 REGULATORY JURISDICTION

The streams, wetlands and deepwater habitats described in this document are under the jurisdiction either of the U.S. Army Corps of Engineers or the Ohio EPA. No filling may occur in these areas without their written permission. Please contact the Ohio EPA Division of Surface Water at (614) 644-2001 or the Huntington District, U.S. Army Corps of Engineers, at (304) 399-5210 before working in these areas.

The following information is excepted and summarized from the 2007 *U.S. Army Corps Of Engineers Jurisdictional Determination Form Instructional Guidebook.* 

"In 2001, the ... U.S. Supreme Court's decision in the *Solid Waste Agency of Northern Cook County (SWANCC) v. Corps* held that isolated, intrastate, non-navigable waters could not be regulated under the CWA based solely on the presence of migratory birds. Following the SWANCC decision it generally was believed that a water body (including a wetland) was subject to CWA jurisdiction if the water body was part of the U.S. territorial seas, or a traditional navigable water, or any tributary to a traditional navigable water, or a wetland adjacent to any one of the above. In addition, isolated wetlands and other waters might be considered jurisdictional where they had the necessary link to either navigable waters or interstate commerce."

In the state of Ohio, the Ohio EPA isolated wetland permitting program was legislatively created in response to the 2001 SWANC decision. On July 17, 2001, House Bill 231 was signed into law, establishing a permanent permitting process for isolated wetlands. The provisions of House Bill 231 were incorporated in Sections 6111.021 through 6111.029 of the Ohio Revised Code.

"In 2006, the Supreme Court once again addressed the jurisdictional scope of Section 404 of the CWA, specifically the term "the waters of the U.S.," in *Rapanos v. U.S.* and in *Carabell v. U.S.* (hereafter referred to as Rapanos).

The decision provides two new analytical standards for determining whether water bodies that are not traditional navigable waters (TNWs), including wetlands adjacent to those non-TNWs, are subject to CWA jurisdiction: (1) if the water body is relatively permanent, or if the water body is a wetland that directly abuts (e.g., the wetland is not separated from the tributary by uplands, a berm, dike, or similar feature) a relatively permanent water body (RPW), or (2) if a water body, in combination with all wetlands adjacent to that water body, has a significant nexus with TNWs. CWA jurisdiction over TNWs and their adjacent wetlands was not in question in this case, and, therefore, was not affected by the Rapanos decision. In addition, at least five of the Justices in Rapanos agreed that CWA jurisdiction exists over all TNWs and over all wetlands adjacent to TNWs.

The Memo states that the [Corps and USEPA] will assert jurisdiction over the following categories of water bodies: TNWs; all wetlands adjacent to TNWs; non-navigable tributaries of TNWs that are relatively permanent (i.e., tributaries that typically flow year-round or have continuous flow at least seasonally); and wetlands that directly abut such tributaries. In addition, the agencies will assert jurisdiction over every water body that is not an RPW if that water body is determined (on the basis of a fact-specific analysis) to have a significant nexus with a TNW. The classes of water body that are subject to CWA jurisdiction only if such a significant nexus is demonstrated are: non-navigable tributaries



that do not typically flow year-round or have continuous flow at least seasonally; wetlands adjacent to such tributaries; and wetlands adjacent to but that do not directly abut a relatively permanent, non-navigable tributary. A significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or an insubstantial effect on the chemical, physical, and/or biological, integrity of a TNW. Principal considerations when evaluating significant nexus include the volume, duration, and frequency of the flow of water in the tributary and the proximity of the tributary to a TNW, plus the hydrologic, ecologic, and other functions performed by the tributary and all of its adjacent wetlands."

#### 6.0 ASSUMPTIONS AND DISCLAIMERS

The constant influence of human activity on the project area can result in a rapid change of ecological boundaries. Over time, natural succession and changes in hydrology can also affect their boundaries. Precision of GPS collected data is subject to variation caused by canopy cover, atmospheric interference and satellite configuration. Because slight inaccuracies are possible, all acreages and derived boundaries presented in this report are approximate.

The results and conclusions contained in this report apply to the year and date in which the data were collected. This report is not considered officially valid until it is approved by the Corps. The report is then valid for a period of five years. Refer to the Corps' Regulatory Guidance Letter # 94-1 (23 May 1994).



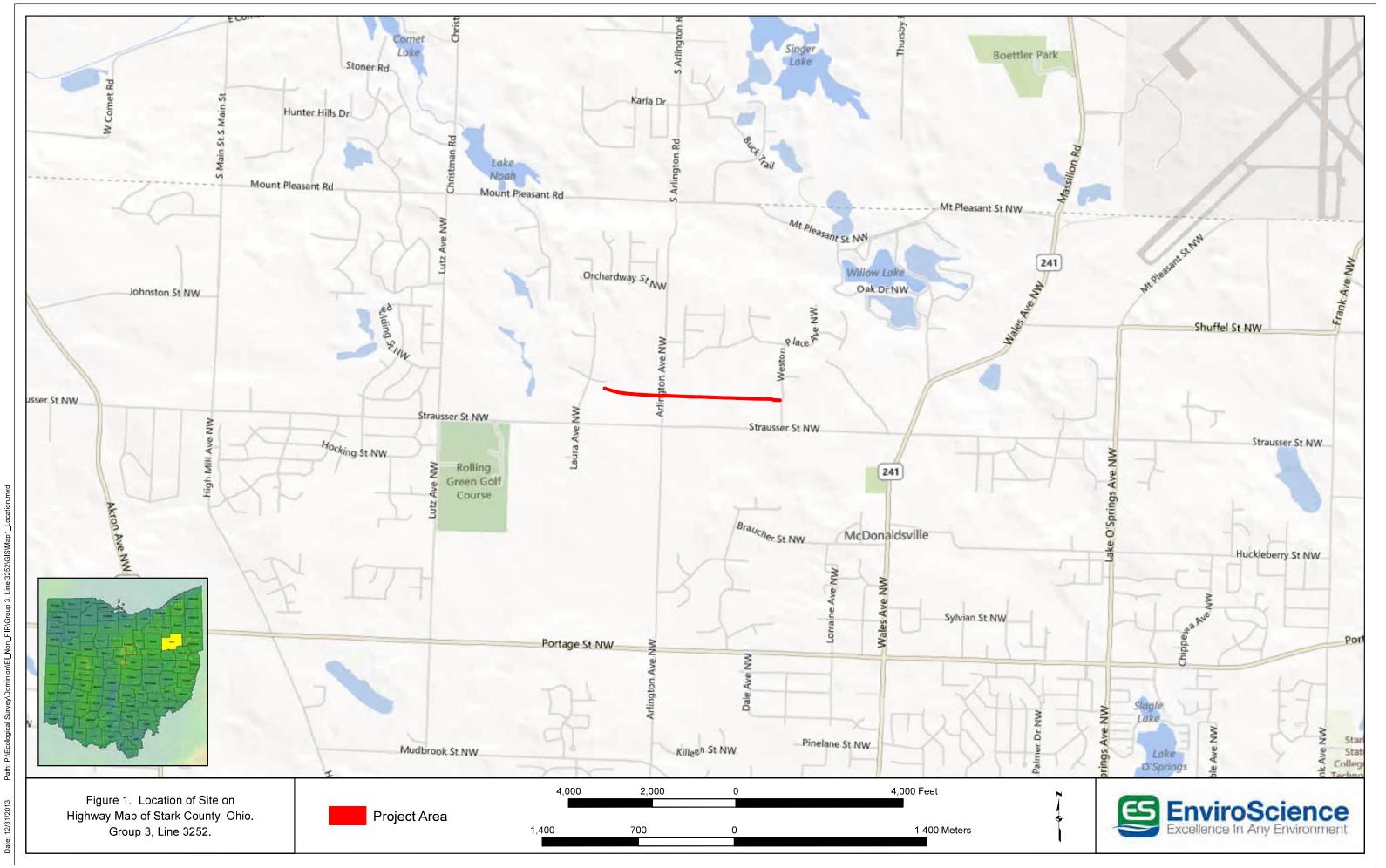
#### REFERENCES

- Anderson, D.M. 1982. *Plant Communities of Ohio: A Preliminary Classification and Description.* Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Columbus, Ohio.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classifications of Wetlands and Deepwater Habitats of the United States*. FWS/OBS-79/31. U.S. Department of Interior, Fish and Wildlife Service, Office of Biological Services, Washington, D.C.
- Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual.* Technical Report Y-87-1. US Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.
- Lichvar, R.W. 2012. The National Plant List. Technical Report ERDC/CRREL TR-12-11. Cold Regions Research and Engineering Laboratory, U.S. Army Engineer Research and Development Center, Hanover, NH.
- Mack, J.J. 2000. *ORAM v. 5.0 Quantitative Score Calibration*. Ohio Environmental Protection Agency, Division of Surface Water, Wetland Ecology Unit, Columbus, Ohio.
- Mack, J.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.
- Munsell Color. 2009. Munsell Soil Color Charts (Rev. ed.). Grand Rapids, Michigan.
- Ohio Department of Natural Resources, Division of Wildlife Website. 2012. http://www.dnr.state.oh.us/Home/species\_a\_to\_z/SpeciesGuideIndex/tabid/6491/Default.aspx
- Ohio Department of Natural Resources, Division of Natural Areas and Preserves Website. 2012. http://ohiodnr.com/Home/Rare\_Plants/RareNativeOhioPlants/tabid/22557/Default.aspx
- Rapanos vs. United States; June Carabell, et al., Petitioners vs. United States Army Corps of Engineers.547 U.S. 715. 2006.
- Solid Waste Agency of Northern Cook County vs. U.S. Army Corps of Engineers.531 U.S. 159. 2001.
- U.S. Army Corps of Engineers. 1994. Regulatory Guidance Letter 94-01. Expiration of Geographic Jurisdictional Determinations.
- U.S. Army Corps of Engineers. 2012. Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Northcentral and Northeast Region (version 2.0). Technical Report ERDC/EL TR-12-1. US Army Engineer Research and Development Center, Vicksburg, Mississippi.
- U.S. Army Corps of Engineers and U.S. Environmental Protection Agency. 2007. U.S.Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook. Washington, D.C.
- U.S. Department of Agriculture. 2012. Web Soil Survey. USDA. Natural Resource Conservation Service. http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm.
- U.S. Fish and Wildlife Service. 2010. Wetlands Mapper Documentation and Instructions Manual. U.S. Fish and Wildlife Service, Division of Habitat and Resource Conservation, Branch of Resource and Mapping Support, National Standards and Support Team, Madison, WI 53711-1061.
- Visual Color Systems. 2004. The Globe Soil Color Book. Mountaindale, New York
- Woods, A.J., J.M. Omernick, C.S. Brockman, T.D. Gerber, W.D. Hosteter and S.H. Azevedo. 1998. *Ecoregions of Indiana and Ohio*. U.S. Geological Survey, Denver, Colorado.



Appendix A:

**Figures** 



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Case No(s). 14-2272-GA-BNR

Summary: Correspondence of Dominion East Ohio Gas Company Submitting Supplemental Information - Part 1 of 2 electronically filed by Teresa Orahood on behalf of Sally Bloomfield