

[WPAA005_UDP_002E] facing east



[WPAA005_UDP_003W] facing west

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: AEP - Allen Station	City/County: Paulding	Sampling Date: 7/15/15
Applicant/Owner: <u>AEP</u>	State: <u>C</u>	OH Sampling Point: WPAA004_WDP
Investigator(s): SCI Engineering, Inc.	Section, Township, Range: <u>30, 1N, R1</u>	E
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, none): <u>Conc</u>	:ave Slope (%):
Subregion (LRR or MLRA): LRR L, MLRA 99 Lat: 4	1.01800472 Long: -84.6765431	2 Datum: NAD83
Soil Map Unit Name: Hoytville silty clay	NWI	classification: N/A
Are climatic / bydrologic conditions on the site typical for the	his time of year? Yes No X (If no expl	ain in Remarks)
Are Vegetation Y Soil Y or Hydrology N	cignificantly disturbed?	and in reconditions,
Are Vegetation, Soll, or Hydrology	Are Normal Circumsta	
Are vegetation, Soll, or Hydrology	naturally problematic? (If needed, explain any	answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	o showing sampling point locations, tran	sects, important features, etc.
Hydrophytic Vegetation Present? Ves X	No. Is the Sampled Area	
Hydrophylic Vegetation reserve res	No within a Wetland? Yes	s <u>×</u> No
Wetland Hydrology Present? Yes X	No If ves. optional Wetland Site ID:	
Remarks: (Explain alternative procedures here or in a su	eparate report.)	
Wetland is located in a depression in a	a corn field Corn growth is sparse	Some small specimens of
vellow fortail present. The entire field	is wet and has little relief. This field	t may have been planted
Jeter on the earn is short on the high of	s wet and has little relief. This lief	aturbed by forming
later, as the corn is short on the high s	spots as well. Vegetation and soll of	sturbed by farming.
HYDROLOGY		
Wetland Hydrology Indicators:	Secondar	y Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check al	I that apply) ✓ Surfa	ace Soil Cracks (B6)
✓ Surface Water (A1) Wa	ater-Stained Leaves (B9) Drain	age Patterns (B10)
✓ High Water Table (A2) Ac	uatic Fauna (B13) Moss	; Trim Lines (B16)
✓ Saturation (A3) Ma	arl Deposits (B15) Dry-S	Season Water Table (C2)
Water Marks (B1) Hy	rdrogen Sulfide Odor (C1) Crayf	fish Burrows (C8)
Sediment Deposits (B2) O>	idized Rhizospheres on Living Roots (C3) Satur	ration Visible on Aerial Imagery (C9)
Drift Deposits (B3) Pr	esence of Reduced Iron (C4) Stunt	ed or Stressed Plants (D1)
Algal Mat or Crust (B4) Re	ecent Iron Reduction in Tilled Soils (C6) 🧹 Geon	norphic Position (D2)
Iron Deposits (B5) Th	in Muck Surface (C7) Shall	ow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Ot	her (Explain in Remarks) Micro	otopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-	Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes X No D	epth (inches): 1	
Water Table Present? Yes X No D	epth (inches): surface	
Saturation Present? Yes X No D	epth (inches): surface Wetland Hydrology	Present? Yes X No
(includes capillary fringe)	······································	
Describe Recorded Data (stream gauge, monitoring well	, aerial photos, previous inspections), if available:	
Remarks:		

Sampling Point: WPAA004_WDP

Tree Stratum (Distaire)	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)	<u>% Cover</u>	<u>Species</u> ?	Status	Number of Dominant Species
1			·	That Are OBL, FACW, or FAC: (A)
2			·	Total Number of Dominant
3			·	Species Across All Strata: <u>2</u> (B)
4				Percent of Dominant Species
5			·	That Are OBL, FACW, or FAC: 50.0% (A/B)
6.				Browslands Index workshoot
7	_			Tetal % Cover of: Multiply by:
·		- Total Ca		
			vei	
Sapling/Shrub Stratum (Plot size:)				FAC species 5 x 3 = 15
1			·	FACIL species x4 =
2			·	$\frac{1100 \text{ species}}{5} \qquad x_5 = \frac{25}{25}$
3				Column Totals: 10 (A) 40 (B)
4			·	
5.				Prevalence Index = $B/A = 4.0$
6				Hydrophytic Vegetation Indicators:
7			·	1 - Rapid Test for Hydrophytic Vegetation
/:			·	2 - Dominance Test is >50%
E'		= Total Co	ver	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: 5)	_			4 - Morphological Adaptations ¹ (Provide supporting
1. Zea mays	5	Yes	UPL	data in Remarks or on a separate sheet)
2. Setaria pumila	5	Yes	FAC	✓ Problematic Hydrophytic Vegetation ¹ (Explain)
3				1
4.				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5				
6			·	Definitions of Vegetation Strata:
			·	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
/			·	at breast height (DBH), regardless of height.
8			·	Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12				Woody vines – All woody vines greater than 3.28 ft in
	10	= Total Co	ver	height.
Woody Vine Stratum (Plot size:				
(1 101 0120)				
			·	
2			·	
3			·	Hydrophytic
4				Present? Yes No X
		= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			
001N, 002E, 003W				

Deptil	Motrix		Pod	ov Egotur	20			
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks
0-3	10YR 3/2	100					sic	
3-6	10YR 3/2	100					С	
6-14	10YR 3/2	95	10YR 5/6	5	С	Μ	С	
14-22	10YR 3/2	70	10YR 5/8	30	С	Μ	С	
¹ Type: C=C	oncentration, D=De	pletion, RI	/I=Reduced Matrix, M	IS=Maske	d Sand Gr	ains.	² Location:	PL=Pore Lining, M=Matrix.
Histoso — Histic E Black H Hydroge Stratifie Deplete — Thick D — Sandy M — Sandy G — Sandy F Stripped Dark Su	I (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surfa ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R,	ice (A11) MLRA 14	 Polyvalue Belo MLRA 149B Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri ✓ Redox Dark Su Depleted Dark Redox Depres 	ow Surface 3) ace (S9) (Mineral (F Matrix (F: x (F3) urface (F6 Surface (sions (F8)	e (S8) (LR (LRR R, M ⊡1) (LRR k 2)) F7)	R R, LRA 149B) (, L)	2 cm Mu Coast P 5 cm Mu Polyvalu Thin Da Iron-Mai Piedmoi Mesic S Red Par Very Sh Other (E	uck (A10) (LRR K, L, MLRA 149B) rairie Redox (A16) (LRR K, L, R) ucky Peat or Peat (S3) (LRR K, L, R) rface (S7) (LRR K, L) ue Below Surface (S8) (LRR K, L) rk Surface (S9) (LRR K, L) nganese Masses (F12) (LRR K, L, R) nt Floodplain Soils (F19) (MLRA 149B) podic (TA6) (MLRA 144A, 145, 149B) rent Material (F21) allow Dark Surface (TF12) Explain in Remarks)
³ Indicators c Restrictive	of hydrophytic veget Laver (if observed	ation and v	vetland hydrology mu	st be pres	sent, unles	s disturbed	or problematic.	
Type:		,-						
Depth (in	ches):						Hydric Soil F	Present? Yes $\frac{X}{No}$ No
Remarks:								

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: AEP - Allen Station	City/County: Paulding	_ Sampling Date: 7/15/15
Applicant/Owner: AEP	State: OH	Sampling Point: WPAA004_UDP
Investigator(s): SCI Engineering, Inc.	_ Section, Township, Range: S30 T1N R1E	
Landform (hillslope, terrace, etc.): Flats	_ocal relief (concave, convex, none): <u>None</u>	Slope (%): <u>1</u>
Subregion (LRR or MLRA): LRR L, MLRA 99 Lat: 41.018004	72 Long: <u>-84.67654312</u>	Datum: NAD83
Soil Map Unit Name: Hoytville silty clay	NWI classifi	cation: N/A
Are climatic / hydrologic conditions on the site typical for this time of Are Vegetation \underline{Y} , Soil \underline{Y} , or Hydrology \underline{N} significant	year? Yes No X (If no, explain in F tly disturbed? Are "Normal Circumstances"	Remarks.) present? Yes No <u>X</u>
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally	problematic? (If needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	ng sampling point locations, transects	s, important features, etc.
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes No X	Is the Sampled Area within a Wetland? Yes	No <u>X</u>
Wetland Hydrology Present? Yes No X	_ If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures here or in a separate rep	port.)	
Upland point is on a higher spot in the field up considered disturbed due to active farming.	nder the existing power lines. Veg	jetation and soils

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living	Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled S	bils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes <u>No X</u> Depth (inches): <u>N/A</u>	
Water Table Present? Yes No X Depth (inches): >21	
Saturation Present? Yes No X Depth (inches): >21	Wetland Hydrology Present? Yes No $\frac{X}{2}$
(includes capillary fringe)	tiona) if available:
Describe Recorded Data (stream gauge, morntoning well, aenai photos, previous inspec	uons), ii available.
Remarks:	

Sampling Point: WPAA004_UDP

	Absolute	Dominant	Indicator	Dominance Test worksheet:
I ree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1		·	·	That Are OBL, FACW, or FAC: (A)
2		·		Total Number of Dominant
3				Species Across All Strata: <u>1</u> (B)
4				Percent of Dominant Species
		·		That Are OBL, FACW, or FAC: 0.00% (A/B)
o		·	·	
6		·	·	Prevalence Index worksheet:
7		·		Total % Cover of: Multiply by:
		= Total Co	ver	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)				FACW species x 2 =
1				FAC species x 3 =
		·		FACU species x 4 =
2		·		UPL species 10 x 5 = 50
3			·	Column Totals: 10 (A) 50 (B)
4				
5.				Prevalence Index = $B/A = 5.0$
6				Hydrophytic Vegetation Indicators:
0		·	·	1 - Rapid Test for Hydrophytic Vegetation
7		·		2 - Dominance Test is >50%
		= Total Co	ver	$\frac{2}{2} = \frac{2}{2} = \frac{1}{2} = \frac{1}{2}$
Herb Stratum (Plot size: 5')				5 - Prevalence index is >5.0
_{1.} Zea mays	10	Yes	UPL	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				The Product of the data and the data data to the second second
4.				be present unless disturbed or problematic
5				
		·	·	Definitions of Vegetation Strata:
b		·	·	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7		·	·	at breast height (DBH), regardless of height.
8		·		Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10.				Herb – All berbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
···		·		Weedy vince All weedy vince greater than 2.29 ft in
12	40	·	·	height.
	10	= Total Co	ver	
Woody Vine Stratum (Plot size:)				
1	_			
2				
2		·		
3		·	·	Hydrophytic Vegetation
4		·	·	Present? Yes No $\frac{X}{X}$
		= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			·
001N. 002E. 003W				

SOIL

Profile Desc	cription: (Describe	to the de	oth needed to docur	nent the	indicator	or confirm	the absence	of indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	<u>x Feature</u> %	S Type ¹	$l oc^2$	Texture	Remarks
<u>0-3</u>	10YR 3/3	100					sic	Komuno
3-9	10YR 3/3	85	5YR 4/6	15	С	Μ	С	
9-21	10YR 3/3	100				<u> </u>	С	Small gravel
						·		
		·			·	·		
		<u></u>						
¹ Type: C=C	oncentration, D=Dep	letion, RM	Reduced Matrix, MS	S=Maske	d Sand G	rains.	² Location	PI =Pore Lining, M=Matrix
Hydric Soil	Indicators:	iouori, rui					Indicators	for Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Below	w Surface	e (S8) (LR	R R,	2 cm N	Muck (A10) (LRR K, L, MLRA 149B)
Histic El Black Hi	oipedon (A2)		MLRA 149B) Thin Dark Surfa) ace (S9) (1			Coast	Prairie Redox (A16) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Mucky N	лос (00) (I Лineral (F	1) (LRR	(, L)	Dark S	Surface (S7) (LRR K, L)
Stratified	d Layers (A5)		Loamy Gleyed	Matrix (F2	2)		Polyva	alue Below Surface (S8) (LRR K, L)
Deplete Thick D	d Below Dark Surfac ark Surface (A12)	e (A11)	Depleted Matrix	(F3) Inface (F6)			Thin D	ark Surface (S9) (LRR K, L)
Sandy N	Aucky Mineral (S1)		Depleted Dark	Surface (F	, =7)		Piedm	ont Floodplain Soils (F19) (MLRA 149B)
Sandy G	Bleyed Matrix (S4)		Redox Depress	ions (F8)			Mesic	Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy F	Redox (S5)						Red P	arent Material (F21)
Dark Su	rface (S7) (LRR R, N	/ILRA 149	B)				Other	(Explain in Remarks)
³ Indicators o	f hydrophytic vegeta	tion and w	etland hydrology mus	st be pres	ent, unles	s disturbed	or problematio	2.
Restrictive	Layer (if observed):							
Type.	ches).						Hydric Soil	Present? Yes No X
Remarks:	mall gravel m	ov indi		cturbo	d Thi	o io io th		
5	mail gravel m	ay indi	caled it was di	sturbe	a. Thi	s is in tr	ie location	i of a former railroad grade.

	Ohio Rapid Assessment Method for Wetlands 10 Page Form for Wetland Categorization					
Vorsion 50	Background Information					
v el siuli 3.0	Scoring Boundary Worksheet					
	Narrative Rating	Ohio EPA, Division of Surface Water				
	Field Form Quantitative Rating	Final: February 1, 2001				
	ORAM Summary Worksheet					
	Wetland Categorization Worksheet					

Instructions

The investigator is *STRONGLY URGED* to read the Manual for Using the Ohio Rapid Assessment Method for Wetlands for further elaboration and discussion of the questions below prior to using the rating forms.

The Narrative Rating is designed to categorize a wetland or to provide alerts to the Rater based on the presence or possible presence of threatened or endangered species. The presence or proximity of such species is often an indicator of the quality and lack of disturbance of the wetland being evaluated. In addition, it is designed to categorize certain wetlands as very low quality (Category 1) or very high quality (Category 3) regardless of the wetland's score on the Quantitative Rating. In addition, the Narrative Rating also alerts the investigator that a particular wetland *may* be a Category 3 wetland, again, regardless of the wetland's score on the Quantitative Rating.

It is *VERY IMPORTANT* to properly and thoroughly answer each of the questions in the ORAM in order to properly categorize a wetland. To *properly* answer all the questions, the boundaries of the wetland being assessed must be correctly identified. Refer to Scoring Boundary worksheet and the User's Manual for a discussion of how to determine the "scoring boundaries." In some instances, the scoring boundaries may differ from the "jurisdictional boundaries."

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories. The most recent version of this document is posted on Ohio EPA's Division of Surface Water web page at: <u>http://www.epa.ohio.gov/dsw/wetlands/WetlandEcologySection.aspx</u>

Background Information

_	
Name: AEP - Allen Station	
Date: 7/15/2015	
Affiliation: SCI Engineering	
Address: 650 Pierce Boulevard, O'Fallon, IL 62269	
Phone Number: 618-624-6969	
e-mail address:	
Name of Wetland:	
Vegetation Communit(ies): Farmed Emergent	
HGM Class(es): Depressional	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
Approximately 250' south of State Route 114 and 0.6 miles east of Township Highv	vay 59.
HWY 59 A	
N State R+ 114	
1250'	
Co.6mi	
Road	
511	
Lat/Long or UTM Coordinate 41.01800472, -84.67654312	
USGS Quad Name Payne	
County Paulding	
Township 1N	
Section and Subsection 30	
Hydrologic Unit Code 4100007	
Site Visit 7/15/15	
National Wetland Inventory Map n/a	
Ohio Wetland Inventory Map n/a	
Soil Survey Hoytville Silty Clay	
Delineation report/map n/a	



Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	х	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	Х	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	Х	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	х	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	Х	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	Х	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has	YES Wetland should be evaluated for possible Category 3 status	NO 🗙 Go to Question 2
	had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland.	NO 🗙 Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland	NO 🗙 Go to Question 4
4	Significant Breeding or Concentration Area. Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland	NO 🗙 Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	NO 🗙 Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	NO 🗙 Go to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland Go to Question 8a	NO 🗙 Go to Question 8a
8a	"Old Growth Forest." Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland.	NO 🗙 Go to Question 8b

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO 🗙
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at	YES 🔲	NO 🗙
	elevation, or along a tributary to Lake Erie that is accessible to fish?	Go to Question 9b	Go to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES 🗖	NO 🗙
	partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
9c	Are Lake Erie water levels the wetland's primary hydrological influence,	YES	NO 🗙
	border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth	Go to Question 9d	Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES 🗖	NO 🗙
	vegetation communities, although non-native or disturbance tolerant		
	native species can also be present?	3 wetland is a Category	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance	YES	NO 🗙
		Wetland should be evaluated for possible Category 3 status	Go to Question 10
		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in	YES	NO 🗙
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES	NOX
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	wongomery, van wert etc.).	Rating	

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palustris	Carex cryptolepis	Calamagrostis canadensis
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var. capillacea	Carex lasiocarpa	Calamogrostis stricta
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherodes
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaumii
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellita
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwellii
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrewsii
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum		Helianthus grosseserratus
Typha angustifolia	Gentianopsis spp.	Larix laricina		Liatris spicata
Typha xglauca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadriflora
	Parnassia glauca	Schechzeria palustris		Lythrum alatum
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianum
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceum
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutans
	Salix candida	Vaccinium oxycoccos		Spartina pectinata
	Salix myricoides	Woodwardia virginica		Solidago riddellii
	Salix serissima	Xyris difformis		
	Solidago ohioensis	5 00		
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.



subtotal this page last revised 1 February 2001 jjm



	Х	None (0)	
6c.	Cove	rage of invasive plants.	Refer
to Ta	able 1	I ORAM long form for lis	t. Add

Moderately low (2)

or deduct points for coverage

Low (1)



6d. Microtopography.

Score all present using 0 to 3 scale.



mod Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp high A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

	-
0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal guality
2	Present in moderate amounts, but not of highest
	quality or in small amounts of highest quality
3	Present in moderate or greater amounts
	and of highest quality

22

End of Quantitative Rating. Complete Categorization Worksheets.

		circle		
		answer or		
		insert	Result	
		score		
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.	
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.	
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.	
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.	
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.	
	Question 6. Bogs	YES NO	If yes, Category 3.	
	Question 7. Fens	YES NO	If yes, Category 3.	
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.	
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.	
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.	
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3	
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.	
	Question 10. Oak Openings	YES NO	If yes, Category 3	
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.	
Quantitative Rating	Metric 1. Size	0		
	Metric 2. Buffers and surrounding land use	1		
	Metric 3. Hydrology	16		
	Metric 4. Habitat	3		
	Metric 5. Special Wetland Communities	0		
	Metric 6. Plant communities, interspersion, microtopography	2		
	TOTAL SCORE	22	Category based on score breakpoints 1	

ORAM Summary Worksheet

Complete Wetland Categorization Worksheet.

Choices	Circle one		Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO X	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-categorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO 🗙	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO 🗙	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO 🔲	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Vetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO 🗙	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

	Fir	nal Category	
Choose one	Category 1	Category 2	Category 3

End of Ohio Rapid Assessment Method for Wetlands.

[WPAA004_WDP_002E] facing east



[WPAA004_WDP_001N] facing north





[WPAA004_WDP_003W] facing west



[WPAA004_UDP_001N] facing north



[WPAA004_UDP_002E] facing east



[WPAA004_UDP_003W] facing west

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: AEP - Allen Station	City/County: Pau	lding	Sampling Date: 7/15/15
Applicant/Owner: AEP		State: OH	Sampling Point: WPAA003_WDP
Investigator(s): SCI Engineering, Inc.	Section, Township	, Range: 30, 1N, R1E	0.00004700030000000000000000000000000000
Landform (hillslope, terrace, etc.): Depression	Local relief (concave,	convex, none): Concave	Slope (%): 1
Subregion (LRR or MLRA). LRR L, MLRA 99	41.01785189	Long84.67321512	Datum: NAD83
Soil Map Unit Name: Hoytville silty clay		NWI classi	ification: N/A
Are climatic / hydrologic conditions on the site typical fr	or this time of year? Yes	No X (If no explain in	Remarks)
Are Vegetation Y Soil Y or Hydrology N	aignificantly disturbed?		" propert? Vec No X
Are vegetation, Soli, or Hydrology			
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answ	vers in Remarks.)
SUMMARY OF FINDINGS – Attach site m	nap showing sampling poi	nt locations, transec	ts, important features, etc.
Hydrophytic Vegetation Present? Yes X	No Is the Sam	pled Area	
Hydric Soil Present? Yes X	No within a W	etland? Yes X	No
Wetland Hydrology Present? Yes X	_ No If yes, optic	onal Wetland Site ID:	
Remarks: (Explain alternative procedures here or in	a separate report.)		
Wetland is located in a depression i	n a cornfield. Above no	ormal rainfall and re	ecent rains have kept
this area wet for an extended period	I. The entire field is we	t and has stunted o	corn. but this area is
holding more water and corn grown	is sparse. Vegetation	and soils disturbed	by farming activities
	ie opareer vegetation (by laining douvloor
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Ind	cators (minimum of two required)
Primary Indicators (minimum of one is required; chec	k all that apply)	Surface So	bil Cracks (B6)
✓ Surface Water (A1)	Water-Stained Leaves (B9)	Drainage F	Patterns (B10)
✓ High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim	Lines (B16)
✓ Saturation (A3)	Marl Deposits (B15)	Dry-Seaso	n Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish B	urrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living	Roots (C3) Saturation	Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	✓ Stunted or	Stressed Plants (D1)
✓ Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled So	oils (C6) 🗹 Geomorph	ic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow A	quitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopog	graphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		FAC-Neutr	ral Test (D5)
Field Observations:			
Surface Water Present? Yes X No	_ Depth (inches): 2		
Water Table Present? Yes X No	Depth (inches): surface		
Saturation Present? Yes X No	Depth (inches): surface	Wetland Hydrology Pres	ent? Yes X No
(includes capillary fringe)	well aerial photos, previous inspec	tions) if available:	
Describe recorded Data (stream gauge, monitoring v			
Remarks:			

Sampling Point: WPAA003_WDP

Tree Stratum (Plot size:	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1	<u></u>	000000		Number of Dominant Species
·			·	That are OBL, FACW, of FAC: (A)
2				Total Number of Dominant Species Across All Strate: 1 (B)
3	·			
4			·	Percent of Dominant Species That Are OBL_EACW_or_EAC: 0.0% (A/B)
5			·	
6			·	Prevalence Index worksheet:
7			·	Total % Cover of:Multiply by:
		= Total Co	ver	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)				FACW species x 2 =
1				FAC species x 3 =
2				FACU species $x = 25$
3			·	$\begin{array}{c} \text{OPL species} \underline{0} \qquad & \text{X } 5 = \underline{20} \\ \text{Column Totals:} 5 \qquad & \text{(A)} \underline{25} \qquad & \text{(P)} \end{array}$
4				
5.				Prevalence Index = $B/A = 5.0$
6.				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
·		Total Ca		2 - Dominance Test is >50%
List Obstance (Distributed 5)		= 1018100	ver	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:)	5	Ves	IIPI	4 - Morphological Adaptations ¹ (Provide supporting
1. <u>200 mays</u>	<u> </u>	103		data in Remarks or on a separate sheet)
2			·	
3			·	¹ Indicators of hydric soil and wetland hydrology must
4			·	be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree Weedy plants 3 in (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8			·	Sapling/shrub – Woody plants less than 3 in DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11.	-			of size, and woody plants less than 3.28 ft tall.
12				Woody vines – All woody vines greater than 3.28 ft in
	5	– Total Co	vor	height.
Woody Vine Stratum (Plot size:		- 10101 00	VCI	
l	·			
<u></u>			·	
3			·	Hydrophytic Vegetation
4			·	Present? Yes $\frac{X}{NO}$
		= Total Co	ver	
Remarks: (Include photo numbers here or on a separate s	sheet.)			
001N, 002E, 003W				

SOIL

(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks	
0-2	10YR 3/2	100	<u></u>				sic	
2-6	10YR 3/2	98	10YR 5/4	2	С	Μ	sic	
6-12	10YR 3/2	85	10YR 5/6	15	С	М	С	
12-21	10YR 4/1	70	10YR 5/8	30	С	M	С	
Type: C=C Iydric Soil	oncentration, D=De	epletion, RN	I=Reduced Matrix, M	IS=Maske	d Sand G	irains.	² Location: PL=Pore Lining, M=Ma Indicators for Problematic Hydric	atrix. Soils ³ :
 Histic E Black H Hydroge Stratifie Deplete Thick D Sandy N Sandy C Sandy F Stripped Dark Su 	pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surfa ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) Irface (S7) (LRR R,	ace (A11) , MLRA 149	MLRA 149E Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri ✓ Redox Dark Su Depleted Dark Redox Depres	B) Mineral (F Matrix (F (x (F3) urface (F6 Surface (sions (F8)	(LRR R, M 51) (LRR 2)) F7)	/ILRA 1498	 Coast Prairie Redox (A16) (LRI 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (Thin Dark Surface (S9) (LRR K Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) (MLRA 144) Red Parent Material (F21) Very Shallow Dark Surface (TF Other (Explain in Remarks) 	(LRR K, L, R) (LRR K, L, R) (LRR K, L) (LRR K, L, R) (URR K, L, R (MLRA 149 4A, 145, 149 12)
Indicators o	of hydrophytic veget	tation and w	vetland hydrology mu	ist be pres	sent, unle	ss disturbed	or problematic.	
Туре:		,						
Depth (in	ches):						Hydric Soil Present? Yes X	No

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: AEP - Allen Station	City/Co	unty: Paulding		Sampling Date: 7/	15/15
Applicant/Owner: AEP		-	State: OH	Sampling Point:	WPAA003_UDF
Investigator(s): SCI Engineering, Inc.	Section	, Township, Range:	S30 T1N R1E		
Landform (hillslope, terrace, etc.): Flats	Local relie	f (concave, convex, n	none): None	Slope	(%): 1
Subregion (LRR or MLRA): LRR L, MLRA 99 Lat: 41	.01785189	Long:		Datum:	NAD83
Soil Map Unit Name: Hoytville silty clay			NWI classifi	cation: N/A	
Are climatic / hydrologic conditions on the site typical for the Are Vegetation $\underline{Y}_{}$, Soil $\underline{Y}_{}$, or Hydrology $\underline{N}_{}$ are Vegetation $\underline{N}_{}$, Soil $\underline{N}_{}$, or Hydrology $\underline{N}_{}$ and SUMMARY OF FINDINGS – Attach site map	is time of year? Ye significantly disturb naturally problemati showing samp	s <u>No X</u> ed? Are "Norm ic? (If needed Ding point locat	_ (If no, explain in F al Circumstances" I, explain any answe ions, transects	Remarks.) present? Yes prs in Remarks.) 5, important fea	_{No_X} tures, etc.
Hydrophytic Vegetation Present? Yes N Hydric Soil Present? Yes N Wetland Hydrology Present? Yes N	No X No X No X	Is the Sampled Area within a Wetland? If yes, optional Wetla	Yes	No <u>X</u>	
Remarks: (Explain alternative procedures here or in a se Upland point is on slightly higher groun wetter areas. Vegetation and soils dist	parate report.) nd than the w turbed by farr	etland point. (ming.	Corn is short,	but taller than	n that in
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indica	ators (minimum of tw	vo required)
Primary Indicators (minimum of one is required; check all	that apply)		Surface Soil	Cracks (B6)	
Surface Water (A1) Wa	ter-Stained Leaves	(B9)	Drainage Pa	atterns (B10)	

Primary Indicators (minimum of one is required;	check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living	Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled S	oils (C6) Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes No	X Depth (inches): N/A	
Water Table Present? Yes No	X Depth (inches): >20	
Saturation Present? Yes No	X Depth (inches): >20	Wetland Hydrology Present? Yes No X
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monito	oring well, aerial photos, previous inspec	ctions), if available:
Remarks:		

Sampling Point: WPAA003_UDP

	Absolute	Dominant	Indicator	Dominance Test worksheet:
I ree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1		·	·	That Are OBL, FACW, or FAC: (A)
2		·		Total Number of Dominant
3				Species Across All Strata: 1 (B)
4				Bereast of Dominant Species
		·		That Are OBL, FACW, or FAC: 0.00% (A/B)
5		·		
6		·	·	Prevalence Index worksheet:
7		·		Total % Cover of: Multiply by:
		= Total Co	ver	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)				FACW species x 2 =
1				FAC species x 3 =
		·		FACU species x 4 =
2		·		UPL species 5 x 5 = 25
3			·	Column Totals: 5 (A) 25 (B)
4				
5.				Prevalence Index = $B/A = 5.0$
6				Hydrophytic Vegetation Indicators:
0		·	·	1 - Rapid Test for Hydrophytic Vegetation
7		·		2 - Dominance Test is >50%
		= Total Co	ver	$\frac{2}{2} = \frac{2}{2} = \frac{1}{2} = \frac{1}{2}$
Herb Stratum (Plot size: 5')				5 - Prevalence index is >5.0
_{1.} Zea mays	10	Yes	UPL	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				The discrete set in the set of th
4.				be present unless disturbed or problematic
5				
		·	·	Definitions of Vegetation Strata:
b		·	·	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7		·	·	at breast height (DBH), regardless of height.
8		·		Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10.				Herb – All berbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
···		·		Weedy vince All weedy vince greater than 2.29 ft in
12	40	·	·	height.
	10	= Total Co	ver	
Woody Vine Stratum (Plot size:)				
1	_			
2				
2		·		
3		·	·	Hydrophytic Vegetation
4		·	·	Present? Yes No $\frac{\chi}{\chi}$
		= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			·
001N. 002E. 003W				

Depth	Matrix	e to the de	Rec	lox Feature	es			uicators.)
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-3	10YR 3/3	100					sic	
3-13	10YR 3/3	100					с	
13-21	10YR 4/3	80	10YR 5/8	20	С	Μ	С	
¹ Type: C=C	Concentration, D=De	epletion, RM	/I=Reduced Matrix, N	/IS=Maske	d Sand G	Grains.	² Location: PL	=Pore Lining, M=Matrix.
Hydric Soil	Indicators:		Dehavely a Del	our Curto o	- (CO) (LI		Indicators for P	Problematic Hydric Soils":
Histic E Histic E Black H Hydrog Stratifie Deplete Sandy I Sandy I Sandy I Strippe Dark St	ipipedon (A2) ispipedon (A2) ilistic (A3) en Sulfide (A4) ed Layers (A5) ed Below Dark Surfa park Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R	ace (A11) , MLRA 14 ation and v	 Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Loamy Mucky Mineral (F1) (LRR K, L) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) 		 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R Piedmont Floodplain Soils (F19) (MLRA 149 Mesic Spodic (TA6) (MLRA 144A, 145, 149E Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) 			
Restrictive	Layer (if observed	I):	, ,,					
Type:								X
Depth (ir	nches):						Hydric Soil Pres	ent? Yes <u>No </u>
S	Soil profile ma	iy be m	ixed due to its	sampl	e loca	tion in th	ie former railr	oad bed right-of-way.

	Ohio Rapid Assessment Metho 10 Page Form for Wetland Cate	d for Wetlands egorization
Vorsion 50	Background Information	
v el siuli 3.0	Scoring Boundary Worksheet	
	Narrative Rating	Ohio EPA, Division of Surface Water
	Field Form Quantitative Rating	Final: February 1, 2001
	ORAM Summary Worksheet	
	Wetland Categorization Worksheet	

Instructions

The investigator is *STRONGLY URGED* to read the Manual for Using the Ohio Rapid Assessment Method for Wetlands for further elaboration and discussion of the questions below prior to using the rating forms.

The Narrative Rating is designed to categorize a wetland or to provide alerts to the Rater based on the presence or possible presence of threatened or endangered species. The presence or proximity of such species is often an indicator of the quality and lack of disturbance of the wetland being evaluated. In addition, it is designed to categorize certain wetlands as very low quality (Category 1) or very high quality (Category 3) regardless of the wetland's score on the Quantitative Rating. In addition, the Narrative Rating also alerts the investigator that a particular wetland *may* be a Category 3 wetland, again, regardless of the wetland's score on the Quantitative Rating.

It is *VERY IMPORTANT* to properly and thoroughly answer each of the questions in the ORAM in order to properly categorize a wetland. To *properly* answer all the questions, the boundaries of the wetland being assessed must be correctly identified. Refer to Scoring Boundary worksheet and the User's Manual for a discussion of how to determine the "scoring boundaries." In some instances, the scoring boundaries may differ from the "jurisdictional boundaries."

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories. The most recent version of this document is posted on Ohio EPA's Division of Surface Water web page at: <u>http://www.epa.ohio.gov/dsw/wetlands/WetlandEcologySection.aspx</u>

Background Information

Name: AEP - Allen Station	
Date: 7/15/2015	
Affiliation: SCI Engineering	
Address: 650 Pierce Boulevard, O'Fallon, IL 62269	
Phone Number: 618-624-6969	
e-mail address:	
Name of Wetland:	
Vegetation Communit(ies): PEMf	
HGM Class(es): Depressional	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
Approximately 400' south of State Route 114 and approximately 700' west of Roa	ad 71
Lat/Long or UTM Coordinate 41.01785189, -84.67321512	
USGS Quad Name Payne	
County Paulding	
Township 1N	
Section and Subsection 30	
Hydrologic Unit Code 4100007	
Site Visit 7/15/15	
National Wetland Inventory Map n/a	
Ohio Wetland Inventory Map n/a	
Soil Survey Hoytville Silty Clay	
Delineation report/map n/a	

Name of Wetland: //PAA003		
Wetland Size (acres, hectares): 0.3 acres		
Sketch: Include north arrow, relationship with other su	rface waters, vegetation zones, etc.	L
Л		
	CORN A A NPAA 003	
Comments, Narrative Discussion, Justification of Cate	gory Changes:	
Farmed wetland in a depression within a corn fiestunted, but this area is wetter and is a pronound	eld. The majority of the entire fie ced depression. Corn growth he	eld is wet and corn is ere is more sparse.
Final score : 24	Cate	gory: 1

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	х	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	Х	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	Х	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	х	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	Х	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	Х	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has	YES Wetland should be evaluated for possible Category 3 status	NO 🗙 Go to Question 2
	had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland.	NO 🗙 Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland	NO 🗙 Go to Question 4
4	Significant Breeding or Concentration Area. Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland	NO 🗙 Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	NO 🗙 Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	NO 🗙 Go to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland Go to Question 8a	NO 🗙 Go to Question 8a
8a	"Old Growth Forest." Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland.	NO 🗙 Go to Question 8b

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	NO 🗙
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at	YES 🔲	NO 🗙
	elevation, or along a tributary to Lake Erie that is accessible to fish?	Go to Question 9b	Go to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES 🗖	NO 🗙
	partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
9c	Are Lake Erie water levels the wetland's primary hydrological influence,	YES	NO 🗙
	border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth	Go to Question 9d	Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES 🗖	NO 🗙
	vegetation communities, although non-native or disturbance tolerant		
	native species can also be present?	3 wetland is a Category	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance	YES	NO 🗙
		Wetland should be evaluated for possible Category 3 status	Go to Question 10
		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in	YES	NO 🗙
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES	NOX
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montenano, Martine, M	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	wongomery, van wert etc.).	Rating	

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palustris	Carex cryptolepis	Calamagrostis canadensis
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var. capillacea	Carex lasiocarpa	Calamogrostis stricta
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherodes
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaumii
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellita
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwellii
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrewsii
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum		Helianthus grosseserratus
Typha angustifolia	Gentianopsis spp.	Larix laricina		Liatris spicata
Typha xglauca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadriflora
	Parnassia glauca	Schechzeria palustris		Lythrum alatum
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianum
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceum
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutans
	Salix candida	Vaccinium oxycoccos		Spartina pectinata
	Salix myricoides	Woodwardia virginica		Solidago riddellii
	Salix serissima	Xyris difformis		
	Solidago ohioensis	5 00		
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.



subtotal this page last revised 1 February 2001 jjm



		Low (1)	
	Х	None (0)	
6c.	Cove	rage of invasive plants.	Refer
to Ta	able 1	I ORAM long form for lis	t. Add

Moderately low (2)

or deduct points for coverage



6d. Microtopography.

Score all present using 0 to 3 scale.



mod Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp high A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal guality
2	Present in moderate amounts, but not of highest
	quality or in small amounts of highest quality
3	Present in moderate or greater amounts
	and of highest quality

24

End of Quantitative Rating. Complete Categorization Worksheets.
		circle				
		answer or				
		insert	Result			
		score				
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.			
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.			
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.			
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.			
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.			
	Question 6. Bogs	YES NO	If yes, Category 3.			
	Question 7. Fens	YES NO	If yes, Category 3.			
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.			
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.			
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.			
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3			
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.			
	Question 10. Oak Openings	YES NO	If yes, Category 3			
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.			
Quantitative Rating	Metric 1. Size	2				
	Metric 2. Buffers and surrounding land use	1				
	Metric 3. Hydrology	16				
	Metric 4. Habitat	3				
	Metric 5. Special Wetland Communities	0				
	Metric 6. Plant communities, interspersion, microtopography	2				
	TOTAL SCORE	24	Category based on score breakpoints 1			

ORAM Summary Worksheet

Complete Wetland Categorization Worksheet.

Choices	Circle one		Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO X	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-categorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO 🗙	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO 🗙	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO 🗖	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Vetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO 🗙	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Final Category									
Choose one	Category 1	Category 2	Category 3						

End of Ohio Rapid Assessment Method for Wetlands.

[WPAA003_WDP_002E] facing east



[WPAA003_WDP_001N] facing north





[WPAA003_WDP_003W] facing west



[WPAA003_UDP_001N] facing north



[WPAA003_UDP_002E] facing east



[WPAA003_UDP_003W] facing west

Survey Description Project Name: Waterbody Name: Waterbody ID: Date: **AEP Allen Station** SPAB001 State Line Ditch 7/13/15 County: Company: Crew Member Initials: State: Photo ID(s): OH SCI Engineering ME/JM 1s, 2n, 3w Paulding Tract Number(s): Milepost Entry: Milepost Exit: Associated Wetland ID(s): 0330S-00300, 0330S-00400 N/A Survey Type: Centerline Re-Route (check one) Access Road Other: Physical Attributes Stream Classification: (check one) Perennial Connecting swale^a Ephemeral Intermittent Waterbody Type: (check one) Lake Pond: River Stream Drainage Other: (define) Ditch OHWM **OHWM Indicator:** Scouring (check all that apply) Clear line Shelving Wrested Water |Width: 9 on bank vegetation staining ft. Wrack line Bent, matted, or Litter and Abrupt plant Soil characteristic Height: 1.5 missing vegetation debris community change change ft Width of Waterbody - Water Edge to Depth of Water at Centerline: Width of Waterbody - Top of Bank to Water Edge at Centerline: Top of Bank at Centerline: (Approx.) 1.5 _{ft.} 9 _{ft.} 30 _{ft.} Sinuosity: Water velocity: Bank slope Bank height (check one) (Approx.) 10_{. ft.} **Right: Right:** Straight 80 degrees 0.01 _{fps} 10 _{ft.} Meandering Left: Left: 80 degrees Qualitative Attributes Water Appearance ✓ Other: Slightly Turbid (check one) No water Clear Turbid Sheen Surface Algal on surface scum mats Sand Bedrock Gravel Silt/clay Other: Substrate: Organic (check all that apply) 30 % 30 % 40 % % of Substrate: % % % Width of Riparian Zone: Vegetative Layers: (check all that apply) Shrubs: Trees: Herbs 20 ft. Avg. DBH of Dominants: in. in. (approx.) Dominant Bank Vegetation: Typa angustifolia, Phalaris arundinacea, Rubus ideaus Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): submerged vegetation Aquatic Organisms Observed: Northern Leopard Frogs Invasive and/or T&E Species Observed: (list) N/A Tributary is: Manipulated (check one) Natural Artificial, man-made Disturbances: (check all that apply) Livestock Manure in Waste discharge Other: waterbody access pipes Stream Quality^b: ✓ Moderate (check one) High Low

Waterbody Data Sheet

²**Connecting swales** are water features that do not meet the definition of a waterbody (not an ephemeral waterbody) in that there is not a defined bed, bank, and ordinary high water mark, however, it is a water conveyance feature that is characterized by flow volume, frequency, and duration to make it more than just an erosional feature and connects two potential waters of the U.S. and thereby may be subject to Section 404 permitting.

^b High Quality: Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Waterbody ID:

SPAB001

Waterbody Sketch Include north arrow, centerline, distance from centerline, photo locations, and survey area/corridor if applicable. 5PA13001 lude north arrow, certienine, distance north contention processing ÎN 0-9 В 1 Culve r Beans en 52 2 1/2 State Line Ditch Notes State Line Ditch flows south to north across the ROW. Majority of the stream segment has been encapsulated by a culvert for field access.



Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

Stream & Location:	State Line Ditch	SPAB001				<i>RM:</i> <u>N</u> /	A_ _ Date	<u>7 13 </u>	15
			Scorers Ful	I Name & A	ffiliation:	Mark Eldrido	e / SCI Engine	ering	rified
River Code: N/A-		STORET #: N/		0 83 - decimal °) —	<u>1 . 0177</u>	<u>1 /84</u> .	<u>80316</u>	loc	ation
1] SUBSTRATE Chec estim BEST TYPES BLDR /SLABS [10] BOULDER [9] COBBLE [8] GRAVEL [7] GRAVEL [7] BEDROCK [5] NUMBER OF BEST Comments	K ONLY Two subtrate % or note exponentiate % or note exponentiate % POOL RIFFLE 40 30 TYPES: 4 c 7 3 c	OTHER TYPE BOXE (very type present OTHER TYP HARDPAN DETRITUS DETRITUS SILT [2] CScore natu (Score natu or more [2] sludge or less [0]	S; ES POOL RIFF [4] [3] 30 [0] . [0] . [0]	FLE OI I LIMES TILLS TILLS U TILLS U HARD ARD ARD ARD ARD ARD ARD ARD	Check C RIGIN STONE [1] [1] ANDS [0] PAN [0] STONE [0] STURINE [0] E [-1] FINES [-2]	SILT	average) QUA HEAVY MODER NORMA FREE [1 EXTENS MODER	LITY [-2] ATE [-1] J Sive [-2] ATE [-1] L [0] 1]	14 14 aximum 20
2] INSTREAM COVE quality; 3-Highest quality i diameter log that is stable 0 UNDERCUT BANK 0 OVERHANGING VI 0 SHALLOWS (IN SL 0 ROOTMATS [1] Comments	R Indicate pres quality; 2-Mo n moderate or g , well developed S [1] EGETATION [1] OW WATER) [1	ence 0 to 3: 0 -Abse derate amounts, bu reater amounts (e.g d rootwad in deep / <u>0</u> <u>POOLS ></u> <u>0</u> <u>BOULDE</u>	ent; 1-Very smal it not of highest g., very large bo fast water, or de 70cm [2] 0 .DS [1] 0 .RS [1] 0	amounts or if quality or in sn ulders in deep rep, well-define OXBOWS, AQUATIC I LOGS OR 1	more commo nall amounts or fast water, id, functional BACKWATE MACROPHYT WOODY DEE	n of margin of highest , large pools. [RS [1] [IES [1] [BRIS [1] [Al AMC Check ONE (EXTENSIV MODERAT SPARSE 5- NEARLY A	DUNT Or 2 & averag E >75% [11] E 25-75% [7] -<25% [3] BSENT <5% Cover Maximum 20	(1)
3] CHANNEL MORPH SINUOSITY DEV □ HIGH [4] □ E □ MODERATE [3] □ C □ LOW [2] □ F □ NONE [1] □ F Comments □	HOLOGY Che IELOPMENT EXCELLENT [7] GOOD [5] FAIR [3] POOR [1]	ck ONE in each cat CHANNE NONE [6] RECOVERE RECOVERIN RECENT OF	egory (Or 2 & a LIZATION D [4] NG [3] & NO RECOVER	Verage) STA □ HIG □ MO ☑ LOV RY [1]	BILITY H [3] DERATE [2] V [1]			Channel Maximum 20	11
4] BANK EROSION / River right looking downstre EROSION ☐ I NONE / LITTLE [3] ☐ MODERATE [2] ☐ HEAVY / SEVERE [1] Comments	AND RIPARI RIPA B B WIDE : B B MODE B B MODE ANDR C VERY B B NONE	AN ZONE Check RIAN WIDTH > 50m [4] RATE 10-50m [3] OW 5-10m [2] NARROW < 5m [1] [0]		ategory for EAC LOOD PLA T, SWAMP [3] OR OLD FIEI ENTIAL, PARK D PASTURE [PASTURE, RO	CH BANK (O) IN QUALI D [2] NEW FIELD 1] WCROP [0]	r 2 per bank TY [1] R Indicate past 10	& average) CONSERVATI JRBAN OR IN MINING / CON predominant 00m riparian.	ON TILLAGE IDUSTRIAL [0 ISTRUCTION land use(s) <i>Riparian</i> Maximum 10	[1] 0] [0] 4
5] POOL / GLIDE AN MAXIMUM DEPTH Check ONE (ONLY!) > 1m [6] 0.7-<1m [4] 0.4-<0.7m [2] 0.2-<0.4m [1] 2 < 0.2m [0] Comments	D RIFFLE / I CHA Check O POOL WID POOL WID	RUN QUALITY NNEL WIDTH NE (Or 2 & average TH > RIFFLE WIDTH TH = RIFFLE WIDTH TH < RIFFLE WIDTH	C + [2]	Check ALL ti ENTIAL [-1] FAST [1] [1] ERATE [1] cate for reach -	ELOCITY hat apply SLOW [1] INTERSTIT INTERMIT EDDIES [1] pools and rif	TIAL [-1] TENT [-2]] <i>Tles.</i>	Recreation Primary Seconda (circle one and o	Pool / Current Maximum 12	
Indicate for func of riffle-obligate RIFFLE DEPTH BEST AREAS > 10cm [2 BEST AREAS 5-10cm [1 BEST AREAS < 5cm [metric=0 Comments	tional riffles species: RUN I] MAXIMU] MAXIMU	; Best areas m Che DEPTH R M > 50cm [2] □ S M < 50cm [1] □ M ☑ U	ust be large eck ONE (Or 2 & IFFLE / RUN TABLE (e.g., Co OD. STABLE (e.g. NSTABLE (e.g.	e enough to & average). N SUBSTRA obble, Boulde e.g., Large Gra , Fine Gravel, S	Support a ATE RIFF r) [2] avel) [1] Sand) [0]	a popula ELE / RUI D N Lu M E	tion N EMBEDD ONE [2] OW [1] ODERATE [0] KTENSIVE [-1	PRIFFLE [me DEDNESS CRIffle / Run Maximum 8	<u>tric=0]</u>
6] GRADIENT (N/A DRAINAGE AREA (ft/mi) □ VE ☑ ☑ Mo mi²) □ Hi	RY LOW - LOW [2 DDERATE [6-10] GH - VERY HIGH [-4] 10-6]	%POOI %RUN:		%GLIDE %RIFFLE		Gradient Maximum 10	7

AJ SAMPLED REACH Check ALL that apply	Comment RE: Reach consistency/ State Line Ditch flows south	s reach typical of steam?, <i>Recreatior</i> to north across the ROW.	n/Observed - Inferred, Other	✓ Sampling observations, Concerns, Acc	ess directions, etc.
METHOD STAGE BOAT 1st-sample pass- 2nd WADE HIGH L. LINE UP OTHER NORMAL DISTANCE DRY	Majority of the stream segm	ent has been encapsulated by	/ a culvert for field acce	ess.	
□ 0.5 Km □ 0.2 Km □ 0.15 Km □ 0.15 Km □ 0.12 Km □ 20-<40 cm	BJ AESTHETICS NUISANCE ALGAE INVASIVE MACROPHYTES EXCESS TURBIDITY DISCOLORATION FOAM / SCUM OIL SHEEN NUISANCE ODOR NUISANCE ODOR SLUDGE DEPOSITS CSOs/SSOs/OUTFALLS EATION AREA DEPTH POOL:] >100ft2] >3ft	DJ MAINTENANCE PUBLIC / PRIVATE / BOTH / NA ACTIVE / HISTORIC / BOTH / NA YOUNG-SUCCESSION-OLD SPRAY / SNAG / REMOVED MODIFIED / DIPPED OUT / NA LEVEED / ONE SIDED RELOCATED / CUTOFFS MOVING-BEDLOAD-STABLE ARMOURED / SLUMPS ISLANDS / SCOURED IMPOUNDED / DESICCATED FLOOD CONTROL / DRAINAGE	Circle some & COMMENT	<i>EJ ISSUES</i> WWTP / CSO / NPDES / INDUSTRY HARDENED / URBAN / DIRT&GRIME CONTAMINATED / LANDFILL BMPs-CONSTRUCTION-SEDIMENT LOGGING / IRRIGATION / COOLING BANK / EROSION / SURFACE FALSE BANK / MANURE / LAGOON WASH H ₂ 0 / TILE / H ₂ 0 TABLE ACID / MINE / QUARRY / FLOW NATURAL / WETLAND / STAGNANT PARK / GOLF / LAWN / HOME ATMOSPHERE / DATA PAUCITY	FJ MEASUREMENTS \bar{x} width \bar{x} depth max. depth \bar{x} bankfull width bankfull \bar{x} depth W/D ratio bankfull max. depth floodprone x ² width entrench. ratio Legacy Tree:

Stream Drawing:

See Waterbody Dataform



[SPAB001_001S up] facing south upstream



[SPAB001_002N down] facing north downstream



[SPAB001_003E across] facing east across bank

Waterbody Data Sheet							
Survey Description							
Project Name:	Waterbo	dy Name:			Waterbody ID:	:	Date:
AEP Allen Station	unnam	ed tributary to Di	ckerson	Ditch	SPAB002		7/14/15
State: County:	(Company:		Crew Me	mber Initials:	Photo ID(s):	
OH Paulding		SCI Engine	erina	ME/JM		1s, 2n, 3w	
Tract Number(s):	1	Wilepost Entry:	Milepost I	Exit:	Associated W	etland ID(s):	
03-30-001-00		-	-		WPAB004,	WPAB005	
Survey Type: (check one)	E I	Re-Route	Access R	load	Other:		
Physical Attributes							
Stream Classification: (check one)		ntermittent	Perennia	I	Connectin	ng swale ^a	
Waterbody Type: (check one) Lake Pond: (define)	:	River		Stream	Drainage Ditch	Other:	
OHWM OHWM Indi Width: 5	icator: apply)	Clear line		Shelving	Wrestee vegetat	d 🖌 Scour	ing Water staining
Height: 1 the mission	matted, or	Wrack		Litter and	Abrupt	plant	Soil characteristic
Width of Waterbody - Top of Bank to	Wid	th of Waterbody - W	ater Edge	to	Depth of Wat	ter at Centerline:	onango
Top of Bank at Centerline:	Wat	er Edge at Centerlin	e:		(Approx.)	1	
8 ft.		5	_ ft.			f	t.
Sinuosity: Wat (check one) (Appr	er velocity	y:	Bank h	eight		Bank slope	
✓ Straight		0.01	r		1 _{ft.}	Rigr	11: 70 degrees
Meandering		0.01 fps		Left:	1 _{ft.}	Le	ft: 70 degrees
Qualitative Attributes							
Water Appearance: (check one) No water Cle	ear 🗌 -	Furbid Sheer on sur	face	Surface scum	Algal mats	Other:	
Substrate: Bedrock Gr.	avel	Sand	Silt/clay		Organic	Other:	
% of Substrate:%	%	%	100	%	%		%
Width of Riparian Zone: Vegetative	e Layers:						
ft. Avg. DBH (approx.)	of Domin	ants:	in.	L	Shrubs:	in.	Herbs
Dominant Bank Vegetation:							
Glycine max, Seteria pumila, A	sclepias	syriaca, Poa spr).				
Aquatic Habitats (ex: submerged or emerged aq	uatic vegetatio	on, overhanging banks/roots	, leaf packs, la	irge submerge	d wood, riffles, deep	pools):	
submerged vegetation, leaf page	ck						
Aquatic Organisms Observed:							
frog							
Invasive and/or T&E Species Observed:	:						
Tributary is: (check one) Natural		Artificial, man-made	Ma	nipulated			
Disturbances: (check all that apply)		Manure in waterbody	Waste o	lischarge	Oth	ier:	
Stream Quality ^b :		Moderate	Low				

²**Connecting swales** are water features that do not meet the definition of a waterbody (not an ephemeral waterbody) in that there is not a defined bed, bank, and ordinary high water mark, however, it is a water conveyance feature that is characterized by flow volume, frequency, and duration to make it more than just an erosional feature and connects two potential waters of the U.S. and thereby may be subject to Section 404 permitting.

^b High Quality: Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

			Waterbod	y ID:
			SPABO	002
Waterbody Sketch				
Include north arrow, cente	erline, distance from centerline, pl	hoto locations, and survey are	ea/corridor if applicable.	
TN				
		A		
	P		. /	
	pears		Beens	
		'		
		A		
		A		
		' (
Notes				
Agricultural ditch th	nat separates fields. Mappe	ed per Rod Ginter. High	water level due to heavy re	ecent rain events.

ChieEPA

Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

QHEI Score: 23.5

Stream & Location: SPAB002			<i>RM:</i> <u>N</u> / <u></u>	ADate:7_/	14 15
UNT to Dickerson Ditch	Scorers	s Full Name & Affiliation	: Mark Eldridge	/ SCI Engineering	
River Code: N/A	STORET #:_ N/A		7 <u>69</u> /8 4	<u>78871</u>	Office verified location ☑
1] SUBSTRATE Check ONLY Two estimate % or not BEST TYPES BLDR /SLABS [10] BOULDER [9] COBBLE [8] GRAVEL [7] BEDROCK [5] NUMBER OF BEST TYPES: Comments	substrate TYPE BOXES; e every type present DTHER TYPES POOL HARDPAN [4] DETRITUS [3] MUCK [2] SILT [2] ARTIFICIAL [0] (Score natural substrar 4 or more [2] sludge from point 3 or less [0]	Check ORIGIN ULINESTONE [1] UTILLS [1] UTILLS [1] UNIT CANDS [0] UNIT CANDSTONE [1] UNIT CANDSTONE [2] UNIT	SILT SILT	Verage) QUALITY HEAVY [-2] MODERATE NORMAL [0] FREE [1] MODERATE MODERATE MODERATE NORMAL [0] NORMAL [0]	[-1] Substrate [-2] 3 [-1] Maximum 20
2] INSTREAM COVER Indicate p quality; 3-Highest quality in moderate diameter log that is stable, well develor 0 UNDERCUT BANKS [1] 0 OVERHANGING VEGETATION 0 SHALLOWS (IN SLOW WATER 0 ROOTMATS [1] Comments	Presence 0 to 3: 0-Absent; 1-Very -Moderate amounts, but not of hig or greater amounts (e.g., very lar ped rootwad in deep / fast water, <u>0</u> POOLS > 70cm [2] [1] 0 ROOTWADS [1] 0 BOULDERS [1]	y small amounts or if more comr ghest quality or in small amoun ge boulders in deep or fast wat , or deep, well-defined, function 0 OXBOWS, BACKWAT 0 AQUATIC MACROPH 0 LOGS OR WOODY D	non of marginal ts of highest er, large C al pools. IERS [1] IYTES [1] EBRIS [1]	AMOUN heck ONE (Or 2 & EXTENSIVE >75 MODERATE 25- SPARSE 5-<25% NEARLY ABSEN C Max	T & average) % [11] 75% [7] 6 [3] IT <5% [1]
3] CHANNEL MORPHOLOGY SINUOSITY DEVELOPME HIGH [4] EXCELLENT MODERATE [3] GOOD [5] LOW [2] FAIR [3] NONE [1] POOR [1] Comments	Check ONE in each category (<i>Or</i> INT CHANNELIZATIO [7] ☑ NONE [6] □ RECOVERED [4] □ RECOVERING [3] □ RECENT OR NO REC	2 & average) DN STABILITY U HIGH [3] MODERATE [2] :OVERY [1]	2]	Ch Max	annel imum 20
4] BANK EROSION AND RIPA River right looking downstream EROSION RI NONE / LITTLE [3] MODERATE [2] HEAVY / SEVERE [1] VE Comments	RIAN ZONE Check ONE in e PARIAN WIDTH Image: Red transform [3] DE > 50m [4] Image: Red transform [3] DERATE 10-50m [3] Image: Red transform [3] RROW 5-10m [2] Image: Red transform [3] RY NARROW < 5m [1]	ach category for <i>EACH BANK</i> (FLOOD PLAIN QUAI OREST, SWAMP [3] HRUB OR OLD FIELD [2] ESIDENTIAL, PARK, NEW FIEL ENCED PASTURE [1] PEN PASTURE, ROWCROP [(Or 2 per bank & LITY D C D [1] Indicate p past 1000	average) DNSERVATION TI RBAN OR INDUS NING / CONSTRU Dredominant land u m riparian. Rip Maxi	LLAGE [1] TRIAL [0] JCTION [0] Jarian imum 10
5] POOL / GLIDE AND RIFFLE MAXIMUM DEPTH C Check ONE (ONLY!) Chec □ > 1m [6] □ POOL V □ 0.7-<1m [4] ☑ POOL V □ 0.4-<0.7m [2] □ POOL V □ 0.2-<0.4m [1] ☑ < 0.2m [0] Comments	Image: Provide state st	CURRENT VELOCIT Check ALL that apply TORRENTIAL [-1] SLOW [1 VERY FAST [1] INTERS FAST [1] INTERM MODERATE [1] EDDIES Indicate for reach - pools and	Y ITTIAL [-1] ITTENT [-2] [1] riffles.	Recreation Po Primary Co Secondary C (circle one and comme Cu Max	Pool / 2
Indicate for functional riff of riffle-obligate species: RIFFLE DEPTH RU BEST AREAS > 10cm [2] MAXI BEST AREAS 5-10cm [1] MAXI BEST AREAS < 5cm [metric=0] Comments	Ies; Best areas must be I Check ONE (N DEPTH RIFFLE / MUM > 50cm [2] STABLE (e MUM < 50cm [1] MOD. STAB UNSTABLE	arge enough to suppor Or 2 & average). RUN SUBSTRATE RI .g., Cobble, Boulder) [2] BLE (e.g., Large Gravel) [1] E (e.g., Fine Gravel, Sand) [0]	t a population FFLE / RUN D NOI D LOV MO D EXT	ON EMBEDDEDN NE [2] N [1] DERATE [0] K TENSIVE [-1] Max	Image: State
6] GRADIENT (N/A ft/mi) ☑ DRAINAGE AREA □ (mi²) □	VERY LOW - LOW [2-4] MODERATE [6-10] HIGH - VERY HIGH [10-6]	%POOL: %RUN: 100) %GLIDE:)%RIFFLE:(Gra Max	indient 2

Comment RE: Reach consistency/ Is reach typical of steam?, Recreation/Observed - Inferred, Other/ Sampling observations, Concerns, Access directions, etc. A] SAMPLED REACH Check ALL that apply **METHOD** STAGE **BOAT** 1st -sample pass- 2nd HIGH WADE L. LINE ✓ NORMAL □ ✓ OTHER DISTANCE ō 0.5 Km **B] AESTHETICS** F] MEASUREMENTS CLARITY D] MAINTENANCE E] ISSUES Circle some & COMMENT 0.2 Km 1st --sample pass-- 2nd PUBLIC / PRIVATE BOTH NA WWTP / CSO / NPDES / INDUSTRY □ NUISANCE ALGAE 🗌 0.15 Km x width ✓ < 20 cm</p> □ INVASIVE MACROPHYTES ACTIVE / HISTORIC / BOTH / NA HARDENED / URBAN / DIRT&GRIME 0.12 Km x depth □ 20-<40 cm EXCESS TURBIDITY YOUNG-SUCCESSION-OLD **CONTAMINATED / LANDFILL** ✓ OTHER max. depth 40-70 cm SPRAY SNAG / REMOVED **BMPs-CONSTRUCTION-SEDIMENT** DISCOLORATION x bankfull width 33 □ > 70 cm/ CTB MODIFIED / DIPPED OUT / NA LOGGING (IRRIGATION) COOLING FOAM / SCUM bankfull \overline{x} depth meters **BANK / EROSION / SURFACE** □ OIL SHEEN LEVEED / ONE SIDED W/D ratio TRASH / LITTER **RELOCATED / CUTOFFS** FALSE BANK / MANURE / LAGOON CANOPY 1st_ cm bankfull max. depth □ NUISANCE ODOR MOVING-BEDLOAD-STABLE WASH H₂0 / TILE / H₂0 TABLE oass ✓ > 85%- OPEN floodprone x² width □ SLUDGE DEPOSITS **ARMOURED / SLUMPS** ACID / MINE / QUARRY / FLOW 55%-<85% 2nd cm CSOs/SSOs/OUTFALLS entrench. ratio **ISLANDS / SCOURED** NATURAL / WETLAND / STAGNANT 30%-<55% **IMPOUNDED / DESICCATED** PARK / GOLF / LAWN / HOME Legacy Tree: □ 10%-<30% AREA DEPTH **CI RECREATION** FLOOD CONTROL / DRAINAGE **ATMOSPHERE / DATA PAUCITY** *POOL*: □ >100ft² □ >3ft <10%- CLOSED</p>

Stream Drawing:

See Waterbody Dataform



[SPAB002_001S UP] facing south upstream



[SPAB002_002 N DOWN] facing north downstream



[SPAB002_003E ACROSS] facing east across bank

Waterbody [Data Sheet							
Survey Descr	ription							
Project Name:		Waterbo	ody Name:			Waterbody ID	:	Date:
AEP Allen Sta	ation	Eibling	g Ditch			SPAA002		7/14/15
State: Cour	nty:		Company:		Crew Me	mber Initials:	Photo ID(s):	
OH Pau	ulding		SCI Engine	ering	JS/ TC		001 up 002 o	down 003 across
Tract Number(s)	:		Milepost Entry:	Milepost E	xit:	Associated W	etland ID(s):	
03-30-001-00			n/a	n/a		None		
(check one)		ne	Re-Route	Access R	oad	Other:		
Physical Attri	ibutes							
Stream Classific (check one)	ation:	ral	Intermittent	Perennia		Connectin	ng swale ^a	
Waterbody Type (check one)	: Lake Po	ond: efine)	River		Stream	Drainage Ditch	Other:	
OHWM Width:	OHWM I (check all th	hat apply)	Clear line on bank		Shelving	Wrester vegetat	d Scour	ing Water staining
Height:	$_^{\text{ft.}}$ 5 \blacksquare \blacksquare Be	nt, matted, or ssing vegetat	r Wrack ion line		itter and lebris	Abrupt	plant	Soil characteristic change
Width of Waterbo	ody - Top of Bank to	Wie	dth of Waterbody - W	ater Edge	to	Depth of Wa	ter at Centerline:	
Top of Bank at C	enterline: 24 _{ft}	Wa	ter Edge at Centerlin 5	ie:		(Approx.)	1 _f	t.
Sinuosity:	n.	Nater veloci	ty:	Bank he	eight		Bank slope	
(check one)	Straight	Approx.)	-	F	light:	8.	Righ	nt: 60
			.5 _{fos}			ft.		degrees
	Meandering		ips		Left:	8 ft.	Le	ft: 45 degrees
Qualitative At	ttributes							
Water Appearane (check one)	ce:	Clear 🖌	Turbid Sheer on sur	face	Surface scum	Algal mats	Other:	
Substrate: (check all that apply)	Bedrock	Gravel	Sand	Silt/clay		Organic	Other:	
% of Substrate:	%	%	%	100	%	%		%
Width of Riparia	n Zone: Vegeta	tive Layers:				Chruba		Horbo
10	ft. Avg. D (approx.)	BH of Domi	nants:	in.	V		.5 _{in.}	√ Herbs
Dominant Bank	Vegetation: us pratensis							
Aquatic Habitats	(ex: submerged or emerge	d aquatic vegetat	tion, overhanging banks/roots	, leaf packs, la	rge submerge	d wood, riffles, deep	pools):	
In-stream v	vegetation							
Aquatic Organis (^(list) None	ms Observed:							
Invasive and/or	T&E Species Observ /ense	ved:						
Tributary is: (check one)	Natural		Artificial, man-made	🖌 Ma	nipulated			
Disturbances: (check all that apply)	Livestoc	k 🗌] Manure in	Waste d	ischarge	Vth	^{ler:} drain tile d	ischarge
Stream Quality ^b : (check one)	High	\checkmark	Moderate	Low				

²**Connecting swales** are water features that do not meet the definition of a waterbody (not an ephemeral waterbody) in that there is not a defined bed, bank, and ordinary high water mark, however, it is a water conveyance feature that is characterized by flow volume, frequency, and duration to make it more than just an erosional feature and connects two potential waters of the U.S. and thereby may be subject to Section 404 permitting.

^b High Quality: Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

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Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Waterbody ID:

SPAA002

Waterbody Sketch

Include north arrow, centerline, distance from centerline, photo locations, and survey area/corridor if applicable.





Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

Stream & Location: Eibling Ditch SPAA002 RM: N/A. Date:7 / 14 / 15 Paulding County,OH **AEP Allen Station** Scorers Full Name & Affiliation: J. Stone/ SCI Engineering Office verified location ☑ Lat./Long.: 41.01760 /84.78399 River Code: N/A-STORET #:_N/A 1] SUBSTRATE Check ONLY Two substrate TYPE BOXES: Check ONE (Or 2 & average) estimate % or note every type present OTHER TYPES POOL RIFFLE **BEST TYPES** ORIGIN QUALITY POOL RIFFLE LIMESTONE [1] HEAVY [-2] 🗌 🗌 HARDPAN [4] BLDR /SLABS [10] TILLS [1] DETRITUS [3] MODERATE [-1] Substrate **BOULDER** [9] SILT WETLANDS [0] COBBLE [8] NORMAL [0] **MUCK** [2] HARDPAN [0] GRAVEL [7] 🗸 🗸 SILT [2] FREE [1] -1 ✓ EXTENSIVE [-2] SANDSTONE [0] SAND [6] ARTIFICIAL [0] RIP/RAP [0] MODERATE [-1] BEDROCK [5] (Score natural substrates; ignore Maximum NUMBER OF BEST TYPES: 4 or more [2] sludge from point-sources) 20 SHALE [-1] ✓ 3 or less [0] Comments COAL FINES [-2] 2] INSTREAM COVER Indicate presence 0 to 3: 0-Absent; 1-Very small amounts or if more common of marginal AMOUNT quality; 2-Moderate amounts, but not of highest quality or in small amounts of highest quality; 3-Highest quality in moderate or greater amounts (e.g., very large boulders in deep or fast water, large diameter log that is stable, well developed rootwad in deep / fast water, or deep, well-defined, functional pools. Check ONE (Or 2 & average) EXTENSIVE >75% [11] 0 **UNDERCUT BANKS [1]** 0 POOLS > 70cm [2] _0 **OXBOWS, BACKWATERS [1]** MODERATE 25-75% [7] 1 **OVERHANGING VEGETATION** [1] 0 **ROOTWADS** [1] 0 **AQUATIC MACROPHYTES [1]** SPARSE 5-<25% [3] SHALLOWS (IN SLOW WATER) [1] 0 0 ☑ NEARLY ABSENT <5% [1]</p> **BOULDERS** [1] 0 LOGS OR WOODY DEBRIS [1] **ROOTMATS** [1] 0 Cover Comments Maximum 2 20 3] CHANNEL MORPHOLOGY Check ONE in each category (Or 2 & average) SINUOSITY DEVELOPMENT **CHANNELIZATION** STABILITY EXCELLENT [7] **NONE [6]** HIGH [3] MODERATE [3] GOOD [5] \Box **RECOVERED** [4] $\overline{}$ MODERATE [2] LOW [2] **FAIR** [3] RECOVERING [3] LOW [1] Channel ✓ NONE [1] POOR [1] RECENT OR NO RECOVERY [1] Maximum Comments 20 4] BANK EROSION AND RIPARIAN ZONE Check ONE in each category for EACH BANK (Or 2 per bank & average) River right looking downstream **RIPARIAN WIDTH** FLOOD PLAIN QUALITY EROSION 🔲 🗋 WIDE > 50m [4] FOREST, SWAMP [3] CONSERVATION TILLAGE [1] 🖸 🖸 NONE / LITTLE [3] URBAN OR INDUSTRIAL [0] **MODERATE 10-50m [3]** □ □ SHRUB OR OLD FIELD [2] ☐ ☐ MODERATE [2] □ □ NARROW 5-10m [2] □ □ HEAVY / SEVERE [1] ☑ ☑ VERY NARROW < 5m [1] FENCED PASTURE [1] Indicate predominant land use(s) □ □ NONE [0] OPEN PASTURE, ROWCROP [0] past 100m riparian. Riparian Δ Comments Maximum 10 5] POOL / GLIDE AND RIFFLE / RUN QUALITY Recreation Potential MAXIMUM DEPTH **CHANNEL WIDTH CURRENT VELOCITY** Check ONE (ONLY!) Check ONE (Or 2 & average) Check ALL that apply Primary Contact POOL WIDTH > RIFFLE WIDTH [2] □ TORRENTIAL [-1] □ SLOW [1] 🗌 > 1m [6] Secondary Contact 0.7-<1m [4] ✓ POOL WIDTH = RIFFLE WIDTH [1] VERY FAST [1] INTERSTITIAL [-1] (circle one and comment on back) FAST [1] 0.4-<0.7m [2] □ POOL WIDTH < RIFFLE WIDTH [0] INTERMITTENT [-2] MODERATE [1] EDDIES [1] ✓ 0.2-<0.4m [1] Pool / □ < 0.2m [0] Indicate for reach - pools and riffles. Current 3 Maximum Comments 12 Indicate for functional riffles; Best areas must be large enough to support a population ✓ NO RIFFLE [metric=0] of riffle-obligate species: Check ONE (Or 2 & average). **RIFFLE DEPTH RUN DEPTH RIFFLE / RUN SUBSTRATE RIFFLE / RUN EMBEDDEDNESS** BEST AREAS > 10cm [2] MAXIMUM > 50cm [2] STABLE (e.g., Cobble, Boulder) [2] **NONE** [2] MAXIMUM < 50cm [1] MOD. STABLE (e.g., Large Gravel) [1] BEST AREAS 5-10cm [1] LOW [1] BEST AREAS < 5cm [metric=0] Riffle / UNSTABLE (e.g., Fine Gravel, Sand) [0] MODERATE [0] 0 Comments 8 6] GRADIENT (N/A VERY LOW - LOW [2-4] ft/mi) %POOL %GLIDE: Gradient 2 **MODERATE** [6-10] **DRAINAGE AREA** Maximum %RIFFLE HIGH - VERY HIGH [10-6] %RUN: 100 mi²) (10

17

QHEI Score:

AJ SAMPLED REACH Check ALL that apply	MPLED REACH Comment RE: Reach consistency/ Is reach typical of steam?, Recreation/ Observed - Inferred, Other/ Sampling observations, Concerns, Access directions, etc Unnamed ditch channelized from a stream. Uniform banks and channel, little habitat. Very turbid from overnight heavy rains.					
METHOD STAGE BOAT 1st-sample pass-2nd WADE HIGH L. LINE UP OTHER NORMAL DISTANCE DRY	Several tile discharge outlet	s. Adjacent landowner indica	ted that it flows year ro	und.		
□ 0.5 Km CLARITY □ 0.2 Km 1stsample pass 2n □ 0.15 Km ✓ 20 cm □ □ 0.12 Km ✓ 20-<40 cm	BJ AESTHETICS NUISANCE ALGAE INVASIVE MACROPHYTES EXCESS TURBIDITY DISCOLORATION FOAM / SCUM OIL SHEEN OIL SHEEN TRASH / LITTER NUISANCE ODOR NUISANCE ODOR SLUDGE DEPOSITS CSOs/SSOs/OUTFALLS EATION AREA DEPTH POOL:] >100ft2] >3ft	DJ MAINTENANCE PUBLIC / PRIVATE / BOTH / NA ACTIVE / HISTORIC / BOTH / NA YOUNG-SUCCESSION-OLD SPRAY / SNAG / REMOVED MODIFIED / DIPPED OUT / NA LEVEED / ONE SIDED RELOCATED / CUTOFFS MOVING-BEDLOAD-STABLE ARMOURED / SLUMPS ISLANDS / SCOURED IMPOUNDED / DESICCATED FLOOD CONTROL / DRAINAGE	Circle some & COMMENT	<i>EJ ISSUES</i> WWTP / CSO / NPDES / INDUSTRY HARDENED / URBAN / DIRT&GRIME CONTAMINATED / LANDFILL BMPs-CONSTRUCTION-SEDIMENT LOGGING / IRRIGATION / COOLING BANK / EROSION / SURFACE FALSE BANK / MANURE / LAGOON WASH H ₂ 0 / TILE / H ₂ 0 TABLE ACID / MINE / QUARRY / FLOW NATURAL / WETLAND / STAGNANT PARK / GOLF / LAWN / HOME ATMOSPHERE / DATA PAUCITY	FJ MEASUREMENTS \bar{x} width \bar{x} depth max. depth \bar{x} bankfull width bankfull \bar{x} depth W/D ratio bankfull max. depth floodprone x^2 width entrench. ratio Legacy Tree:	

Stream Drawing:

See waterbody dataform



[SPAA002_001S] facing south upstream



[SPAA002_002N] facing north downstream



[SPAA002_003W] facing west across bank

Waterbo	dy Data Sh	leet							
Survey D	escription								
Project Nan	ne:		Waterbo	ody Name:			Waterbody ID	:	Date:
AEP Alle	n Station		Henry	Ditch			SPAA001		7/13/15
State:	County:			Company:		Crew Me	mber Initials:	Photo ID(s):	
IN	Allen			SCI Engine	ering	JS/ TC		001 up 002 c	lown 003 across
Tract Numb	per(s):			Milepost Entry:	Milepost E	xit:	Associated W	etland ID(s):	
03-29-01	3-00, 0329S	-01901		n/a	n/a		None		
(check one)		Centerline	;	Re-Route	Access R	oad	Other:		
Physical	Attributes								
Stream Clas (check one)	ssification:	Ephemera	al 🗸	Intermittent	Perennial		Connectir	ng swale ^a	
Waterbody (check one)	Type: Lake	Pon (defir	nd: 	Rive	r 🔽	Stream	Drainage Ditch	Other:	
OHWM Width:	4	OHWM In (check all that	dicator: t apply)	Clear line on bank		Shelving	Wrester vegetat	d Scour	ing Water staining
Height:	π. .5 _{ft}	I Bent miss	t, matted, o	r Wrack line		itter and lebris	Abrupt	plant	Soil characteristic change
Width of Wa	aterbody - Top	of Bank to	Wie	dth of Waterbody - W	/ater Edge	to	Depth of Wa	ter at Centerline:	
Top of Ban	k at Centerline 30 _{ft}		Wa	iter Edge at Centerlin ह	ne: 5 _{ft.}		(Approx.)		t.
Sinuosity:		W	ater veloci	ty:	Bank he	eight		Bank slope	
(спеск опе)	🖌 Straight	(Ap	prox.)		F	light:	8 _{ft}	Righ	nt: 45
	Meande	ring	-	1 fps		Left:	1 8 ,	Le	eft: 60 .
Qualitativ	/e Attributes						π.		degrees
Water Appe	earance:							_	
(check one)	No w	vater C	Clear 🖌	Turbid Sheer on su	n rface	Surface scum	Algal mats	Other:	
Substrate: (check all that a	pply) Bedr	ock	Gravel	Sand	Silt/clay		Organic	Other:	
% of Substr	rate:	%	%	%	100	%	%		%
Width of Ri	parian Zone:	Vegetati	ve Layers:			Г	Shrube		Horbs
_	10 ft.	Avg. DB (approx.)	H of Domi	nants:	in.	L		in.	
Dominant E	Bank Vegetations s inermis	n:							
Aquatic Hal	bitats (ex: submer	ged or emerged a	aquatic vegeta	tion, overhanging banks/roots	s, leaf packs, la	rge submerge	ed wood, riffles, deep	pools):	
Aquatic Ord	anisms Obser	ved:							
^(list) None	.								
Invasive an ^(list) None	d/or T&E Spec	ies Observe	d:						
Tributary is (check one)	: [Natural		Artificial, man-made	e 🖌 Ma	nipulated			
Disturbance (check all that a)	es: pply)	Livestock access		Manure in waterbody	Waste d	ischarge	Vth	^{ler:} drain tile d	ischarge
Stream Qua (check one)	ality ^b :	High	\checkmark	Moderate	Low				

²**Connecting swales** are water features that do not meet the definition of a waterbody (not an ephemeral waterbody) in that there is not a defined bed, bank, and ordinary high water mark, however, it is a water conveyance feature that is characterized by flow volume, frequency, and duration to make it more than just an erosional feature and connects two potential waters of the U.S. and thereby may be subject to Section 404 permitting.

^b High Quality: Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Waterbody ID:

SPAA001

Waterbody Sketch





Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

QHEI Score: 17

Stream & Location: Unnamed E	Ditch SPAA001		<i>RM:</i> <u>N/A</u> .	_ Date: 7 _ / _13 _ / _15_
AEP Allen Station	Scorers	Full Name & Affiliation: J	. Stone/ SCI Engi	neering
<i>River Code:</i> <u>N/A</u>	<i>STORET #:_</i> N/ <u>A</u>	Lat./ Long.: 41 . 0176	2 /8 <u>4.77</u>	449 Office verified location ☑
1] SUBSTRATE Check ONLY Twestimate % or no BEST TYPES POOL RIF BLDR /SLABS [10] BOULDER [9] COBBLE [8] GRAVEL [7] BEDROCK [5] NUMBER OF BEST TYPES: Comments	o substrate TYPE BOXES; ote every type present FLE OTHER TYPES POOL HARDPAN [4] DETRITUS [3] DETRITUS [3] MUCK [2] SILT [2] ARTIFICIAL [0] (Score natural substrat 4 or more [2] sludge from point 3 or less [0]	Check Of ORIGIN LIMESTONE [1] ☐ TILLS [1] ☐ WETLANDS [0] ✓ ☐ HARDPAN [0] ☐ SANDSTONE [0] HACUSTURINE [0] COAL FINES [-2]		Age) QUALITY HEAVY [-2] MODERATE [-1] NORMAL [0] FREE [1] EXTENSIVE [-2] MODERATE [-1] NORMAL [0] NONE [1]
2] INSTREAM COVER Indicate quality; 3-Highest quality in moderate diameter log that is stable, well deve OUNDERCUT BANKS [1] OVERHANGING VEGETATIO OSHALLOWS (IN SLOW WATE OROOTMATS [1] Comments	presence 0 to 3: 0-Absent; 1-Very 2-Moderate amounts, but not of hig e or greater amounts (e.g., very lar loped rootwad in deep / fast water, POOLS > 70cm [2] N [1] O ROOTWADS [1] BOULDERS [1]	small amounts or if more common ghest quality or in small amounts of ge boulders in deep or fast water, or deep, well-defined, functional p OXBOWS, BACKWATER AQUATIC MACROPHYT OLOGS OR WOODY DEB	o of marginal of highest Chec bools. EX RS [1] MO ES [1] SP, RIS [1] NE	AMOUNT k ONE (0r 2 & average) TENSIVE >75% [11] DERATE 25-75% [7] ARSE 5-<25% [3] ARLY ABSENT <5% [1] Cover Maximum 20
3] CHANNEL MORPHOLOGY SINUOSITY DEVELOPM □ HIGH [4] □ EXCELLEN □ MODERATE [3] □ GOOD [5] □ LOW [2] □ FAIR [3] ☑ NONE [1] ☑ POOR [1] Comments □	Check ONE in each category (<i>Or</i> ENT CHANNELIZATIC T [7] INONE [6] RECOVERED [4] RECOVERING [3] RECENT OR NO REC	2 & average) DN STABILITY HIGH [3] MODERATE [2] LOW [1] OVERY [1]		Channel Maximum 20
4] BANK EROSION AND RIP River right looking downstream EROSION COMME / LITTLE [3] MODERATE [2] HEAVY / SEVERE [1] Comments	ARIAN ZONE Check ONE in exception of the second	ach category for EACH BANK (Or FLOOD PLAIN QUALIT DREST, SWAMP [3] HRUB OR OLD FIELD [2] ESIDENTIAL, PARK, NEW FIELD [ENCED PASTURE [1] PEN PASTURE, ROWCROP [0]	2 per bank & ave Y B CONS CONS CONS CONS CONS CONS CONS CONS	erage) ERVATION TILLAGE [1] N OR INDUSTRIAL [0] G / CONSTRUCTION [0] ominant land use(s) parian. <i>Riparian</i> Maximum 10
5] POOL / GLIDE AND RIFFL MAXIMUM DEPTH Check ONE (ONLY!) Che □ > 1m [6] □ POOL 0.7-<1m [4] ☑ POOL 0.4-<0.7m [2] □ POOL 0.2-<0.4m [1] □ < 0.2m [0] Comments	E / RUN QUALITY CHANNEL WIDTH eck ONE (Or 2 & average) WIDTH > RIFFLE WIDTH [2] WIDTH = RIFFLE WIDTH [1] WIDTH < RIFFLE WIDTH [0] U	CURRENT VELOCITY Check ALL that apply TORRENTIAL [-1] SLOW [1] VERY FAST [1] INTERSITI FAST [1] INTERSITI MODERATE [1] EDDIES [1] Indicate for reach - pools and riffi	AL [-1] ENT [-2]	creation Potential primary Contact condary Contact e one and comment on back) Pool / Current Maximum 12
Indicate for functional rif of riffle-obligate species RIFFLE DEPTH R BEST AREAS > 10cm [2] MAX BEST AREAS 5-10cm [1] MAX BEST AREAS < 5cm [metric=0] Comments	ifles; Best areas must be I Check ONE (I UN DEPTH RIFFLE / (IMUM > 50cm [2] STABLE (e. (IMUM < 50cm [1]	arge enough to support a Or 2 & average). RUN SUBSTRATE RIFF .g., Cobble, Boulder) [2] BLE (e.g., Large Gravel) [1] : (e.g., Fine Gravel, Sand) [0]	E / RUN EM	NO RIFFLE [metric=0] IBEDDEDNESS IBEDDEDNESS IBEDDEINESS IBEDDEINESS IBEDDEINESS IBEDDEINESS IBEDDEINESS
6] GRADIENT (N/A ft/mi) [DRAINAGE AREA [(mi ²) [VERY LOW - LOW [2-4] MODERATE [6-10] HIGH - VERY HIGH [10-6]	%POOL: %RUN: 100 %	%GLIDE: %RIFFLE:	Gradient Maximum 10

AJ SAMPLED REACH Check ALL that apply	Comment RE: Reach consistency/ Stream is a deep channelize	ls reach typical of steam? <i>, Recreation</i> ed ditch parallel to County Roa	n/Observed - Inferred, O <i>ther</i> ad 17. Water level is u	∕ Sampling observations, Concerns, Acc p due to recent heavy rains and	ess directions, etc. significant input from
METHOD STAGE BOAT 1st-sample pass- 2nd WADE HIGH L. LINE UP OTHER NORMAL DISTANCE DRY	drain tiles.				
□ 0.5 Km CLARITY □ 0.2 Km 1stsample pass 2n □ 0.15 Km 20 cm 1 □ 0.12 Km 20-<40 cm	BJ AESTHETICS	DJ MAINTENANCE PUBLIC / PRIVATE / BOTH / NA ACTIVE / HISTORIC / BOTH / NA YOUNG-SUCCESSION-OLD SPRAY / SNAG / REMOVED MODIFIED / DIPPED OUT / NA LEVEED / ONE SIDED RELOCATED / CUTOFFS MOVING-BEDLOAD-STABLE ARMOURED / SLUMPS ISLANDS / SCOURED IMPOUNDED / DESICCATED FLOOD CONTROL / DRAINAGE	Circle some & COMMENT	<i>EJ ISSUES</i> WWTP / CSO / NPDES / INDUSTRY HARDENED / URBAN / DIRT&GRIME CONTAMINATED / LANDFILL BMPs-CONSTRUCTION-SEDIMENT LOGGING / IRRIGATION / COOLING BANK / EROSION / SURFACE FALSE BANK / MANURE / LAGOON WASH H ₂ 0 / TILE / H ₂ 0 TABLE ACID / MINE / QUARRY / FLOW NATURAL / WETLAND / STAGNANT PARK / GOLF / LAWN / HOME ATMOSPHERE / DATA PAUCITY	FJ MEASUREMENTS \overline{x} width \overline{x} depth max. depth \overline{x} bankfull width bankfull \overline{x} depth W/D ratio bankfull max. depth floodprone x ² width entrench. ratio Legacy Tree:

Stream Drawing:

See waterbody dataform



[SPAA001_001S] facing south upstream



[SPAA001_002N] facing north downstream



[SPAA001_003W] facing west across bank

Waterbody Data Sheet							
Survey Description							
Project Name:		Waterbody Name:			Waterbody ID:		Date:
AEP Allen Station Me		Mercia Ditch			SPAB003		7/14/15
State: County:		Company:		Crew Mer	mber Initials:	Photo ID(s):	
OH Paulding		SCI Engine	ering	ME/JM		1s, 2n, 3w	
Tract Number(s):		Milepost Entry:	Milepost E	xit:	Associated W	etland ID(s):	
0328S-00500		-	-		N/A		
(check one)	e 🗌	Re-Route	Access R	oad	Other:		
Physical Attributes							
Stream Classification: (check one)	al	Intermittent	Perennia		Connectin	ng swale ^a	
(check one)	nd: ^{fine)}	River	√ €	stream	Drainage Ditch	Other:	
OHWM OHWM Ir Width: 6	ndicator: at apply)	Clear line on bank		Shelving	Wrester vegetat	d Scour	ing Water staining
Height: 1 Height:	nt, matted, or sing vegetat	ion Wrack		itter and ebris	Abrupt	plant	Soil characteristic change
Width of Waterbody - Top of Bank to	Wic	dth of Waterbody - W	ater Edge	to	Depth of Wa	ter at Centerline:	0
Top of Bank at Centerline: 20 "	Wa	ter Edge at Centerlin 6	e:		(Approx.)	1 _f	t
Sinuosity:	ater veloci		Bank he	eiaht		Bank slope	
(check one) (A	Approx.)		F	ight:	6	Righ	nt: 70
		0.01			ft.		degrees
Meandering	_	ips		Left:	6 _{ft.}	Le	ft: 70 degrees
Qualitative Attributes							
Water Appearance: (check one)	Clear 🖌	Turbid Sheen on sur	face	Surface scum	Algal mats	Other:	
Substrate: Bedrock	Gravel	Sand	Silt/clay		Organic	Other:	
% of Substrate:%	%	%	100	%	%		%
Width of Riparian Zone: Vegetat	tive Layers:						
ft. Avg. DE	BH of Domii	nants:	in.	L		in.	Herbs
Dominant Bank Vegetation:							
Typha angustifolia, Juncus et	ffusus, Ca	arex vulpinoidea, S	Schoeno	olectus a	icutus		
Aquatic Habitats (ex: submerged or emerged (<i>list</i>) submerged vegetation, overh	l aquatic vegetat	ion, overhanging banks/roots	leaf packs, la	rge submerge	d wood, riffles, deep	pools):	
Aquatic Organisms Observed:	0 0	<u> </u>					
(list) Northern Leopard frogs							
Invasive and/or T&E Species Observe	ed:						
Tributary is: (check one) Natural		Artificial, man-made	🖌 Ma	nipulated			
Disturbances: (check all that apply)		Manure in waterbody	Waste d	ischarge	Oth	ner:	
Stream Quality ^b : (check one) High		Moderate	Low				

²**Connecting swales** are water features that do not meet the definition of a waterbody (not an ephemeral waterbody) in that there is not a defined bed, bank, and ordinary high water mark, however, it is a water conveyance feature that is characterized by flow volume, frequency, and duration to make it more than just an erosional feature and connects two potential waters of the U.S. and thereby may be subject to Section 404 permitting.

^b High Quality: Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Waterbody ID:

SPAB003

Waterbody Sketch

	ustance nom centenine, pro		survey area/corric			
1n						
		SPA	Baoz			
		1				
		1				
	C_0/Λ	1		$\int dx$	^	
				01	1	
	Begns	91				
	p • • •)					
		Λ				
		· /				
Notes			1			
Ephemeral stream that	flows S to N across RO	W. High water	level due to h	eavy recent	rain events.	
		0		,		
ChicEPA						
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Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

QHEI Score: 27

Stream & Location: SPAB003	<i>RM:</i> <u>N</u> /	A_Date	7 / 14 / 15
Mercia Ditch Scorers Full Name & Affiliation:	Mark Eldrido	ie / SCI Enginee	ering
<i>River Code:</i> N/A <i>STORET #:</i> N/A <i>Lat./Long.:</i> 41.0178	<u>33</u> /8 <u>4</u> .	<u>76491</u>	Office verified location
1] SUBSTRATE Check ONLY Two substrate TYPE BOXES; estimate % or note every type present Check C BEST TYPES POOL RIFFLE OTHER TYPES ORIGIN BLDR /SLABS [10] Image: Comparison of the	SILT	average) QUAL HEAVY [MODER/ NORMAI FREE [1] EXTENS MODER/ S NORMAI	LITY -2] ATE [-1] L [0] IVE [-2] ATE [-1] L [0]] Maximum 20
2] INSTREAM COVER Indicate presence 0 to 3: 0-Absent; 1-Very small amounts or if more commo quality; 2-Moderate amounts, but not of highest quality or in small amounts quality; 3-Highest quality in moderate or greater amounts (e.g., very large boulders in deep or fast water, diameter log that is stable, well developed rootwad in deep / fast water, or deep, well-defined, functional 0 UNDERCUT BANKS [1] 0 POOLS > 70cm [2] 0 OXBOWS, BACKWATE 0 OVERHANGING VEGETATION [1] 0 BOULDERS [1] 0 AQUATIC MACROPHYT 0 BOULDERS [1] 0 COMMATS [1]	n of margina of highest , large pools. [RS [1] [IES [1] [BRIS [1] [A AMO Check ONE ((EXTENSIVE MODERATE SPARSE 5 NEARLY AE	Dr 2 & average) 5 > 75% [11] 2 > 75% [7] <25% [3]
3] CHANNEL MORPHOLOGY Check ONE in each category (Or 2 & average) SINUOSITY DEVELOPMENT CHANNELIZATION STABILITY HIGH [4] EXCELLENT [7] NONE [6] HIGH [3] MODERATE [3] GOOD [5] RECOVERED [4] MODERATE [2] LOW [2] FAIR [3] RECOVERING [3] LOW [1] NONE [1] POOR [1] RECENT OR NO RECOVERY [1]			Channel Maximum 20
4] BANK EROSION AND RIPARIAN ZONE Check ONE in each category for EACH BANK (OR River right looking downstream RIPARIAN WIDTH REROSION RIPARIAN WIDTH MIDE > 50m [4] FOREST, SWAMP [3] MODERATE [2] MODERATE 10-50m [3] HEAVY / SEVERE [1] VERY NARROW < 5m [1]	r 2 per bank TY [1] C R [1] C R C	& average) CONSERVATIC JRBAN OR IN MINING / CONS e predominant l Om riparian.	DN TILLAGE [1] DUSTRIAL [0] STRUCTION [0] Cand use(s) Riparian Maximum 10
5] POOL / GLIDE AND RIFFLE / RUN QUALITY MAXIMUM DEPTH Check ONE (ONLY!) > 1m [6] 0.7-<1m [4] 0.4-<0.7m [2] 0.2-<0.4m [1] Comments Check ONE (Or 2 & average) POOL WIDTH > RIFFLE WIDTH [2] POOL WIDTH = RIFFLE WIDTH [2] POOL WIDTH = RIFFLE WIDTH [1] CHECK ONE (ORLY!) Check ALL that apply Check ALL that apply CHECK ONE (I) CHECK ONE (I)	FIAL [-1] TENT [-2]] files.	Recreation Primary Secondar (circle one and c	n Potential Contact ry Contact omment on back) Pool / Current Maximum 12
Indicate for functional riffles; Best areas must be large enough to support a of riffle-obligate species: Check ONE (Or 2 & average). RIFFLE DEPTH RUN DEPTH RIFFLE / RUN SUBSTRATE RIFF BEST AREAS > 10cm [2] MAXIMUM > 50cm [2] STABLE (e.g., Cobble, Boulder) [2] BEST AREAS 5-10cm [1] MAXIMUM < 50cm [1] MOD. STABLE (e.g., Large Gravel) [1] BEST AREAS < 5cm [metric=0] UNSTABLE (e.g., Fine Gravel, Sand) [0]	a populat FLE / RUN D C D C D M D E	tion ✓ NO NEMBEDD DNE [2] DW [1] ODERATE [0] KTENSIVE [-1]	RIFFLE [metric=0] EDNESS Riffle / Maximum 8
6] <i>GRADIENT</i> (N/A ft/mi)	%GLIDE %RIFFLE		Gradient Maximum 10

AJ SAMPLED REACH Check ALL that apply	Comment RE: Reach consistency/I Ephemeral stream that flows	s reach typical of steam?, <i>Recreation</i> s south to north across ROW.	/Observed - Inferred, <i>Other</i> High water level due to	Sampling observations, Concerns, Acc heavy recent rains.	ess directions, etc.
METHOD STAGE BOAT 1st-sample pass- 2nd WADE HIGH L. LINE UP OTHER NORMAL DISTANCE DRY					
□ 0.5 Km □ 0.2 Km □ 0.15 Km □ 0.15 Km □ 0.12 Km □ 20-<40 cm	BJ AESTHETICS	D] MAINTENANCE PUBLIC / PRIVATE (BOTH) NA ACTIVE / HISTORIC / BOTH / NA YOUNG-SUCCESSION-OLD SPRAY SNAG / REMOVED MODIFIED / DIPPED OUT / NA LEVEED / ONE SIDED RELOCATED / CUTOFFS MOVING-BEDLOAD-STABLE ARMOURED / SLUMPS ISLANDS / SCOURED IMPOUNDED / DESICCATED FLOOD CONTROL (DRAINAGE	Circle some & COMMENT	EJ ISSUES WWTP / CSO / NPDES / INDUSTRY HARDENED / URBAN / DIRT&GRIME CONTAMINATED / LANDFILL BMPs-CONSTRUCTION-SEDIMENT LOGGING (IRRIGATION) COOLING BANK / EROSION / SURFACE FALSE BANK / MANURE / LAGOON WASH H20 / TILE / H20 TABLE ACID / MINE / QUARRY / FLOW NATURAL / WETLAND / STAGNANT PARK / GOLF / LAWN / HOME ATMOSPHERE / DATA PAUCITY	FJ MEASUREMENTS \bar{x} width \bar{x} depth max. depth \bar{x} bankfull width bankfull \bar{x} depth W/D ratio bankfull max. depth floodprone x^2 width entrench. ratio <i>Legacy Tree:</i>

Stream Drawing:

See Waterbody Dataform





[SPAB003_001N DOWN] facing north downstream





[SPAB003_003E ACROSS] facing east across bank

Waterbody Data Sheet							
Survey Description							
Project Name:	Waterbo	ody Name:			Waterbody ID	:	Date:
AEP Allen Station	Shilts	Ditch			SPAB004		7/14/15
State: County:		Company:		Crew Me	mber Initials:	Photo ID(s):	
OH Paulding		SCI Engine	ering	ME/JM		1n, 2s, 3e	
Tract Number(s):		Milepost Entry:	Milepost	Exit:	Associated W	etland ID(s):	
0328S-00500, 0328S-00302		-	-		WPAB006		
Survey Type: (check one)		Re-Route	Access F	load	Other:		
Physical Attributes							
Stream Classification: (check one)		Intermittent	Perennia	I	Connectin	ng swale ^a	
Waterbody Type: (check one)	d: e)	Rive	r 🖌	Stream	Drainage Ditch	Other:	
OHWM OHWM Inc (check all that	licator: apply)	Clear line	, D	Shelving	Wrester vegetat	d Scour	ing Water staining
Height: 1 Height:	matted, o	r Vrack		_itter and debris	Abrupt commu	plant] Soil characteristic change
Width of Waterbody - Top of Bank to	Wie	dth of Waterbody - W	ater Edge	to	Depth of Wa	ter at Centerline:	<u> </u>
Top of Bank at Centerline:	Wa	ter Edge at Centerlir، ج	ie:		(Approx.)	1,	
ft.			ft.	aiabt		Bank alana	t.
(check one)	prox.)	ty:	Bank n	eight Riaht:	F	Bank slope Righ	nt: zo
Straight		0.01			э _{ft.}	5	degrees
Meandering	-	fps		Left:	5 _{ft.}	Le	eft: 70 degrees
Qualitative Attributes						I	0
Water Appearance:				,			
(check one)	lear 🗸	Turbid Sheer on su	n rface	Surface scum	Algal mats	Other:	
Substrate: Bedrock G	ravel	Sand	Silt/clay		Organic	Other:	
% of Substrate:%	%	%	100	%	%		%
Width of Riparian Zone: Vegetativ	/e Layers:			Г	Chruba		Llarka
ft. Avg. DBH	H of Domi	nants:	in.	L		in.	Meibs
Dominant Bank Vegetation:							
Carex vulpinoidea, Schoenopl	ectus ac	utus, Daucus car	ota, Fest	uca arud	linacea		
Aquatic Habitats (ex: submerged or emerged a (list) overhanging vegetation	quatic vegetat	tion, overhanging banks/roots	s, leaf packs, la	arge submerge	ed wood, riffles, deep	pools):	
Aquatic Organisms Observed:							
^(list) N/A							
Invasive and/or T&E Species Observed	l:						
Daucus carota							
Tributary is: (check one) Natural		Artificial, man-made	Ma	nipulated			
Disturbances: (check all that apply) Livestock access		Manure in waterbody	Waste of pipes	lischarge	Oth	er:	
Stream Quality ^b : (check one) High		Moderate	Low				

²**Connecting swales** are water features that do not meet the definition of a waterbody (not an ephemeral waterbody) in that there is not a defined bed, bank, and ordinary high water mark, however, it is a water conveyance feature that is characterized by flow volume, frequency, and duration to make it more than just an erosional feature and connects two potential waters of the U.S. and thereby may be subject to Section 404 permitting.

^b High Quality: Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Waterbody ID: SPAB004 Waterbody Sketch Include north arrow, centerline, distance from centerline, photo locations, and survey area/corridor if applicable. IN SPAPOOU (orn ____ Two Begns Notes Ephemeral stream that flows S to N across ROW. A two-track road runs parallel to the stream. Water level due to heavy recent rain events.



Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

QHEI Score: 27

Stream & Location	SPAB004 Shilts Ditch			<i>RM:</i> <u>N/A</u> _ <i>Da</i>	l te: 7 <u> 14 15</u>
		Scorers Full N	ame & Affiliation:	Mark Eldridge / SCI Eng	ineering Office verified —
Al SUBSTRATE Che		$\underline{N / A} = - (\underline{NAD 83})$	$\frac{1}{4} \frac{1}{1} \cdot \frac{01}{8} \frac{84}{8}$	<u>2 184.76020</u>	location
BEST TYPES BEST TYPES BLDR /SLABS [10 BOULDER [9] COBBLE [8] GRAVEL [7] BEDROCK [5] NUMBER OF BEST Comments	POOL RIFFLE OTHER T POOL RIFFLE OTHER T D HARDPA D DETRITU D MUCK [2 C Solution 2 C Solution 2	AZES, tr ty ty ty ty ty ty ty ty ty ty	Check Of ORIGIN	NE (Or 2 & average) QU SILT MOD SILT NORI FREE DEON DEON MOD	ALITY 'Y [-2] ERATE [-1] MAL [0] [1] NSIVE [-2] ERATE [-1] MAL [0] 3 Maximum 20
2] INSTREAM COV quality; 3-Highest quality diameter log that is stab 0 UNDERCUT BAN 1 OVERHANGING 0 SHALLOWS (IN S 0 ROOTMATS [1] Comments	ER Indicate presence 0 to 3: 0-A quality; 2-Moderate amounts. / in moderate or greater amounts le, well developed rootwad in dee KS [1] / EGETATION [1] 0 POOLS SLOW WATER) [1] 0 BOULD	bssent; 1-Very small am , but not of highest qua (e.g., very large boulde p / fast water, or deep, S > 70cm [2] 0 WADS [1] 0 DERS [1] 0	ounts or if more common lity or in small amounts c ers in deep or fast water, well-defined, functional p DXBOWS, BACKWATER AQUATIC MACROPHYT OGS OR WOODY DEB	of marginal AI of highest large Check ONI pools. EXTENS RS [1] MODER ES [1] SPARSE RIS [1] NEARLY	AOUNT E (Or 2 & average) IVE >75% [11] ATE 25-75% [7] 5-<25% [3] ABSENT <5% [1] Cover Maximum 20
3] CHANNEL MORF SINUOSITY DE HIGH [4]	HOLOGY Check ONE in each VELOPMENTCHANI EXCELLENT [7]Image: None [6]GOOD [5]Image: RecoveFAIR [3]Image: RecovePOOR [1]Image: Recent	category (<i>Or 2 & avera</i> NELIZATION] :RED [4] :RING [3] 'OR NO RECOVERY [⁷	age) STABILITY ☐ HIGH [3] ☑ MODERATE [2] ☐ LOW [1]		Channel Maximum 20
4] BANK EROSION River right looking downst EROSION ☐ Ø NONE / LITTLE [3 ☐ MODERATE [2] ☐ HEAVY / SEVERE Comments	AND RIPARIAN ZONE Ch ream R RIPARIAN WIDTH I I <	in each categ I R I FOREST, S I SHRUB OR I RESIDENTI II FORCED P III FENCED P III OPEN PAS	ory for EACH BANK (Or OD PLAIN QUALIT WAMP [3] & OLD FIELD [2] AL, PARK, NEW FIELD [ASTURE [1] TURE, ROWCROP [0]	2 per bank & average) Y B CONSERVA CONSERVA CONSERVA URBAN OR III URBAN OR Indicate predomina past 100m riparian	TION TILLAGE [1] INDUSTRIAL [0] DNSTRUCTION [0] Int land use(s) Maximum 10
5] POOL / GLIDE A MAXIMUM DEPT Check ONE (ONLY!) > 1m [6] 0.7-<1m [4] 0.4-<0.7m [2] 0.2-<0.4m [1] V < 0.2m [0] Comments	ND RIFFLE / RUN QUALIT H CHANNEL WIDT Check ONE (Or 2 & aver POOL WIDTH > RIFFLE WII POOL WIDTH = RIFFLE WII POOL WIDTH < RIFFLE WII	TY HCUR rage) CI DTH [2] TORRENT DTH [1] VERY FA: DTH [0] FAST [1] MODERA Indicate	RENT VELOCITY heck ALL that apply TIAL [-1] SLOW [1] ST [1] INTERSTITI INTERMITT TE [1] EDDIES [1] for reach - pools and riffl	AL [-1] ENT [-2]	tion Potential ary Contact dary Contact nd comment on back) Pool / Current Maximum 12
Indicate for fun of riffle-obligat RIFFLE DEPTH BEST AREAS > 10cm BEST AREAS 5-10cm BEST AREAS < 5cm [metric: Comments 6] GRADIENT (N/A DRAINAGE ARE	ctional riffles; Best areas ⇒ species: (RUN DEPTH [2] □ MAXIMUM > 50cm [2] □ [1] ☑ MAXIMUM < 50cm [1] □ =0] ft/mi) ☑ VERY LOW - LOW A □ MODERATE [6-10 mi ²) □ HIGH - VERY HIG	s must be large er Check ONE (Or 2 & av RIFFLE / RUN S STABLE (e.g., Cobb MOD. STABLE (e.g., Cobb MOD. STABLE (e.g., Fin UNSTABLE (e.g., Fin V [2-4] H [10-6]	Nough to support a erage). UBSTRATE UBSTRATE RIFF le, Boulder) Large Gravel) [1] be Gravel, Sand) %POOL: %RUN: 100	population Image: LE / RUN EMBEL Image: NONE [2] Image: Low [1] Image: Low [1] <td< td=""><td>NO RIFFLE [metric=0] DEDNESS [0] Riffle / Run [-1] Maximum 8 0 Gradient Maximum 10</td></td<>	NO RIFFLE [metric=0] DEDNESS [0] Riffle / Run [-1] Maximum 8 0 Gradient Maximum 10
EPA 4520					06/16/06

Waterbody Data Sheet							
Survey Description							
Project Name:		Waterbody Name:			Waterbody ID:		Date:
AEP Allen Station	Unnar	med Tributary to V	Vest For	k Ditch	SPAA003		7/14/15
State: County:		Company:		Crew Me	mber Initials:	Photo ID(s):	
OH Paulding		SCI Engine	ering	JS/ TC		001 up 002 d	down 003 across
Tract Number(s):		Milepost Entry:	Milepost I	xit:	Associated W	etland ID(s):	
0327S-00101		n/a	n/a		None		
(check one)	e	Re-Route	Access F	load	Other:		
Physical Attributes							
Stream Classification: (check one)	al 🗌	Intermittent	Perennia	I	Connectin	ng swale ^a	
Waterbody Type: (check one)	nd: ine)	Rive	r 🗌	Stream	Drainage Ditch	Other:	
OHWM OHWM In Width: 2	dicator: at apply)	Clear line	e []	Shelving	Wrester vegetat	d Scour	ing Water staining
Height: .5 ft Meight:	t, matted, o	r Wrack		⊥itter and debris	Abrupt	plant] Soil characteristic change
Width of Waterbody - Top of Bank to	Wie	dth of Waterbody - W	ater Edge	to	Depth of Wa	ter at Centerline:	
Top of Bank at Centerline:	Wa	ter Edge at Centerlin	ne:		(Approx.)	2	
ft.			, ft.			f	t.
Check one)	/ater veloci pprox.)	ty:	Bank h	eight Pight:	_	Bank slope	
Straight		5			6 _{ft.}	i i i i i i i i i i i i i i i i i i i	degrees
Meandering	-	fps		Left:	6 _{ft.}	Le	ft: 60 degrees
Qualitative Attributes							
Water Appearance: (check one) No water	Clear 🖌	Turbid Sheer on su	n	Surface scum	Algal [Other:	
Substrate: Bedrock	Gravel	Sand	Silt/clay		Organic	Other:	
% of Substrate: %	%	%	100	%	%		%
Width of Riparian Zone: Vegetat	ive Layers:	%		<u></u>	//		%
10 (check all t Avg. DE (approx)	hat apply) BH of Domi	Trees:	in.	L	Shrubs:	in.	✓ Herbs
Dominant Bank Vegetation:							
^(//st) Schedonorus pratensis							
Aquatic Habitats (ex: submerged or emerged (list)	aquatic vegetat	tion, overhanging banks/roots	s, leaf packs, la	irge submerge	ed wood, riffles, deep	pools):	
In-stream vegetation							
Aquatic Organisms Observed:							
Invasive and/or T&E Species Observe	ed:						
^(list) Cirsium arvense							
Tributary is: (check one) Natural		Artificial, man-made	🖌 Ma	inipulated			
Disturbances: (check all that apply)		Manure in waterbody	Waste o	lischarge	Oth	ier:	
Stream Quality ^b : (check one) High	\checkmark	Moderate	Low				

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Commission of Ohio Docketing Information System on

2/26/2016 4:21:32 PM

in

Case No(s). 16-0074-EL-BLN

Summary: Letter of Notification AEP Transco LON for Timber Switch-Haviland Project electronically filed by Mr. Hector Garcia on behalf of AEP Ohio Transmission Company