APPENDIX 07-3

WETLAND DELINEATION FORMS

Wetland 1							
Project/Site:	AEP Biers Run-Hopet	own-Delano		City/County	Ross Coun		Sampling Date: 10/9/2013
Applicant/Owner:	AEP					State: OH	Sampling Point: wbao-100913-0
Investigator(s):	BAO, BE			Sec		ip, Range: unknown	_
Landform (hillslope, Slope (%):	terrace, etc.):	39.3889		1		relief (concave, convex, none): -83.096146	Datum: NAD83 UTM16N
Soil Map Unit Name		39.3669	00	Long:		-63.096146 NWI class	
	ogic conditions on the s	ite typical for this tin	ne of year?	Vac	X No	(If no, explain in Remark	
Are Vegetation		, or Hydrology	Y significantly			ormal Circumstances" present	
Are Vegetation		, or Hydrology				ded, explain any answers in Re	
						insects, important featu	
Hydrophytic Vegetat		Yes X	No		Sampled Ar		,
Hydric Soil Present?		Yes X	No		a Wetland?		X No
Wetland Hydrology I	Present?	Yes X	No	_			
Remarks:							
Manmade excavate	d pond that appears to	have converted to	small PEM wetland				
<u> </u>							
VEGETATION -	Use scientific na	ames of plants	- Absolute	Dominant	Indicator	_	
Tree Stratum (Plot s	size: 30' radius)	% Cover		Status	Dominance Test workshee	st-
1.	Jo radida	_′	70 00461	оресіез:	Otatus	Dominance rest workshee	
2.						Number of Dominant Specie	s
3.						That Are OBL, FACW, or FA	C: 3 (A)
4.							
5				= Total Cover		Total Number of Dominant	3 (B)
				= Total Cover		Species Across All Strata:	(B)
Sapling/Shrub Stratu	um (Plot size: 15' rad	dius)				Percent of Dominant Specie	s
Populus deltoide			5	Yes	FAC	That Are OBL, FACW, or FA	
2.							
3.							
4						Prevalence Index workshee	
5. 6.						Prevalence Index workshee	ot:
0.			5	= Total Cover		Total % Cover of:	Multiply by:
Herb Stratum (Plot	size: 5' radius)		- 10101 00101		OBL species 5	x1 = 5
1. Carex sp.	-		50	Yes	FAC	FACW species 10	x2 = 20
2. Juncus tenuis			20	Yes	FAC	FAC species 80	x3 = 240
Typha sp.			5	No	OBL	FACU species	x4 =
4. Cyperus sp.			<u>5</u> 10	No	FACW	UPL species	x5 =
Phalaris arundin 6.	nacea		10	No	FACW	Column Totals: 95	(A) <u>265</u> (B)
7.				-		Prevalence Index =	B/A = 2.79
8.							
9.							
10.						Hydrophytic Vegetation In-	dicators:
11							
12.				. ——			drophytic Vegetation
14						X 2-Dominance Test	
15.							aptations ¹ (Provide supporting
16.							on a separate sheet)
17.							phytic Vegetation ¹ (Explain)
18.							
19.						¹ Indicators of hydric soil and	
20.			90	= Total Cover		be present, unless disturbed	or problematic.
			90	- TOTAL COVER		-	
Woody Vine Stratun	n (Plot size: 30' rad	dius)				Hydrophytic	
1.						Vegetation	
2.							X No
				= Total Cover		1	
						1	
Remarks: (Include	photo numbers here or	on a separate shee	t.)				
ĺ							
US Army Corpo of	Engineero						Midweet Region version 2.0

SOIL Sampling Point: wbao-10091

epth	Matrix Color (moist)	%		edox Features %	Type ¹	Loc ²	Texture	Remarks
(inches)			Color (moist)					Remarks
0-6"	10YR 3/1	95	10YR 4/6	5	C	M_	Clay	
6-10"	10YR 4/1	80	10YR 5/6	20	C	M	Silty Clay	
10-11"								Bedrock
		. — —						
1=	oncentration, D=Deplet	DM D-d			01-01	21	Name DL Dans Halan	M M-t-l-
lydric Soil I		on, RM=Rea	uced Matrix, CS=Cover	ed or Coated 8	Sand Grains.		tion: PL=Pore Lining cators for Problema	
Histoso			Sandy Gley	red Matrix (S4)	1	muic		ie Redox (A16)
	pipedon (A2)		Sandy Red	. ,				nese Masses (F12)
_	listic (A3)		Stripped M	. ,			Dark Surfac	, ,
Hydrog	en Sulfide (A4)		Loamy Muc	ky Mineral (F1	1)		Very Shallov	v Dark Surface (TF12)
Stratifie	d Layers (A5)		Loamy Gle	yed Matrix (F2))		Other (Expl	ain in Remarks)
	uck (A10)		x Depleted M					
	ed Below Dark Surface (A11)		Surface (F6)	_		3	
	ark Surface (A12)			ark Surface (F	7)			rophytic vegetation and
	Mucky Mineral (S1)		Redox Dep	ressions (F8)				ogy must be present,
_	ucky Peat or Peat (S3)						uniess distui	bed or problematic.
	.ayer (if observed):							
Type:								
Depth (i	nches):					Hydric	Soil Present?	Yes X No
	o have been historically	impacted				Hydric	Soil Present?	Yes X No
lemarks: soils appear t	o have been historically	impacted				Hydric	Soil Present?	Yes X No
temarks: oils appear to the state of the sta	o have been historically OGY Irology Indicators: eators (minimum of one					Hydric	Secondary Indica	tors (minimum of two required)
HYDROL Wetland Hyd Primary India X Surface	o have been historically DGY Irology Indicators: ators (minimum of one water (A1)		Water-Stair	ned Leaves (B!	9)	Hydric	Secondary Indica Surface Soi	tors (minimum of two required)
HYDROL Wetland Hyd Primary India X Surface X High W	on have been historically DGY Irology Indicators: actors (minimum of one at Water (A1) ater Table (A2)		Water-Stair Aquatic Far	una (B13)		Hydric	Secondary Indica Surface Soi	tors (minimum of two required) Il Cracks (B6) atterns (B10)
HYDROL Wetland Hyd Primary India X Surface X High W X Saturat	o have been historically OGY Irology Indicators: actors (minimum of one) Water (A1) ater Table (A2) ion (A3)		Water-Stair Aquatic Fa True Aquat	una (B13) ic Plants (B14))	Hydric	Secondary Indica Surface Soi X Drainage P Dry-Seasor	tors (minimum of two required) Cracks (B6) atterns (B10) Water Table (C2)
HYDROL Wetland Hyc Primary Indic X Surface X High W X Saturat Water I	o have been historically OGY Irology Indicators: ators (minimum of one) Water (A1) ater Table (A2) ion (A3) warks (B1)		Water-Stair Aquatic Fai True Aquat Hydrogen S	una (B13) ic Plants (B14) Sulfide Odor (C)		Secondary Indica Surface Soi x Drainage P Dry-Seasor Crayfish Bu	tors (minimum of two required) Cracks (B6) atterns (B10) Water Table (C2) rrows (C8)
HYDROL Wetland Hyc Primary Indic X Surface X High W X Sutrace Water I Sedime	on have been historically Por Verbory Indicators: Lators (minimum of one Water (A1) Later Table (A2) Lono (A3) Lawarks (B1) Int Deposits (B2)		Water-Stain Aquatic Fai True Aquat Hydrogen S Oxidized R	una (B13) ic Plants (B14) Sulfide Odor (C hizospheres or) (1) n Living Roo		Secondary Indica Surface Soi X Drainage P Dry-Seasor Crayfish Bu X Saturation 1	tors (minimum of two required) I Cracks (B6) atterns (B10) Water Table (C2) rrows (C8) Visible on Aerial Imagery (C9)
HYDROL Wetland Hyc Primary Indic x Surface X High W X Saturat Water I Sedime Drift De	o have been historically OGY Irology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) darks (B1) int Deposits (B2) posits (B3)		Water-Stain Aquatic Fai True Aquat Hydrogen S Oxidized R Presence of	una (B13) ic Plants (B14) Sulfide Odor (C hizospheres or f Reduced Iror) C1) n Living Roo n (C4)	ts (C3)	Secondary Indica Surface So X Drainage So Dry-Seasor Crayfish Bu X Saturation Y Sturted or 1	tors (minimum of two required) Il Cracks (B6) atterns (B10) Water Table (C2) rrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1)
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ite: -	AFF	BNU	Rater(s): BAO	BE		Date: 1/9/13
O nex 6 pts.	Subtotal	Select one size class and s >50 acres (>20,2 25 to <50 acres (10 to <25 acres (3 to <10 acres (0.3 to <3 acres (0.1 to <3.3 acres (0.1 to <3.3 acres (ha) (6 pls) 10.1 to <20.2ha) (5 pts) 4 to <10.1ha) (4 pts) .2 to <4ha) (3 pts) 1.12 to <1.2ha) (2pts) (0.04 to <0.12ha) (1 pt)			
13	13	X <0.1 acres (0,04) Metric 2. Upla	nd buffers and sur	round	ling land use.	
ux 14 ots	subtotal	WIDE. Buffers a MEDIUM. Buffer NARROW. Buffer NARROW. Buffer VERY NARROW. 2b. Intensity of surrounding X VERY LOW. 2nd (Ed.) MODERATELY HODERATELY HODERA	er width. Select only one and assip- verage 50m (164M) or more around 52 to <16.5 to <50m (82 to <16.5 to 52 to <16.5 to 52 to <15.5 to 52	wetland ; (ft) around (82ft) around und wetland neck and sinnah, will and growth park, con	perimeter (7). d wetland perimeter (4). end wetland perimeter (1). end perimeter (0). average, idilife area, etc. (7). iforest. (5). servation tilliage, new fallos.	w field. (3)
9	22	Metric 3. Hydr			and the second s	
na 50 pre	sucidim'	Perennial surface 3c, Maximum water depth. >0.7 (27.5in) (3) 0.4 to 0.7m (15.7 <	ater (5) r (3) tr (3) tent surface water (3) water (lake or stream) (5) Select only one and assign score. to 27.5in) (2)	3b 3d 5	100 year floodplain Between streamlis Part of welland/upi Part of riparian or upi Duration inundation/satu Semi- to permaner Regularly inundate Seasonally sunda	n (1) ke and other human use (1) land (e.g. forest), complex (1) upland corndor (1) ation. Score one or dbt check nitly inundated/salurated (4) d/saturated (3)
			Check all disturbances ditch			tormwater)

Wetland 1

ORAM V	5.0	Field	Form	Quan	titati	√e	Rating	
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W. KHO 100913-03

Site: At-	P BHE	Rater(s):	B4	D,BE	Date:/0/09/13
autoral	5 Tires pages	1.104-11			
02/7	Metric 5. Specia	ai Wetlands			
20 L rac 10 pts sub	Lake Erie coastal/tr Lake Plain Sand Pr Relict Wet Prairies Known occurrence	0) tland (5) ibutary wetland-unres ibutary wetland-restri airies (Oak Openings (10)	cled hydro (10) ed or end	angered species (10)	
	The second secon	. See Question 1 Qu			
4 2		communitie	es, int	erspersion, m	icrotopography.
nos 20 pts	6a. Wetland Vegetation Com-			Community Cover Scale	
	Score all present using 0 to 3	scale,	0		.1ha (0,2471 acres) contiguous area
	Aquatic bed Emergent Shrub		1		prises small part of welland's loderate quality, or comprises a of low quality
	Forest Mudflats Den water	-	2		prises significant part of wetland's roderate quality or comprises a small
	Other 6b. horizontal (plan view) Inte	rapersion.	3		significant part, or more, of wetland's
	Select only one.	- 44	South St. 4	TOTAL THE STATE OF	
	High (5)	N		escription of Vegetation	
	Moderately high(4) Moderate (3)		low	disturbance tolerant n	
	Moderately low (2) Low (1) None (0) 6c. Coverage of invasive plan to Table 1 ORAM long form to		mod	although nonnative an can also be present, a	t component of the vegetation, d/or disturbance tolerant native spp ind species diversity moderate to tenerally w/o presence of rare ared spp
	or deduct points for coverage Extensive >75% cov Moderate 25.75% or Sparse 5-25% cove X Nearly absent <5%	over (-3) r (-1)	high	and/or disturbance tole absent, and high spp	re species, with nonnative spp erant native spp absent or virtually diversity and often, but not always, hreatened, or endangered spp
	Nearly absent <5% Absent (1)		udflat and	Open Water Class Quali	the contract of the contract o
	6d. Microtopography.	100	O.	Absent <0.1ha (0.247 a	
	Score all present using 0 to 3 :		1	Low 0.1 to <1ha (0.247)	to 2.47 acres)
	Vegetated hummuck		2	Moderate 1 to <4ha (2.4	
	Coarse woody debri		3	High 4ha (9.88 acres) or	more
	1 Amphibian breeding	pools M	crotopog	raphy Cover Scale	
			0	Absent	
			1	Present very small amou of marginal quality	ints or if more common
1 1			2	Present in moderate am quality or in small amo	
		_	3	Present in moderate or g	And the second s

Wetland 2		WEILAND DE	ERMINATIO	JN DAIAF	JKIVI IVII	dwest Region	
Project/Site:	AEP Biers Run-Hope	etown-Delano		City/County:	Ross Coun	ty	Sampling Date: 11/18/2013
Applicant/Owner:	AEP					State: OH	Sampling Point: wbao-111813-
Investigator(s):	BAO			Sect		ip, Range: unknown	
Landform (hillslope						relief (concave, convex, none)	
Slope (%):	Lat:	39.3661551		Long:		-83.073476	Datum: NAD83 UTM16N
Soil Map Unit Nam				Yes	X No.		sification:
		site typical for this time		-		(If no, explain in Rema	
Are Vegetation Are Vegetation		, or Hydrology Y , or Hydrology N	naturally prof			ormal Circumstances" present ded, explain any answers in R	
-						insects, important feat	
Hydrophytic Vegeta			No		Sampled Ar		ures, etc.
Hydric Soil Presen		Yes X	No		a Wetland?		X No
Wetland Hydrology	y Present?	Yes X	No			_	
Remarks: PEM/POW located	d on the edge of agricult	tural fields; man-made po	ond with berm a	ffecting hydrolo	gy		
VEGETATION	Use scientific r	names of plants.					
Tree Stratum (Plo	t size: 30' radius	`	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test workshe	ant:
1.	30 Taulus	—′	76 COVE	opecies:	Status	Dominance rest workshe	et.
2.						Number of Dominant Speci	ies
3.						That Are OBL, FACW, or F	AC: 3 (A)
4							
5			0	= Total Cover		Total Number of Dominant Species Across All Strata:	3 (B)
			- 0	- Total Cover		Species Across All Strata.	(B)
Sapling/Shrub Stra	atum (Plot size: 15' ra	adius)				Percent of Dominant Speci	es
1. Acer saccharin	num		2	Yes	FACW	That Are OBL, FACW, or F	AC: 100% (A/B)
2							
3						Prevalence Index workshe	not:
5.						Frevalence muex workshe	
			2	= Total Cover		Total % Cover of:	Multiply by:
Herb Stratum (Plo	t size: 5' radius	_)				OBL species 80	x1 = 80
Typha angustit			50	Yes	OBL	FACW species 2	x2 =4
2. Leersia oryzoid	des		30 5	Yes	OBL FAC	FAC species 20	x3 =60
Solidago sp. Bidens Sp.			10	No No	FAC	FACU species UPL species	x4 = x5 =
5. Carex Sp.			5	No	FAC	Column Totals: 102	
6.							
7.						Prevalence Index :	= B/A = 1.41
8							
9						Hydrophytic Vegetation In	
11.						nydrophytic vegetation if	ndicators:
12.						1-Rapid Test for H	lydrophytic Vegetation
13.						X 2-Dominance Test	
14.						X 3-Prevalence Inde	
15							daptations ¹ (Provide supporting
16 17							or on a separate sheet) ophytic Vegetation ¹ (Explain)
18.						- I Tobiemade Hydro	opingno regulation (Expidit)
19.						¹ Indicators of hydric soil and	d wetland hydrology must
20.						be present, unless disturbe	d or problematic.
			100	= Total Cover			
Woody Vine Stratu	<u>um</u> (Plot size: 30' ra	adius)				Hydrophytic	
1.			_			Vegetation	
2.						Present? Yes	s X No
				= Total Cover			
Remarks: (Include	photo numbers here o	r on a separate sheet)				1	
(,	(0.000.)					
US Army Corps	of Engineers						Midwest Region version 2.0

rofile Descri Depth	iption: (Describe to Matrix		Don	dox Features				
nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-9"	10YR 4/1	80	10YR 5/8	20	RM	M	Silty Clay	romano
	10111111		10111000				Only Only	
,,		etion, RM=Reduce	ed Matrix, CS=Covere	d or Coated S	and Grains.		on: PL=Pore Lining,	
lydric Soil In			Candy Claye	al Matrix (C4)		Indic	ators for Problemat	•
Histosol	(A1) pipedon (A2)		Sandy Gleye	ed Matrix (S4)				e Redox (A16) lese Masses (F12)
Black His			Stripped Mat				Dark Surface	
	n Sulfide (A4)			y Mineral (F1)				Dark Surface (TF12)
_ , .	Layers (A5)			ed Matrix (F2)				in in Remarks)
2 cm Mu			x Depleted Ma					,
	Below Dark Surface	(A11)	Redox Dark					
Thick Da	ark Surface (A12)		Depleted Da	rk Surface (F7	")		3Indicators of hydro	ophytic vegetation and
	lucky Mineral (S1)		Redox Depre	essions (F8)				gy must be present,
5 cm Mu	cky Peat or Peat (S3)					unless disturt	ed or problematic.
testrictive La	yer (if observed):							
Type:								
emarks:	ches):					Hydric	Soil Present?	Yes X No
emarks:						Hydric	Soil Present?	Tes A NO
emarks:	OGY					Hydric	Soil Present?	TES A NO
EMARKS:	OGY ology Indicators:	e is required; chec	ck all that apply)			Hydric		
Wetland Hydr	OGY	e is required: chec		ed Leaves (B9)	Hydric		ors (minimum of two required)
EYDROLO Wetland Hydr Primary Indica x Surface	OGY ology Indicators: stors (minimum of on	e is required: chee)	Hydric	Secondary Indicate	ors (minimum of two required) Cracks (B6)
EYDROLO Wetland Hydr Primary Indica x Surface	OGY rology Indicators: stors (minimum of on Water (A1) ter Table (A2)	e is required: chec	Water-Staine x Aquatic Faur)	Hydric	Secondary Indicat Surface Soil X Drainage Pa	ors (minimum of two required) Cracks (B6)
WYDROLO Wetland Hydr Primary Indica x Surface ' High Wa	POGY rology Indicators: stors (minimum of on Water (A1) ter Table (A2) on (A3)	e is required: chec	X Aquatic Faur True Aquatic X Hydrogen Su	na (B13) : Plants (B14) ulfide Odor (C1	1)		Secondary Indicat Surface Soil X Drainage Pa	ors (minimum of two required) Cracks (B6) Itterns (B10) Water Table (C2)
emarks: VPDROLO Vetland Hydr rimary Indica x Surface High Wa x Saturatic x Water M x Sedimen	OGY ology Indicators: ultors (minimum of on Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2)	e is required: chec	X Aquatic Faur True Aquatic X Hydrogen Su Oxidized Rhi	na (B13) Plants (B14) ulfide Odor (C1 izospheres on	I) Living Roots		Secondary Indicat Surface Soil x Drainage Pa Dry-Season Crayfish Bur. Saturation V	ors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9)
WDROLO Wetland Hydr Primary Indice X Surface High Wa X Saturatic X Water M X Sedimen Drift Dep	OGY ology Indicators: tions (minimum of on Water (A1) tier Table (A2) on (A3) arks (B1) tt Deposits (B2) oosits (B3)	e is required: chee	X Aquatic Faur True Aquatic X Hydrogen Su Oxidized Rhi Presence of	na (B13) Plants (B14) ulfide Odor (C1 izospheres on Reduced Iron	I) Living Roots (C4)	(C3)	Secondary Indicat Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Sturted or S	ors (minimum of two required) Cracks (86) tterns (810) Water Table (C2) rows (C8) tisible on Aerial Imagery (C9) tressed Plants (D1)
WDROLC Wetland Hydr Primary Indica X Surface ' High Wa X Saturatic X Water M X Sedimen Drift Dep Algal Ma	ology Indicators: tors (minimum of on Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) oosits (B3) t or Crust (B4)	e is required: chec	X Aquatic Faur True Aquatic X Hydrogen Su Oxidized Rhi Presence of Recent Iron I	na (B13) Plants (B14) Ulfide Odor (C1 izospheres on Reduced Iron Reduction in T	I) Living Roots (C4)	(C3)	Secondary Indicat Surface Soil X Drainage Pe Dry-Season Crayfish Bur Saturation V Sturled or S Geomorphic	ors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2)
WDROLO Wetland Hydr Primary Indica x Surface ' High Wa x Saturatic x Water M x Sedimen Drift Dep Drift Dep Algal Ma Iron Dep	ology Indicators: stors (minimum of on Water (A1) ter Table (A2) on (A3) arks (B1) tt Deposits (B2) costis (B3) to to 'Crust (B4) osits (B5)		x Aquatic Faur True Aquatic X Hydrogen Su Oxidized Rhi Presence of Recent Iron I	na (B13) Plants (B14) Ulfide Odor (C1 izospheres on Reduced Iron Reduction in T turface (C7)	I) Living Roots (C4)	(C3)	Secondary Indicat Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Sturted or S	ors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2)
WDROLO Wetland Hydr Primary Indica X Surface ' High Wa X Saturatic X Water M X Sedimen Drift Dep Algal Ma Iron Dep X Inundatic	OGY ology Indicators: ditors (minimum of on Water (A1) ter Table (A2) on (A3) to Exposits (B1) to Deposits (B2) oosits (B3) to Crust (B4) oosits (B5) on Visible on Aerial In	nagery (B7)	Water-Staine x Aquatic Faur True Aquatic x Hydrogen Su Oxidized Rhi Presence of Recent Iron I Thin Muck S Gauge or We	na (B13) c Plants (B14) ulfide Odor (C1 izospheres on Reduced Iron Reduction in T urface (C7) ell Data (D9)	Living Roots (C4) 'illed Soils (C	(C3)	Secondary Indicat Surface Soil X Drainage Pe Dry-Season Crayfish Bur Saturation V Sturled or S Geomorphic	ors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2)
WDROLO Wetland Hydr Primary Indica X Surface High Wa X Saturatic X Water M X Sedimen Drift Dep Algal Ma Iron Dep X Inundatic Sparsely	OGY ology Indicators: ultors (minimum of on Water (A1) ter Table (A2) tor (A3) to Poposits (B1) to Poposits (B2) oosits (B3) tor Crust (B4) oosits (B5) on Visible on Aerial In Vegetated Concave	nagery (B7)	Water-Staine x Aquatic Faur True Aquatic x Hydrogen Su Oxidized Rhi Presence of Recent Iron I Thin Muck S Gauge or We	na (B13) Plants (B14) Ulfide Odor (C1 izospheres on Reduced Iron Reduction in T turface (C7)	Living Roots (C4) 'illed Soils (C	(C3)	Secondary Indicat Surface Soil X Drainage Pe Dry-Season Crayfish Bur Saturation V Sturled or S Geomorphic	ors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2)
WDROLC Wetland Hydr Primary Indica High Wax Saturatic X Water M X Water M X Sedimen Drift Dep Algal Ma Iron Dep X Inundatic Sparsely	ology Indicators: ators (minimum of on Water (A1) tter Table (A2) on (A3) arks (B1) tt Oeposits (B2) osits (B3) tt or Crust (B4) osits (B5) on Visible on Aerial li Vegetated Concave	nagery (B7) Surface (B8)	Water-Staine x Aquatic Faur True Aquatic X Hydrogen St. Oxidized Rhi Presence of Recent Iron I Thin Muck S Gauge or We Other (Expla	na (B13) c Plants (B14) ulfide Odor (C1 izospheres on Reduced Iron Reduction in T rurface (C7) ell Data (D9) in in Remarks	Living Roots (C4) 'illed Soils (C	(C3)	Secondary Indicat Surface Soil X Drainage Pe Dry-Season Crayfish Bur Saturation V Sturled or S Geomorphic	ors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2)
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WDROLC Wetland Hydr Primary Indice X Sufface ' High Wa X Saturatic X Sedimen Iron Dep X Inundatic Sparsely Ield Observe Surface Wate Water Table F	OGY ology Indicators: tions (minimum of on Water (A1) ter Table (A2) on (A3) arks (B1) tt Deposits (B2) osits (B3) to "Crust (B4) osits (B3) on Visible on Aerial It Vegetated Concave attions: r Present?	nagery (B7) Surface (B8) Yes <u>x</u> No Yes <u>x</u> No	Water-Staine x Aquatic Faur True Aquatic X Hydrogen St. Oxidized Rhi Presence of Recent Iron i Thin Muck S Gauge or W. Other (Expla	na (B13) Plants (B14) Iffide Odor (C1 izospheres on Reduced Iron Reduction in T iurface (C7) ell Data (D9) in in Remarks): 24"): 2"	Living Roots (C4) illed Soils (C	(C3) 6)	Secondary Indicat Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic X FAC-Neutral	ors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)
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WYDROLO Wetland Hydr Primary Indice X Surface I High Wa X Saturation X Water M X Sedimen Drift Dep Algal Ma Iron Dep X Inundatic Sparsely ield Observe Surface Water Vater Table F Saturation Pre includes capi Describe Rec	ology Indicators: tors (minimum of on Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Ir Vegetated Concave stitions: r Present? resent? llary fringe)	nagery (B7) Surface (B8) Yes x No Yes x No Yes No Yes No	Water-Staine x Aquatic Faur True Aquatic x Hydrogen Su Oxidized Rhi Presence of Recent Iron I Thin Muck S Gauge or Wr Other (Expla Depth (inches) Depth (inches)	na (B13) Plants (B14) Plants (B14) Iffide Odor (C1 Iffice Odor (C1 Iffice Odor (C7 If	Living Roots (C4) Filled Soils (C	(C3) 6)	Secondary Indicat Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic X FAC-Neutral	ors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)

				market and the
ORAM v.	5.0 Field	Farm	Quantitative	Rating

Wetland 2 4-840-11/8/3-03

Site: AEY BHD	Rater(s): BAG	Date: 11/18/13
Metric 1. Wetland	Area (size).	
an 6 pts. suitifield Select one size class and assign >50 acres (>20,2ha) (6 25 to 55) acres (10,1 1 10 to ≤25 acres (4 to 5 3 to <10 acres (12 to 5 0.3 to <3 acres (0.12 to 0.1 to <0.3 acres (0.02 to 0.1 to <0.3 acres (0.04 to 0.1 to <0.0 acres (0.04 to <0.1 to <0.0 acres (0.04 to <0.1 to <0.0 acres (0.04 to <0.0 acres (0.	score: .pls), o <20.2ha) (5 pls) 10.1ha) (4 pls) 4ha) (3 pls) <1.2ha) (2pls) to <0.42ha) (2pls) to <0.42ha) (1 pl)	
Metric 2. Upland	buffers and surround	ing land use.
WIDE. Buffers awerage MEDIUM Buffers awerage NARROW. Buffers awe VERY NARROW. Buf 2b. Intensity of surrounding land VERY LOW. 2nd grow LOW. Old field (>10 y MODERATELY HIGH.	th. Select only one and assign score. It is 50m (164tt) or more around wetland prage 25m to <50m (82 to <164th) around erage 10m (<25m (281 to <82th) around erage 10m to <25m (281 to <82th) around wetlar use. Select one or doubte check and a drift or older forest, praint, swarmanh, with grars), shrub (and, young second growth. Residential, fenced pasture, park, consil, open pasture, row croppling, mindig, cl.), open pasture, row croppling, mindig, cl.	eimetei (7) welland perimeter (4) id wetland perimeter (3) id perimeter (0) verage. title area, etc. (7) forest. (5) ervation tilliage, new fallow field. (3)
/ // Metric 3. Hydrolo		3,000,000,000
>0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27 <0.4m (<15.7in) (1)	surface water (3) surface water (3) or (lake or stream) (5) st. only one and assign score.	Connectivity. Score all that apply. 100 year floodplain (1) Between stream/lake and other human use (1) Part of wetland/unland (e.g. forest), complex (1) Part of inparian or upland corridor (1) Dutation inundation/saturation. Score one or dbi che Semi- to permanently inundated/saturated (4) Regularly fundated/saturated (3) Seasonally inundated (2) Seasonally saturated in upper 30cm (12(n) (1)
None or none apparen Recovered (7) Recovering (3) Recent or no recovery	(12) Check all disturbances observed ditch	
	Alteration and Develo	opment.
None or none apparent Recovered (3) Recovering (2) Recent or no recovery 4b. Ability development. Select Excellent (7) Very good (6) Good (5) Aboterately good (4) Fair (3) Poor to fair (2) Poor (1) 4c. Habital alteration. Score on	(1) Lonly one and assign score. Be or double check and average.	
None or none apparer Recovered (6) Recovering (3) Recent or no recovery	mowing grazing	shrub/sapling removal herbaceous/aquatic bed removal sedimentation Lifedging larming nutrient enrichment

Wetland L W13A0-111813-03

		252000
Field Form Cuantitative Patien		

Site: ME	OND	Rater(s):	"PU	Date: 11/18/13
12	2			
subtates fire	t page			
0 20	Metric 5. Special V	Vetlands.		
max 10 phs subject	M Check all that apply and score as in	Market		
max representation	Boo (10)	dicated		
	Fen (10)			
	Old growth forest (10)			
	Mature forested wetland I			
	Lake Erie coastal/tributar			
	Lake Erie coastal/tributar Lake Plain Sand Prairies		ology (5)	
	Relict Wet Prairies (10)	(Oak Openings) (19)		
	Known occurrence state/	ederal threatened or end	langered species (10)	
	Significant migratory sens			
	Calegory 1 Wetland. See			
4 245	Metric 6. Plant con	nmunities in	terspersion m	icrotopography
1 23	motific o. I failt con	midinas, m	corspersion, ii	incrotopography.
max 20 phs: subtro		or Vanatating	Community Cover Scal	
	Score all present using 0 to 3 scale	vegetation 0		0.1ha (0.2471 acres) configuous are
	Aquatic bed	1		nprises small part of welland's
	/ Emergent		vegetation and is of	moderate quality, or comprises a
	Shrub	1	significant part but is	
	Forest	2		nprises significant part of wetland's
	Mudflats Open water			moderate quality or comprises a sm
	Other Other	- 3	part and is of high qu	rainty s significant part, or more, of wetland
	6b. horizontal (plan View) Interspers		vegetation and is of t	
	Select only one.		regulation and is out	ngn quanty.
	High (5)	Narrative E	Description of Vegetation	Quality
	Moderately high(4)	low		or predominance of nonnative or
	Moderate (3)	_	disturbance tolerant i	
	Moderately low (2)	mod		nt component of the vegetation,
	None (0)			nd/or disturbance tolerant native sp
	6c. Coverage of invasive plants. Re	efer.		and species diversity moderate to generally w/o presence of rare
	to Table 1 ORAM long form for list.		threatened or endang	
	or deduct points for coverage	high		ive species, with nonnative spp
	Extensive >75% cover (-5)		ferant native spp absent or virtually
	Moderate 25-75% cover (-	3)		diversity and often, but not always,
	3 Sparse 5-25% cover (-1)		the presence of rare,	threatened, or endangered app
	Nearly absent <5% cover Absent (1)			No.
	6d. Microtopography.	Mudilat and	d Open Water Class Qua	
	Score all present using 0 to 3 scale.	- 0	Absent <0.1ha (0.247 Low 0.1 to <1ha (0.247	
	Vegetated hummucks/tuss		Moderate 1 to <4ha (2	
	Coarse woody debris >156		High 4ha (9.88 acres) of	
	Standing dead >25cm (10)			
	Amphibian breeding pools	Microtopog	raphy Cover Scale	
		0	Absent	
		- 1		ounts or if more common
		2	of marginal quality	and the best of th
.1-		2		rounts, but not of highest
1				
.1		- 3		ounts of highest quality
1		3	Present in moderate or and of highest quality	greater amounts

Project/Site:	AEP Biers Run-Hope	town-Delano		City/County:	Ross County	у	Sampling Date: 8/27/2013
pplicant/Owner:	AEP					State: OH	Sampling Point: wbao-08271
vestigator(s):	BAO, JAC			Sec	tion, Townshi	p, Range: unknown	
andform (hillslope,	terrace, etc.):					relief (concave, convex, none):	Concave
lope (%):	Lat:	39.367218		Long:		-83.046843	Datum: NAD83 UTM16N
oil Map Unit Name						NWI class	
		site typical for this time of	funar?	Yes	X No	(If no, explain in Remark	
e Vegetation			significantly d	_		ormal Circumstances" present?	
-							
re Vegetation	N , Soil N	_	naturally prob			led, explain any answers in Ren	
UMMARY OF	FINDINGS Atta	ach site map show	ing samplin	g point loc	ations, tra	insects, important feat	ures, etc.
drophytic Vegeta		Yes X	No		Sampled Are		
dric Soil Present		Yes X	No	within	a Wetland?	Yes	No
etland Hydrology	Present?	Yes X	No				
emarks:							
FO adjacent to roa	nd; roadside ditch runs	through wetland					
EGETATION	Use scientific r	names of plants.					
			Absolute	Dominant	Indicator		
ee Stratum (Plot)	% Cover	Species?	Status	Dominance Test worksheet	:
Populus deltoid	es		50	Yes	FAC	I	
Salix nigra			30	No	OBL	Number of Dominant Species	
Acer saccharing	ım		50	Yes	FACW	That Are OBL, FACW, or FA	C: 10 (A)
Acer negundo			10	No	FAC		
Platanus occide			10	No No	FACW	That Are OBL, FACW, or FA	C: 10 (A)
Fraxinus penns			10	No	FACW		
Ulmus american			2	No	FACW		
Catalpa specios	а		<u>5</u> 	No = Total Cover	FACU	Total Number of Dominant	10 (B)
			167	= Total Cover		Species Across All Strata:	(B)
pling/Shrub Strati	um (Plot size: 15' ra	adiue \				Percent of Dominant Species	
. Toxicodendron		idids	2	Yes	FAC	That Are OBL, FACW, or FA	
. Frangula alnus	dalouno		- 5	Yes	FACW	THAT THE ODE, THOM, OF THE	0. 10070 (70
Cornus racemo	sa .			Yes	FAC		
						Prevalence Index workshee	t:
i.						Prevalence Index workshee	
			9	= Total Cover		Total % Cover of:	Multiply by:
erb Stratum (Plot	size: 5' radius)	-			OBL species 40	x1 = 40
Toxicodendron	radicans		15	Yes	FAC	FACW species 82	x2 = 164
Solidago sp.			10	Yes	FAC	FAC species 109	x3 = 327
Scirpus atrovire			10	Yes	OBL	FACU species 5	x4 = 20
Cyperus escule	ntus		5	No	FACW	UPL species	x5 =
Apocynum canr	abinum		5	No	FAC	Column Totals: 236	(A) 551 (
Carex sp.			10	Yes	FAC		
						Prevalence Index =	B/A = 2.33
						L	
						Hydrophytic Vegetation Inc	iicators:
						1-Rapid Test for Hyd X 2-Dominance Test is	
						X 2-Dominance Test is X 3-Prevalence Index	
							is \$3.0° aptations (Provide supporting)
							on a separate sheet) hytic Vegetation ¹ (Explain)
						- Froblematic Hydrop	niyuc vegetation (Explain)
						¹ Indicators of hydric soil and v	vetland hydrology must
						be present, unless disturbed	
			55	= Total Cover		Do present, unless disturbed	огргооленнаць.
			- 55	rotal Govel			
ondy Vine Stratun	n (Plot size: 30' ra	adius)				Hydrophytic	
			5	Yes	FAC	Vegetation	
							X No
. Toxicodendron							
Toxicodendron			5	= Total Cover			
Toxicodendron			5	= Total Cover			

SOIL Sampling Point: wbao-08271;

nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-8"	10YR 4/2	60	10YR 5/6	40	RM	M	Sandy Clay	
		ion, RM=Red	uced Matrix, CS=Cover	ed or Coated	Sand Grains.		ion: PL=Pore Lining,	
ydric Soil Ir						Indic	ators for Problemat	
Histosol	(A1) pipedon (A2)		Sandy Gley Sandy Red	ed Matrix (S4)			e Redox (A16) nese Masses (F12)
_	stic (A3)		Stripped M	. ,			Dark Surface	, ,
_	n Sulfide (A4)			ky Mineral (F	1)			Dark Surface (TF12)
_ , .	Layers (A5)			yed Matrix (F2	,			in in Remarks)
	ick (A10)		x Depleted M					
	d Below Dark Surface (A11)		Surface (F6)				
_	ark Surface (A12)			ark Surface (F				ophytic vegetation and
	lucky Mineral (S1)		Redox Dep	ressions (F8)				ogy must be present,
_	icky Peat or Peat (S3)						uniess disturt	ped or problematic.
	ayer (if observed):							
Type:								
						Hydric	Soil Present?	Yes <u>X</u> No
emarks:	DGY rology Indicators:					Hydric		
emarks: IYDROLO Vetland Hydi Primary Indici	OGY rology Indicators: ators (minimum of one	is required: c		and Lanuar (f	200	Hydric	Secondary Indicate	ors (minimum of two required)
YDROLO Vetland Hydi Primary Indica Surface	DGY rology Indicators: ators (minimum of one Water (A1)	is required: c	x Water-Stair	ned Leaves (E	39)	Hydric	Secondary Indicate Surface Soil	ors (minimum of two required) Cracks (B6)
emarks: IYDROLO Wetland Hydro Primary Indica Surface High Wa	OGY rology Indicators: ators (minimum of one Water (A1) ater Table (A2)	is required: c	x Water-Stair Aquatic Far	una (B13)		Hydric	Secondary Indicate Surface Soil X Drainage Pa	ors (minimum of two required) Cracks (B6) Itterns (B10)
IYDROLO Vetland Hydi Primary Indica Surface High Wa Saturatio	OGY rology Indicators: ators (minimum of one Water (A1) ater Table (A2)	is required: c	x Water-Stair Aquatic Far True Aquat		4)	Hydric	Secondary Indicate Surface Soil X Drainage Pa	ors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2)
Wetland Hyding Surface High Was Saturative X Water N	Pology Indicators: ators (minimum of one Water (A1) itet Table (A2) on (A3)	is required: c	x Water-Stair Aquatic Fai True Aquat x Hydrogen S	una (B13) ic Plants (B14	i) C1)		Secondary Indicate Surface Soil X Drainage Pa Dry-Season Crayfish Bur	ors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2)
Wetland Hyderimary Indicase Surface High Was Saturative Water Management Sediment Se	POGY rology Indicators: ators (minimum of one Water (A1) tier Table (A2) on (A3) arks (B1)	is required: c	x Water-Stain Aquatic Fai True Aquat x Hydrogen S Oxidized R	una (B13) ic Plants (B14 Sulfide Odor (G	i) C1) in Living Roof		Secondary Indicat Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V	ors (minimum of two required) Cracks (B6) ttlerns (B10) Water Table (C2) rows (C8)
emarks: IYDROLC Vetland Hyd Primary Indicator Surface High Wa Saturati X Water N Sedimes X Drift Der	POGY rology Indicators: ators (minimum of one Water (A1) ter Table (A2) nn (A3) larks (B1) to Deposits (B2) posits (B3) at or Crust (B4)	is required: c	x Water-Stail Aquatic Fai True Aquat x Hydrogen S Oxidized R Presence c Recent Iror	una (B13) ic Plants (B14 Sulfide Odor (G hizospheres of f Reduced Iro Reduction in	i) C1) In Living Root In (C4)	s (C3)	Secondary Indicate Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic	ors (minimum of two required) Cracks (B6) ttlerns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) ttressed Plants (D1) Position (D2)
emarks: IYDROLC Vetland Hydl Primary Indica Surface High Wa Saturati X Water N Sediment X Drift Deg Algal Ma Iron Dep	OGY Tology Indicators: ators (minimum of one Water (A1) tier Table (A2) on (A3) arks (B1) ti Deposits (B2) oosits (B3) t or Crust (B4) oosits (B5)		x Water-Stail Aquatic Fai True Aquat x Hydrogen \$ Oxidized R Presence c Recent Iror Thin Muck	una (B13) ic Plants (B14 Sulfide Odor (Chizospheres of Reduced Iro I Reduction in Surface (C7)	i) C1) In Living Roof In (C4) Tilled Soils (s (C3)	Secondary Indicate Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S	ors (minimum of two required) Cracks (B6) ttlerns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) ttressed Plants (D1) Position (D2)
Primary Indicase Surface High Was Saturation Surface High Was Saturation Surface Algal Ma Iron Deg	OGY rology Indicators: ators (minimum of one Water (A1) tter Table (A2) on (A3) larks (B1) tt Deposits (B2) oosits (B3) ot or Crust (B4) oosits (B5) on Visible on Aerial Im	agery (B7)	x Water-Stail Aquatic Fai True Aquat X Hydrogen S Oxidized R Presence c Recent Iror Thin Muck Gauge or V	una (B13) ic Plants (B14) Sulfide Odor (Control of Reduced Iron Reduction in Surface (C7) Vell Data (D9)	(i) C1) on Living Roof on (C4) Tilled Soils (i	s (C3)	Secondary Indicate Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic	ors (minimum of two required) Cracks (B6) ttlerns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) ttressed Plants (D1) Position (D2)
emarks: HYDROLC Vetland Hydv Primary Indic. Surface High Wa Saturatii X Water N Sedimen X Drift Dep Iron Dep Inundati	OGY Tology Indicators: ators (minimum of one Water (A1) tier Table (A2) on (A3) arks (B1) ti Deposits (B2) oosits (B3) t or Crust (B4) oosits (B5)	agery (B7)	x Water-Stail Aquatic Fai True Aquat X Hydrogen S Oxidized R Presence c Recent Iror Thin Muck Gauge or V	una (B13) ic Plants (B14 Sulfide Odor (Chizospheres of Reduced Iro I Reduction in Surface (C7)	(i) C1) on Living Roof on (C4) Tilled Soils (i	s (C3)	Secondary Indicate Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic	ors (minimum of two required) Cracks (B6) ttlerns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) ttressed Plants (D1) Position (D2)
WDROLC Wetland Hydv Primary Indici Surface High We Saturati X Water N Sedimer X Drift Dep Iron Dep Inundati Sparsely Sparsely	Pology Indicators: ators (minimum of one Water (A1) ater Table (A2) no (A3) larks (B1) atrices (B2) posits (B3) at or Crust (B4) posits (B5) no Visible on Aerial Im Vegetated Concave S	agery (B7) Surface (B8)	x Water-Stail Aquatic Fail True Aquat x Hydrogen S Oxidized R Presence c Recent Iror Thin Muck Gauge or V Other (Exp	una (B13) ic Plants (B14) Sulfide Odor (V inizospheres o if Reduced Iro i Reduction in Surface (C7) Vell Data (D9) ain in Remark	(i) C1) on Living Roof on (C4) Tilled Soils (i	s (C3)	Secondary Indicate Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic	ors (minimum of two required) Cracks (B6) ttlerns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) ttressed Plants (D1) Position (D2)
emarks: IYDROLC Vetland Hyd Primary Indicator Surface High W Saturati X Water N Sediment X Drift Dep Inundati Sparseh Sparseh Sparseh Sparseh Sparseh Surface Water Surfa	vology Indicators: ators (minimum of one Water (A1) tier Table (A2) on (A3) arks (B1) tt Deposits (B2) sosits (B3) at or Crust (B4) sosits (B5) on Visible on Aerial Im Vegetated Concave S ations: r Present?	agery (B7) surface (B8) Yes No	x Water-Stail Aquatic Fai True Aquat x Hydrogen S Oxidized R Presence c Recent for Thin Muck Gauge or V Other (Exp	una (B13) ic Plants (B14) Sulfide Odor (Ghizospheres of Reduced Iro I Reduced Iro I Reduction in Surface (C7) Vell Data (D9) ain in Remark	(i) C1) on Living Roof on (C4) Tilled Soils (i	s (C3)	Secondary Indicate Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic	ors (minimum of two required) Cracks (B6) ttlerns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) ttressed Plants (D1) Position (D2)
IYDROLC Vetland Hydry Frimary Indic. Surface High Wa Saturatir X Water N Algal Ma Iron Deg Inundati Splarsely Splarsely Surface Water Water Table I	Poly vology Indicators: ators (minimum of one Water (A1) ter Table (A2) on (A3) tarrisk (B1) nt Deposits (B2) cosits (B3) tor Crust (B4) cosits (B5) on Visible on Aerial Im Vegetad Concave Sations: r Present?	agery (B7) Surface (B8) Yes No Yes No	x Water-Stail Aquatic Fai True Aquat x Hydrogen S Oxidized R Presence c Recent for Thin Muck Gauge or V Other (Exp) x Depth (inche x Depth (inche	una (B13) ic Plants (B14) Sulfide Odor (Gitzospheres of Reduced Iro Surface (C7) Vell Data (D9) ain in Remark s):	c) C1) on Living Root n (C4) Tilled Soils (s (C3)	Secondary Indicat Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic X FAC-Neutral	ors (minimum of two required) Cracks (B6) ttterns (B10) Water Table (C2) rows (C8) lisible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) ITest (D5)
emarks: IYPROLCE Vetland Hyd Primary Indic: Surface High We Saturation X Water N Sediment X Jrift Dey Algal Me Iron Der Inundati Sparseh iield Observ: Surface Wate Water Table le Saturation Pr	Pology Indicators: ators (minimum of one Water (A1) ater Table (A2) no (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) no Visible on Aerial Im Vegetated Concave S ations: r Present? Present?	agery (B7) Surface (B8) Yes No Yes No	x Water-Stail Aquatic Fai True Aquat x Hydrogen S Oxidized R Presence c Recent for Thin Muck Gauge or V Other (Exp	una (B13) ic Plants (B14) Sulfide Odor (Gitzospheres of Reduced Iro Surface (C7) Vell Data (D9) ain in Remark s):	c) C1) on Living Root n (C4) Tilled Soils (s (C3)	Secondary Indicate Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic	ors (minimum of two required) Cracks (B6) ttlerns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) ttressed Plants (D1) Position (D2)
WYDROLC Wetland Hyd Primary Indicator Surface High W Saturation X Water N Sediment X Drift Dep Inundati Sparsel Sparsel Sparsel Sparsel Surface Water Surface Wa	Poly rology Indicators: ators (minimum of one Water (A1) tier Table (A2) on (A3) larks (B1) tt Deposits (B2) sosits (B3) at or Crust (B4) sosits (B5) on Visible on Aerial Im Vegetated Concave S ations: r Present? resent?	agery (B7) Surface (B8) Yes No Yes No Yes No	x Water-Stail Aquatic Fail True Aquat x Hydrogen \$ Oxidized R Presence c Recent Iror Thin Muck Gauge or V Other (Exp) x Depth (inche x Depth (inche	una (B13) ic Plants (B14) sulfide Odor (this plants) if Reduced Iro Reduction in Surface (C7) Vell Data (D9) ain in Remark s): s):	or District Control of	s (C3) C6)	Secondary Indicat Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic X FAC-Neutral	ors (minimum of two required) Cracks (B6) ttterns (B10) Water Table (C2) rows (C8) lisible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) ITest (D5)
emarks: IYDROLC Vetland Hyd Primary Indicator Surface High W Saturation X Water N Sedimer X Drift Dep Inundati Sparsely Sparsely Guida Observ Surface Water Table I Saturation Princludes cap	Poly rology Indicators: ators (minimum of one Water (A1) tier Table (A2) on (A3) larks (B1) tt Deposits (B2) sosits (B3) at or Crust (B4) sosits (B5) on Visible on Aerial Im Vegetated Concave S ations: r Present? resent?	agery (B7) Surface (B8) Yes No Yes No Yes No	x Water-Stail Aquatic Fai True Aquat x Hydrogen S Oxidized R Presence c Recent for Thin Muck Gauge or V Other (Exp) x Depth (inche x Depth (inche	una (B13) ic Plants (B14) sulfide Odor (this plants) if Reduced Iro Reduction in Surface (C7) Vell Data (D9) ain in Remark s): s):	or District Control of	s (C3) C6)	Secondary Indicat Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic X FAC-Neutral	ors (minimum of two required) Cracks (B6) ttterns (B10) Water Table (C2) rows (C8) lisible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) ITest (D5)
emarks: IYDROLC Vetland Hyd Primary Indicator Surface High We Saturation X Water N Sedimer X Drift Dep Inundati Sparseh Inundati Sparseh Sparseh Saturation Pre Inundati Sparseh Inundati Inundati Sparseh Inundati Inundati	Poly rology Indicators: ators (minimum of one Water (A1) tier Table (A2) on (A3) larks (B1) tt Deposits (B2) sosits (B3) at or Crust (B4) sosits (B5) on Visible on Aerial Im Vegetated Concave S ations: r Present? resent?	agery (B7) Surface (B8) Yes No Yes No Yes No	x Water-Stail Aquatic Fail True Aquat x Hydrogen \$ Oxidized R Presence c Recent Iror Thin Muck Gauge or V Other (Exp) x Depth (inche x Depth (inche	una (B13) ic Plants (B14) sulfide Odor (this plants) if Reduced Iro Reduction in Surface (C7) Vell Data (D9) ain in Remark s): s):	or District Control of	s (C3) C6)	Secondary Indicat Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic X FAC-Neutral	ors (minimum of two required) Cracks (B6) ttterns (B10) Water Table (C2) rows (C8) lisible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) ITest (D5)
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emarks: IYDROLC Vetland Hyd Primary Indicator Surface High W Saturation X Water N Sedimer X Drift Dep Inundati Sparsely Sparsely Guida Observ Surface Water Table I Saturation Princludes cap	Poly rology Indicators: ators (minimum of one Water (A1) tier Table (A2) on (A3) larks (B1) tt Deposits (B2) sosits (B3) at or Crust (B4) sosits (B5) on Visible on Aerial Im Vegetated Concave S ations: r Present? resent?	agery (B7) Surface (B8) Yes No Yes No Yes No	x Water-Stail Aquatic Fail True Aquat x Hydrogen \$ Oxidized R Presence c Recent Iror Thin Muck Gauge or V Other (Exp) x Depth (inche x Depth (inche	una (B13) ic Plants (B14) sulfide Odor (this plants) if Reduced Iro Reduced Iro Reduction in Surface (C7) Vell Data (D9) ain in Remark s): s):	or District Control of	s (C3) C6)	Secondary Indicat Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic X FAC-Neutral	ors (minimum of two required) Cracks (B6) ttterns (B10) Water Table (C2) rows (C8) lisible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) ITest (D5)

Wetland

ORAM v. 5.0 Field Form Quantitative Rating

Warel !

Site: \	Rater(s): (34) 340	Date: 8/27/761
1 1 1	Metric 1. Wetland Area (size).	
may B pts. substat		
	>50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2ha) (5 pts)	
	10 to <25 acres (4 to <10.1ha) (4 pts) 3 to <10 acres (1,2 to <4ha) (3 pts)	
	0.3 to <3 acres (0.12 to <1,2ha) (2pts)	
	0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt) <0.1 acres (0.04ha) (0 pts)	
4 9	Metric 2. Upland buffers and surrounding la	and use.
D		
nus 14 pts. subtotel	 2a. Calculate average buffer width. Select only one and assign score. Do not do WIDE. Buffers average 50m (164ft) or more around wetland perimeter. 	
	MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland	perimeter (4)
	VERY NARROW. Buffers average <10m (<32ft) around wetland perime	
	2b. Intensity of surrounding land use. Select one or double check and average. VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area.	
	LOW. Old field (>10 years), shrub land, young second growth forest. (5	
	HIGH. Urban, industrial, open pasture, row cropping, mining, construction	
2 17	Metric 3. Hydrology.	
anx 30 pts. subjected	3a. Sources of Water. Score all that apply. 3b. Connect	tivity. Score all that apply.
	High pH groundwater (5)	00 year floodplein (1) etween stream/lake and other human use (1
	Precipitation (1)	art of wetland/upland (e.g. forest), complex
		art of riparian or upland corridor (1) inunidation/saturation. Score one or dbl ch
	3c. Maximum water depth. Select only one and assign score.	emi- to permanently inundated/saturated (4 equilarly inundated/saturated (3)
	0.4 to 0.7m (15.7 to 27.6in) (2)	easonally inundated (2)
	Se Modifications to natural hydrologic regime. Score one or double check and as	easonally saturated in upper 30cm (12in) (1 verage.
	None or none apparent (12) Check all disturbances observed	
	Recovering (3)	oint source (nonstormwater) ling/grading
		oad bed/RR track redging
	stormwater input of	ther Culue T
15 30	Metric 4. Habitat Alteration and Developme	nt.
16 6	La contract de la con	
naa 20 ptn. subtotal	None or none apparent (4)	
	Recovered (3) Recovering (2)	
	Recent or no recovery (1) 4b. Habitet development. Select only one and assign score.	
	Excellent (7)	
	Very good (5) Good (5)	
	Moderately good (4) Fair (3)	
	Poor to fair (2)	
	Poor (1) 4c. Habitat alteration. Score one or double check and average.	
	None or none apparent (9) Check all disturbances observed	he delegation removal
	Recovering (3) b grazing b	hrub/sapling removal erbaceous/aquatic bed removal
	Recent or no recovery (1) clearcutting s	edimentation fredging
79		arming outrient enrichment

Wetland 3

4 1 - N T	Form Quantitative Rating	2 1 12 2 2	2/1/2/2/2/2
te: AEP	logic town-Dolano Rate	er(s):	Date: 4/27/701
29 0 29	Metric 5. Special Wetla		
= = 11	Bog (10) Fea (10) Fea (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetlan Lake Erie coastal/tributary wetlan Lake Pilan Sand Prairies (Oak O; Relict Wet Prairies (10) Known occurrence state/federal t Significant migratory songbird/we Category 1 Wetland. See Questi	d-restricted hydro benings) (10) hreatened or end ter fowl habitat or on 1 Qualitative F	ology (5) angered species (10) usage (10)
5 34	Metric o. Trans commo	miles, mi	erspersion, interotopography.
50 btc anpiops	6a. Wetland Vegetation Communities.	Vegetation	Community Cover Scale
	Score all present using 0 to 3 scale,	0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
	Aquatic bed	1	Present and either comprises small part of wetland's
	Emergent		vegetation and is of moderate quality, or comprises a
	Shrub Z Forest	- 2	significant part but is of low quality
	Mudflats	2	Present and either comprises significant part of welland's vegetation and is of moderate quality or comprises a small
	Open water		part and is of high quality
	Other	3	Present and comprises significant part, or more, of wetland's
	6b. horizontal (plan view) Interspersion.	9	vegetation and is of high quality
	Select only one.	-	T 1984 and at 1984 desiry
	High (5)	Narrative D	lescription of Vegetation Quality
	Moderately high(4)	low.	Low spp diversity and/or predominance of nonnative or
	Moderate (3)	100	disturbance tolerant native species
	Moderately low (2)	mod	Native spp are dominant component of the vegetation,
	Low (1)		although nonnative and/or disturbance tolerant native spp
	None (0)		can also be present, and species diversity moderate to
	6c. Coverage of invasive plants. Refer- to Table 1 ORAM long form for list. Add		moderately high, but generally w/o presence of rans threatened or endangered spp
	or deduct points for coverage	high	A predominance of native species, with nonnative spp
	Extensive >75% cover (-5)	inger	and/or disturbance tolerant native app absent or virtually
	Moderate 25-75% cover (-3)		absent, and high spp diversity and often, but not always,
	Sparse 5-25% cover (-1)		the presence of rare, threatened, or endangered app
	Nearly absent <5% cover (0)	-	
	Absent (1)	Mudflat an	d Open Water Class Quality
	6d. Microtopography.	0	Absent <0.1ha (0.247 acres)
	Score all present using 0 to 3 scale.	- 1	Low 0.1 to <1ha (0.247 to 2.47 acres)
	Vegetated hummucks/fussucks	2	Moderate 1 to <4ha (2.47 to 9.88 acres)
	Coarse woody debris >15cm (6in		High 4ha (9,88 acres) or more
	O Standing dead >25cm (10in) dbh		The Secretary Co.
	Amphibian breading pools		graphy Cover Scale
		- 0	Absent Present very small amounts or if more common
			of marginal quality
		2	Present in moderate amounts, but not of highest
	1	2	quality or in small amounts of highest quality
ilegory.	-	3	Present in moderate or greater amounts
1		4	
200			and of highest quality

End of Quantitative Rating. Complete Categorization Worksheets.

8

placent/Overs AEP Section, Township, Range unknown Local relief (onclare, convex, none). Concrete religion(s): Bab. Jul. Local relief (onclare, convex, none). Concrete per (5): List 39.36546 Long 43.0228 No Datum; ALOBIS UTM16N Map for Name: McC2 Section, Township, Range unknown Local relief (onclare, convex, none). Concrete per (5): Map for None; Constant Property on the set typical for this time of year? Ves. X. No No (17 no, explain in Nemarks.) No (17 no, explain in Nem	Wetland 4		WEILAND	JE I EKWIINA I	ION DATA	FURIVI IV	lidwest Region	
Section Transition Present Section Transiti	Project/Site:	AEP Biers Run-Hopete	own-Delano		City/County	Ross Count	ty	Sampling Date: 8/27/2013
inclose principles. Include the process of the set of year included in the process of the set of year included in the set of year included in the set of year included inc	Applicant/Owner:	AEP					State: OH	Sampling Point: wbao-082713-01
Not class factors (Pot size: 30 gads 1 to 1 t	Investigator(s):	BAO, JAC			Sec	tion, Townshi	ip, Range: unknown	
Map Unit Name KoCQ Central Pythorogon continues on the site bypical for this time of year? Yes X No (if no, explain in hematids) Yes X No (if no, explain in hematids	Landform (hillslope	, terrace, etc.):				Local r		
e dimate i hydrotogic conditions on the site hydral for this time of year? Vey dipation M. Soil N. or Hydrology M. auturally problemate? (If needed, explain any answers in Remarks.) Vey dipation M. Soil N. or Hydrology M. auturally problemate? (If needed, explain any answers in Remarks.) William Mary OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. Very S. X. No	Slope (%):		39.368548	3	Long:			
e Vegetation Y Soil Y or Hydrology N asturarly problemate? (if needed, explain any answers in Remarks) UMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. UMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. UMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. UMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. UMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. UMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. UMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. UMMARY OF FINDINGS — Attach site is the Sampled Arra within a Wetland?	Soil Map Unit Name							
eVegetation N Soil N Or Hydrotogy N naturally problemate? (If needed, espain any answers in Remarks) William Ary OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. Individual of the state		-	**		-			•
UMMARY OF FINDINGS	Are Vegetation							
Indicator Present? Yes X No Is the Sampled Area within a Wetland? Yes X No Is the Sampled Area within	Are Vegetation							
within a Wetland? Ves X No within a Wetland? Wes A No within a Wetland								res, etc.
relation Hydrodopy Present? Yes X No Provided Present? Yes X No Provided Pr								V N-
### Melland with stream running through center ### Melland with stream running through center ### Absolute					- Within	a wettand?	res	A NO
EGETATION Use scientific names of plants. ### Absolute Dominant Indicator		Fleselit!	165	INU	-			
Absolute Dominant Indicators Square Species Status S		stream running through o	enter					
Absolute Dominant Indicators Square Species Status S								
Dominance Test worksheet: Provider defloides	VEGETATION	Use scientific na	ames of plants.					
Populus defloides	Tree Stratum (DI-4	oiza: 201	`				Dominance T+	
Salik nigra S Yes OBL Number of Domhant Species That Are OBL, FACW, or FAC: 3 (A)			_'				Dominance Test workshee	T.
That Are OBL, FACW, or FAC: 3 (A) Total Number of Dominant Species Across All Stratu: 4 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 75% (A/B) Percent of Dominant Species That Are OBL, FACW, or FAC: 75% (A/B) Prevalence Index worksheet: Prevalence Index wor		ies					Number of Dominant Specie	s
Total Number of Dominant Species Across All Stratus: Percent of Dominant Species That Are OBL, FACW, or FAC: 75% (A/B)	3.				- 100			
10 = Total Cover Species Across All Strata: 4 (8)	4.							
Percent of Dominant Species That Are OBL, FACW, or FAC: 75% (A/B)	5.						Total Number of Dominant	
That Are OBL, FACW, or FAC: 75% (A/B)	-			10	= Total Cover		Species Across All Strata:	4 (B)
That Are OBL, FACW, or FAC: 75% (A/B)								
Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 97 x1 = 97 OBL species 2 x2 = 4 OBL species 2 x3 = 57 OBL species 2 x4 = 8 OBL spe		tum (Plot size: 15' rac	lius)					
Prevalence Index worksheet: Prev	1						That Are OBL, FACW, or FA	.C: 75% (A/B)
Prevalence Index worksheet: Provalence Index worksheet: Prevalence Index worksheet: Prev	2							
Provalence Index worksheet: Total % Cover of: Multiply by.	3.						Danielana ladan madalah	-4-
Total Cover Total W Cover of: Multiply by:	5							
Apply Appl	6						Tovalonoe maex workshee	
Apply Appl					= Total Cover		Total % Cover of:	Multiply by:
Society arrows 5	Herb Stratum (Plot	t size: 5' radius)		_			
Scipus atroviens	1. Typha angustif	olia	_	75	Yes	OBL	FACW species 2	x2 = 4
Cyperus esculentus	Solidago sp.							
Toxicodendron radicans 5 No FAC Column Totals: 120 (A) 166 (B)								
Carex sp. 2 No FAC Prevalence Index = B/A = 1.38								
Apocynum cannabinum 2 No FAC Carex lurida 2 No OBL Hydrophytic Vegetation Indicators: 1-Rapid Test for Hydrophytic Vegetation X 2-Dominance Test is >50% X 3-Prevalence Index is \$3.0¹ 4-Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 108 = Total Cover 108 = Total Cover Hydrophytic Vegetation Indicators: 1-Rapid Test for Hydrophytic Vegetation X 2-Dominance Test is >50% X 3-Prevalence Index is \$3.0¹ 4-Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 108 = Total Cover Hydrophytic Vegetation 108 = Total Cover Hydrophytic Vegetation Indicators: 1-Rapid Test for Hydrophytic Vegetation Yespert in Hydrophytic Vegetation Yespert in Hydrophytic Vegetation Present; unless disturbed or problematic. Hydrophytic Vegetation Present? Yes X No **Bridge Test or Hydrophytic Vegetation Tincidence Test or Hydrophytic Vegetation Yes X No **Bridge Test or Hydrophytic Vegetation **Bridge Test or Hydrophytic Vegetation Yes X No **Br		radicans					Column Totals: 120	(A) 166 (B)
Carex lurida 2 No OBL Hydrophytic Vegetation Indicators: 1-Rapid Test for Hydrophytic Vegetation X 2-Dominance Test is >50% X 3-Prevalence index is \$3.0° and 4-Morphological Adaptations* (Provide supporting data in Remarks or on a separate sheet) 108 = Total Cover 2 Yes FACU 4-Morphytic Vegetation Indicators: 1-Rapid Test for Hydrophytic Vegetation X 2-Dominance Test is >50% X 3-Prevalence index is \$3.0° and 4-Morphytic Vegetation* (Provide supporting data in Remarks or on a separate sheet) **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. **Hydrophytic Vegetation Present? Yes X No **Prevalence index is \$3.0° and in the problematic of the		un a hinum					Drovolonoo Indov =	D/A = 4.29
Hydrophytic Vegetation Indicators: 1-Rapid Test for Hydrophytic Vegetation X 2-Dominance Test is >50% X 3-Prevalence Index is \$3.0° 4-Morphological Adaptations* (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation* (Explain) 108 = Total Cover 108 = Total Cover 108 FACU Yes FACU Yes FACU Yeseant? Yes X No Present? Yes X No Hydrophytic Yeseant? Yes X No Present? Yes X No Hydrophytic Vegetation No No Present? Yes X No Hydrophytic Vegetation Present? Yes X No Hydrophytic Vegetation No No Present? Yes X No Hydrophytic Vegetation No No Hydrophytic Vegetation No No Hydrophytic Vegetation No No Present? Yes X No Hydrophytic Vegetation No No No Hydrophytic Vegetation No		nabinum					Prevalence index =	B/A = 1.36
Hydrophytic Vegetation Indicators: 1-Rapid Test for Hydrophytic Vegetation X 2-Dominance Test is >50% X 3-Prevalence index is ≤3.0¹ 4-Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 108 = Total Cover 109 FACU Vegetation 109 Yes FACU Vegetation 109 Yes X No 2 Yes FACU Vegetation 109 Problematic Nydrophytic Vegetation 100 Problematic Nydrophytic Nydrophytic Vegetation 100 Problematic Nydrophytic Nydrop	9				140	ODL		
1.Rapid Test for Hydrophytic Vegetation X 2-Dominance Test is >50% X 3-Prevalence Index is 3.0 of additional interest in the control of the	10						Hydrophytic Vegetation Inc	dicators:
X 2-Dominance Test is >50% X 3-Prevalence index is \$30' 4-Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)	11.						.,,,	
X 2-Dominance Test is >50% X 3-Prevalence index is ≤3.0¹ 4-Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 108 = Total Cover 108 = Total Cover 108 = Total Cover 108 FACU Yes FACU Yes FACU Yes Yes Yes No Prosent? Yes X No Present? Yes X No Present? Yes X No Present? Yes X No	12.						1-Rapid Test for Hy	drophytic Vegetation
4-Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) 4-Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) 4-Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) 4-Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) 4-Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) 4-Morphological Adaptations (Provide supporting data in Remarks separate sheet) 4-Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) 4-Morphological Adaptations (Provide supporting data in Remarks special separate sheet) 4-Morphological Adaptations (Provide supporting data in Remarks special separate sheet)	13.							
data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation (Explain)	14.							
Problematic Hydrophytic Vegetation (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 108 = Total Cover	15.						4-Morphological Ad	aptations ¹ (Provide supporting
"Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 108 = Total Cover	16							
Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic	17				. ——		Problematic Hydrop	phytic Vegetation (Explain)
be present, unless disturbed or problematic. 108 = Total Cover	18 19.						Indicators of hydric coil	wetland hydrology must
108 = Total Cover Hydrophytic	19. 20.						,	, ,,
oody Vine Stratum (Plot size: 30' radius) Vils aestivalis	LU			108	= Total Cover		be present, unless disturbed	огрюшентавс.
. Vitis aestivalis 2 Yes FACU Vegetation Present? Yes X No				100	rotal Gover			
. Vitis aestivalis 2 Yes FACU Vegetation Present? Yes X No	Woody Vine Stratu	m (Plot size: 30' rad	fius)				Hydrophytic	
Present? Yes X No	Vitis aestivalis			2	Yes	FACU		
2 = Total Cover emarks: (Include photo numbers here or on a separate sheet.)	2.							X No
				2	= Total Cover			
					-			
US Army Coms of Engineers Midwest Region version 2.0	Remarks: (Include	photo numbers here or	on a separate sheet.)				
US Army Corps of Engineers Midwest Region version 2.0								
	US Army Corns	of Engineers						Midwest Region version 2.0

Sampling Point: wbao-082710 SOII

Depth Matrix inches) Color (moist) 0-8" 10YR 4/1		Color (moist)	ox Features %	Type ¹	Loc ²	Texture	
				Type	LUC	rexture	Remarks
	80	10YR 6/8	20	RM	М	Silty Clay	
						. —————	
¹ Type: C=Concentration, D=Depletion	RM=Reduced	Matrix CS=Covered	or Coated S	Sand Grains	² Locati	ion: PL=Pore Lining, N	M=Matrix
lydric Soil Indicators:	,					ators for Problematic	
Histosol (A1)		Sandy Gleyed	Matrix (S4)			Coast Prairie	Redox (A16)
Histic Epipedon (A2)		Sandy Redox	(S5)			Iron-Mangane	ese Masses (F12)
Black Histic (A3)		Stripped Matr	ix (S6)			Dark Surface	(S7)
Hydrogen Sulfide (A4)		Loamy Mucky					Dark Surface (TF12)
Stratified Layers (A5)		Loamy Gleyer				Other (Explai	n in Remarks)
2 cm Muck (A10)		x Depleted Mate	. ,				
Depleted Below Dark Surface (A1	1)	Redox Dark S		_		3	
Thick Dark Surface (A12)		Depleted Dark		7)		,	phytic vegetation and
		Redox Depres	ssions (F8)			wetland hydrolog	gy must be present,
Sandy Mucky Mineral (S1)						continue all attentions	
5 cm Mucky Peat or Peat (S3)						unless disturbe	ed or problematic.
5 cm Mucky Peat or Peat (S3) Restrictive Layer (if observed):						unless disturbe	ed or problematic.
5 cm Mucky Peat or Peat (S3)					Hydric	unless disturbe	Yes X No
5 cm Mucky Peat or Peat (S3) testrictive Layer (if observed): Type: Depth (inches): emarks:					Hydric		<u> </u>
5 cm Mucky Peat or Peat (S3) Restrictive Layer (if observed): Type: Depth (inches): emarks:					Hydric		<u> </u>
5 cm Mucky Peat or Peat (S3) testrictive Layer (if observed): Type: Depth (inches): emarks:	required: check	all that apply)			Hydric	Soil Present?	<u> </u>
6 cm Mucky Peat or Peat (S3) Restrictive Layer (if observed): Type: Depth (inches): emarks: IYDROLOGY Vetland Hydrology Indicators:	equired: check	all that apply) x Water-Staine	d Leaves (BS	3)	Hydric	Soil Present?	Yes X No
5 cm Mucky Peat or Peat (S3) testrictive Layer (if observed): Type: Depth (inches): emarks: IYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is or	required: check			3)	Hydric	Soil Present?	Yes X No
5 cm Mucky Peat or Peat (S3) testrictive Layer (if observed): Type: Depth (inches): emarks: IYPROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is r	required: check	x Water-Stained	a (B13)		Hydric	Soil Present? Secondary Indicato Surface Soil X Drainage Pat	Yes X No
6 cm Mucky Peat or Peat (S3) Restrictive Layer (if observed): Type: Depth (inches): emarks: IYDROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of one is r x. Surface Water (A1) x. High Water Table (A2)	required: check	x Water-Stained	a (B13) Plants (B14)		Hydric	Soil Present? Secondary Indicato Surface Soil X Drainage Pat	rs (minimum of two required) Cracks (B6) Vater Table (C2)
6 cm Mucky Peat or Peat (S3) Restrictive Layer (if observed): Type: Depth (inches): Depth (inches): Pemarks: IYDROLOGY Vetland Hydrology Indicators: Your Age Water (A1) X High Water Table (A2) X Saturation (A3) X Water Marks (B1) Sediment Deposits (B2)	equired: check	x Water-Stained Aquatic Fauna True Aquatic x Hydrogen Sul Oxidized Rhiz	a (B13) Plants (B14) fide Odor (C cospheres on	1) Living Roots		Secondary Indicato Surface Soil X Drainage Pat Dry-Season V Craylish Burn Saturation Vis	rs (minimum of two required) Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9)
5 cm Mucky Peat or Peat (S3) testrictive Layer (if observed): Type: Depth (inches): emarks: IYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is r x Surface Water (A1) x High Water Table (A2) x Saturation (A3) x Water Marks (B1)	equired: check	x Water-Stained Aquatic Fauna True Aquatic x Hydrogen Sul Oxidized Rhiz Presence of F	a (B13) Plants (B14) fide Odor (C cospheres on Reduced Iron	1) Living Roots (C4)	s (C3)	Secondary Indicato Surface Soil (Dry-Season V Crayfish Burr Saturation Vis Stunted or St	rs (minimum of two required) Cracks (B6) terms (B10) Vater Table (C2) ws (C8) sible on Aeral Imagery (C9) ressed Plants (D1)
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6 cm Mucky Peat or Peat (S3) testrictive Layer (if observed): Type: Depth (inches): Permarks: IYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is r x Surface Water (A1) x High Water Table (A2) x Saturation (A3) x Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Image Sparsely Vegetated Concave Surfield Observations:	ery (B7)	x Water-Stainer Aquatic Fauna True Aquatic x Hydrogen Sul Oxidized Rip Presence of F Recent Iron R Thin Muck Su Gauge or Wei	a (B13) Plants (B14) fide Odor (C cospheres on Reduced Iron teduction in T urface (C7) Il Data (D9)	1) a Living Roots a (C4) Filled Soils (C	s (C3)	Soil Present? Secondary Indicato Surface Soil (x Drainage Part Dry-Season V Crayfish Burr Saturation VIV Stunted or St Geomorphic I	rs (minimum of two required) Cracks (B6) terms (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2)
5 cm Mucky Peat or Peat (S3) Restrictive Layer (if observed): Type: Depth (inches): Pemarks: Syphis Depth (inches): Primary Indicators (minimum of one is recommended in the commended in	ery (B7) face (B8) s_x_No	x Water-Stainer Aquatic Faun: True Aquatic x Hydrogen Sul Oxidized Rhiz Presence of F Recent Iron R Thin Muck Su Gauge or Wei Other (Explair	a (B13) Plants (B14) fide Odor (C cospheres on Reduced Iron teduction in T urface (C7) Il Data (D9) n in Remarks	1) a Living Roots a (C4) Filled Soils (C	s (C3)	Soil Present? Secondary Indicato Surface Soil (x Drainage Part Dry-Season V Crayfish Burr Saturation VIV Stunted or St Geomorphic I	rs (minimum of two required) Cracks (B6) terms (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2)
5 cm Mucky Peat or Peat (S3) Restrictive Layer (If observed): Type: Depth (inches): Depth (inches): Demarks: Primary Indicators (minimum of one is recommended in the second of the se	ery (B7) face (B8) s	x Water-Stainet Aquatic Faun. True Aquatic x Hydrogen Sul Oxidized Rhiz Presence of F Recent Iron R Thin Muck Su Gauge or We Other (Explain Depth (inches):	a (B13) Plants (B14) fide Odor (C cospheres on Reduced Iron reduction in T urface (C7) Il Data (D9) n in Remarks 1" Surface	1) a Living Roots (C4) Filled Soils (C	s (C3)	Secondary Indicato Surface Soil X Drainage Pat Dry-Season V Craylish Burn Saturation Vis Stunted or St Geomorphic I X FAC-Neutral	rs (minimum of two required) Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
5 cm Mucky Peat or Peat (S3) Restrictive Layer (If observed): Type: Depth (inches): Depth (inches): Demarks: Primary Indicators (minimum of one is recommended in the second of the se	ery (B7) face (B8) s_x_No	x Water-Stainer Aquatic Faun: True Aquatic x Hydrogen Sul Oxidized Rhiz Presence of F Recent Iron R Thin Muck Su Gauge or Wei Other (Explair	a (B13) Plants (B14) fide Odor (C cospheres on Reduced Iron reduction in T urface (C7) Il Data (D9) n in Remarks 1" Surface	1) a Living Roots (C4) Filled Soils (C	s (C3)	Soil Present? Secondary Indicato Surface Soil (x Drainage Part Dry-Season V Crayfish Burr Saturation VIV Stunted or St Geomorphic I	rs (minimum of two required) Cracks (B6) terms (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2)

Wetland 4

	Wetlan	d9
RAM v. 5.0 Field Form Quantitative Rating		Date: 1/11/10/2
Site: AET Houstonia Delina	Rater(s):	Date: 41 1/40
10 to <25 acres (1.2 o.3 to <10 acres (1.2 o.3 to <10 acres (1.2 o.3 to <10 acres (0.4 o.1 acre	ign score. ((6 pts) (16 pts) (15 p<20 2hs) (5 pts) (6 pts) (6 pts) (6 pts) (7 pts) (7 pts) (8 pts) (9	not double check. meter (7) vetland perimeter (4) vetland perimeter (1) perimeter (0) stage. (6 area, etc. (7) rest. (5) rest. (5)
Metric 3. Hydro	ology.	Connectivity. Score all that apply.
3c. Maximum water depth. >0.7 (27.6in) (3) 0.4 to 0.7m (15.7	read and supply leading to the supply leadin	100 year floodylain (1). Between streamflake and other human use (1 Part of wetland/uplaind (e.g. forest), complex (2). Part of mediand/uplaind (e.g. forest), complex (3). Part of mediand plaint comider (1). Duration inundation/saturation. Score one or dole in Serrii: to permanentily nundated/saturated (3). Seasonally mundated (2). Seasonally saturated in upper 30cm (12in) (1).
3e, Modifications to natura Note or note ap Recovered (7) Recovering (3) Recent or no rec	parent (12) Check all disturbances observed ditch	point source (nonstormwater) illimo(grading road bed/RR track dredging other
max 20 pts. subtent 46. Substrate disturbance None or none as Recovered (2) Recovering (2) Receil or no re 4b. Hinbitat development. Excellent (7) Very good (6) Moderately good Fair (3) Poor to fair (2)	covery (1) Select only one and assign score. In the select only one and assign score. In the select one of double check and average. In the select one of double check and average. In the select one of double check and average. In the select one of double check and average.	

last revised 1 February 2001 Jim

Metric 5. Special Wetlands. Part 10 graz. Modera M	DRAM v. 5.0 Field For	n Quantilative Rating		une	March. 1	W140 16-11
Metric 5. Special Wetlands Part			Rater(s): []	n) I-	A.F.	Date: 8/27/2013
Check all that apply and score as indicated. Bog 110) Fin 110) Old growth forest (10) Malaure forested welfand (5) Lake Eric coasstaff/buttary wetland-meristricted hydrology (10) Lake Plain Sand Prairies (Oak Openings) (10) Relick Wel Prairies (10) Krown occurrence statel/rederate threatened or endangered species (10) Significant migratory soxophilar/baset frow habilator usage (10) Significant migratory soxophilar/baset frow habilate or usage (10) Significant part but is of low quality Fresent and either comprises agrillicant part of welland's vegetation and is of moderate quality or comprises a an inchange of the provided of the provided in the provided of the provided of the provided in the provided of the provided in the prov	72					
Bog (10) Fen 1(0) Gid growth forest (10) Mallor forested wellant (5) Lake Efie cosstativiturary wetland-unrestricted hydrology (10) Lake Efie cosstativiturary wetland-unrestricted hydrology (5) Lako Plain Sand Prairies (0ak Openings) (10) Retick Wet Prairies (10) Rock Openings) (10) Retick Wet Prairies (10) Right (10) Retick Wet Prairies (10) R	0 22					
Fig. 1(0) Category	TOX 10 pts: subjected	Check all that apply and score as in Bog (10)	dicated			
Category 1 Wetland. See Closelion 1 Qualitative feating (19) Metric 6. Plant communities, interspersion, microtopography. 6a. Wetland Vegetation Community Cover Scale Advantice Score all present using 0 to 3 scale. Forest		Fen (10) Oid growth forest (10) Majore forested wellland Lake Erie coastal/virbutar Lake Erie coastal/virbutar Lake Plain Sand Prairies Relict Wet Prairies (10)	ry wetland-unrestric ry wetland-restricted (Oak Openings) (1	0) or endan	gy (5)	
Metric 6. Plant communities, interspersion, microtopography. Be. Welland Vegetation Communities, Score all present using 0 to 3 scale. Aquatic bed Emergent Emergent Emergent Emergent Shrub Forest Mudfals Open water Opther Department of the Shrub Forest Mudfals Open water Opther Emergent Eligible (Shrub Moderately high(4) Moderately high (5) Moderately high (6) Moderately high (7) Moderately high (8) Moderately high (8) Moderately high (9) Moderat		A Comment of the State of the S	us Chapstion 1 Dualil	tative Ka	ing (-10)	
Absent or comprises scale present using 0 to 3 scale. Aquatic bed Emergent Shrub Present and either comprises small part of wetland's vegetation and is of important againty or comprises a significant part of wetland's vegetation and is of flow quality or comprises a significant part of wetland's vegetation and is of moderate quality, or comprises a significant part and since the comprises is grafticant part of wetland's vegetation and is of moderate quality or comprises a surport and is of high quality. Other	-1 71	Metric 6. Plant co	mmunities	, inte	erspersion, mic	crotopography.
Scare all present using 0 to 3 scale. Aqualic bed Emergon	may 20 plis subtotal	6a. Wetland Vegetation Commun	11001	etation C	Community Cover Scale	ha (0.2471 acres) configuous area
Emergont Shrub Separation and is of moderate quality, or comprises a significant part but it so flow quality or comprises a significant part but it so flow quality or comprises as an expert and either comprises significant part of wetland's vegetation and is of moderate quality or comprises as an part and is of high quality or comprises as an part and is of high quality or sometime. Solect only one.		Score all present using 0 to 3 scale	er.	0	Present and either compl	isas small part of wetland's
Shrub Forest Wuddita Shrub So down quality Shrub Forest Wuddita Shrub So down quality Shrub So down quality Shrub So down quality Shrub So down quality Shrub Shru					vegetation and is of mo	derate quality, or comprises a
Muditals Open water Open water Other Other Sib. horizontal (plan view) Interspersion. Select only one. Flight (5) Moderately high(4) Moderately high(4) Moderately low (2) Low (1) None (0) None (0) None (1) None (1) None (1) None (1) None (1) None (2) Extensive >75% cover (-5) Sparse 5-25% cover (-5) Nonetry absent 45% cover (-5) Nonetry beant 45% cover (0) Absent (1) So. (Microtopography. Soore all present using 0 to 3 scale. Vogetated hummunicatiossaucks Coarse woody debris > 15cm (6in) Standing dead >25cm (10in) dbh Amphibian breeding pools (1) Microtopography Soore all present using 0 to 3 scale. Vogetated hummunicatiossaucks Coarse woody debris > 15cm (6in) Standing dead >25cm (10in) dbh Amphibian breeding pools (1) Microtopography Nonetry beant 45% cover (1) Standing dead >25cm (10in) dbh Amphibian breeding pools (1) Microtopography Nonetry beant 45% cover (1) Standing dead >25cm (10in) dbh Amphibian breeding pools (1) Microtopography Cover Scale Present in moderate or greater amounts on highest quality Present in moderate or greater amounts on highest quality					elegificant part but is of	low quality
Deer walter Other St. hortzontal (plan view) Interspersion. Select only one. High (5) Moderate(3) Mod				2	Present and either comp	rises significant part of weband s
Open water Other Other Other					make an it is all blinds of tol	ih)
Select only one. Select one. Select only one. Select one. Select only one. Select one. Select only one. Select one. Select only one. Select one. Select only one. Select one. Select only one. Select only one. Select only one. Sel		Open water	-		Process and is of right qual	innificant part, or more, of wetland
Select only one. Select only one.		Other		3	Present and comprises a	ah quality
High (5) Moderate (3) Moderate (3) Moderate (3) Moderate (4) Moderate (5) Moderate (5) Moderate (7) Moderate (7) Moderate (8) Moderate (7) Moderate		6b. horizontal (plan view) Intersp		_		
Low spp diversity and/or productions and continuation of the design of the second disturbance tolerant native species			Nar	rative D	escription of Vegetation (Quality
Moderate (3) Moderately low (2) Vow (1) None (0) None (0) None (1) None (2) None (2) None (3) None (4) None (5) None (6) None (7) None (8) None (8) None (9) None (9) None (9) None (1)			1100		Low spp diversity and/or	predominance or normalive or
although nonhative and/or disturbance tolerant native and although nonhative and or destination to the company of the presence of race threatened or endangered spp Moderate 25-75% cover (-5)				1.0	disturbance tolerant re	stive species
to Table 1 ORAM long form for list. Add for deduct points for coverage with the property of th		Moderately low (2) Low (1)		mod	although nonnative an	d/or disturbance tolerant native ap ind species diversity moderate to
or deduct points for coverage or deduct points for coverage Extensive >75% cover (-5) Moderate 2-75% cover (-5) Sparse 5-25% cover (-1) Nearly absent <5% cover (-1) Nearly absent <5% cover (-1) Absent (1) 6d. Microtopography Score all present using 0 to 3 scale. Vegetated hummuctartisations Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh Amphibian breeding pools Microtopography Cover Scale 0 Absent 1 Present in moderate amounts or if more common or anginal quality 2 Present in moderate amounts of highest quality 3 Present in moderate or greater amounts and of highest quality 3 Present in moderate or greater amounts and of highest quality		6c. Coverage of Invasive plants	Heter H Add		threshland or endang	arad SOD
Moderate 28-75% cover (-1) Sparse 5-25% cover (-1) Nearly obsent <5% cover (0) Absent (1) 6d. Microtopography Score all present using 0 to 3 scale. Vogetated hummuckar(ussucks Coarse woody dabris = 15cm (6in) Standing dead >25cm (10in) dbh Amphiblan broeding pools Microtopography Cover Scale Amphiblan broeding pools Microtopography Cover Scale 0 Absent 1 Present very small amounts or if more common of marginal quality or in small amounts of highest quality or in small amounts of highest quality 3 Present in moderate amounts, but not of highest quality 9 Present in moderate or greater amounts and of highest quality		or rieduct points for coverage		high	A predominance of nativ	ve species, with nonnative spp evant native spp absent or virtually
Sparse Seats Active Cover (0) Absent (1)		Moderate 25-75% cov	ur (-3)		absent, and high spp the resence of rare.	diversity and often, but not amayor threatened, or endangered app
Absent (1) 6d. Microtopography Score all present using 0 to 3 scale. Vogetated hummuckstossucks Coarse woody dobris > 15cm (8in) Standing dead >25cm (10in) dbh Amphiblan breeding pools Microtopography Cover Scale Microtopography Cover Scale Microtopography Cover Scale Absent 1 Present very small amounts or if more common of marginal quality Present in moderate amounts, but not of highest quality 3 Present in moderate or greater amounts and of highest quality 3 Present in moderate or greater amounts and of highest quality		Sparse 5-25% cover (_		
Some all present using 0 to 3 scale. 1			Mi	udflat an	d Open Water Class Qua	lity
Score all present using 0 to 3 scale. Vegetated humanusculasucks Coarse woody dabris >15cm (6in) Standing dead >25cm (10in) dbh Amphiblan breeding pools Microtopography Cever Scale Amphiblan breeding pools Microtopography Cever Scale Amphiblan breeding pools Microtopography Cever Scale Amphiblan breeding pools Present very small amounts or if more common or marginal quality Present in moderate amounts, but not of highest quality Present in moderate or greater amounts and of highest quality					Absent <0.1ha (0,247	acres)
Vogetated hummunckstossuchs 2 Notes 1 1 1 1 1 1 1 1 1		Some all present using 0 to 3 sc	ale.		Low 0.1 to <1ha (0.247	10 2.47 SCRES)
Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh Amphibian breeding pools Microtopography Cover Scale O Absent Present very small amounts or if more common of marginal quality or in small amounts of highest quality or in small amounts of highest quality Prosent in moderate or greater amounts and of highest quality		Venetated hymmucks	/lussucks		Moderate 1 to <4ha (2	,4/ 10 S.00 8G/GS)
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quality or in small amounts of highest quarry 3 Present in moderate or greater amounts and of highest quality			1 -	1	Present very small am	
(U) Eggry 3 Present in moderate or greater amounts and of highest quality			-	2	quality or in small an	nounts of highest quality
and of Highest quality	Tel some		-	3	Present in moderate of	r greater amounts
51	CT(1 Galler)			-	and of highest qualit	ty
Total Countitative Rating, Complete Categorization Worksheets.	31		7			
	6	Find of Quantitative	e Rating, Co	omple	te Categorization	n Worksheets.

End of Quantitative Rating. Complete Categorization Worksheets.

8

tantly distributed in the control of	Yes _ urbed? matic? point loca	X No_ Are "No_ (If needstitions, tra Sampled Ara a Wetland?	State: OH
antly distribution	Yes _ urbed? matic? point loca Is the s	X No_Are "No (If need attions, transactions, transactions)	ip, Range: unknown relief (concave, convex, none): Concave -83.026035
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gy from d	within	a Wetland?	
gy from d			Yes X No
gy from d	Irainage swal		
gy from d	Irainage swal		
		le from uplar	nd area
			Dominance Test worksheet:
			Number of Demiserat Consider
			Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)
70	INU	FACVV	That Are OBL, FACW, or FAC: 7 (A)
			Total Number of Dominant
0% = 7	Total Cover		Species Across All Strata: 7 (B)
			Percent of Dominant Species
%	No	FACW	That Are OBL, FACW, or FAC: 100% (A/
	Yes	FACW	
%	No	FACU	Prevalence Index worksheet:
20/ - 7	F-4-1 C		Takal 0/ Causa af
276 = 1	Total Cover		Total % Cover of: Multiply by:
1%	No	FACW	FACW species 135% x2 = 2.7
			FAC species 52% x3 = 1.56
%	No	FACW	FACU species 2% x4 = 0.08
%	No	FAC	UPL species x5 =
%	No	FACW	Column Totals: 1.89 (A) 4.34 (
0%	No	FACW	
			Prevalence Index = B/A = 2.30
			Hydrophytic Vegetation Indicators:
			1-Rapid Test for Hydrophytic Vegetation
			X 2-Dominance Test is >50%
			X 3-Prevalence Index is ≤3.01
			4-Morphological Adaptations ¹ (Provide supporting
			data in Remarks or on a separate sheet)
			Problematic Hydrophytic Vegetation ¹ (Explain)
			¹ Indicators of hydric soil and wetland hydrology must
			be present, unless disturbed or problematic.
0% = 1	Total Cover		
			Hydrophytic
	Yes		Vegetation
		FAC	Present?
% = 1	otal Cover		
		Over Species? 5% Yes 7% Yes 7% No 7% No 7% Yes 7% Yes 7% Yes 7% No 7% </td <td>cover Species? Status 5% Yes FACW 9% Yes FACW 9% Total Cover 9% Total Cover 9% Yes FACW 9% Yes FACW 9% Yes FACW 9% No FACW 9% Yes FACW</td>	cover Species? Status 5% Yes FACW 9% Yes FACW 9% Total Cover 9% Total Cover 9% Yes FACW 9% Yes FACW 9% Yes FACW 9% No FACW 9% Yes FACW

SOIL Sampling Point: wbao-10071;

Profile Descr Depth	Matrix			dox Features				
inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-14"	10YR 3/2	98	10YR 5/8	2	RM	М	Silty Clay Loam	with gravel
								*
							·	
1= 0.0						2		
lydric Soil Ir		tion, Rivi=Reduc	ced Matrix, CS=Covere	ed or Coated S	sand Grains.		on: PL=Pore Lining, Nators for Problematic	
Histosol			Sandy Gleye	ed Matrix (S4)			Coast Prairie I	
	pipedon (A2)		Sandy Redo					se Masses (F12)
	stic (A3)		Stripped Mar				Dark Surface (
	n Sulfide (A4)			ky Mineral (F1)			Dark Surface (TF12)
	Layers (A5)			ed Matrix (F2)			Other (Explain	
	ick (A10)		x Depleted Ma					,
_	Below Dark Surface	(A11)		Surface (F6)				
	ark Surface (A12)			ark Surface (F	7)		3Indicators of hydrog	phytic vegetation and
_	lucky Mineral (S1)		Redox Depre		•			y must be present,
	icky Peat or Peat (S3)			,				d or problematic.
Restrictive L	ayer (if observed):							
Type:	, , , , , , , , , , , , , , , , , , , ,							
	ches):					Hydric	Soil Present?	Yes X No
emarks:						Hydric	Soil Present?	Yes X No
emarks:						Hydric	Soil Present?	Yes X No
emarks: HYDROLO Wetland Hydi Primary Indica	OGY rology Indicators: ators (minimum of one	e is required: che				Hydric	Secondary Indicator	s (minimum of two required)
emarks: HYDROLO Wetland Hydi Primary Indica	DGY rology Indicators:	e is required: che		ed Leaves (BS	9)	Hydric		s (minimum of two required)
HYDROLO Wetland Hydromary Indica x Surface	OGY rology Indicators: ators (minimum of one	e is required: che	x Water-Staine	na (B13)		Hydric	Secondary Indicator Surface Soil C X Drainage Patt	s (minimum of two required) tracks (B6) erns (B10)
Wetland Hydierimary Indicax Surface High Wax Saturatio	Pology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3)	e is required: che	x Water-Staine Aquatic Faul True Aquatic	na (B13) c Plants (B14)		Hydric	Secondary Indicator Surface Soil C X Drainage Patt Dry-Season W	s (minimum of two required) tracks (B6) erns (B10) Vater Table (C2)
Wetland Hydi Primary Indica X Surface High Wa X Saturati X Water M	POGY rology Indicators: ators (minimum of one Water (A1) tier Table (A2) on (A3) arks (B1)	e is required: che	x Water-Staine Aquatic Faul True Aquatic Hydrogen St	na (B13) c Plants (B14) ulfide Odor (C	1)		Secondary Indicator Surface Soil C x Drainage Patt Dry-Season W Crayfish Burro	s (minimum of two required) cracks (B6) erns (B10) /ater Table (C2) ws (C8)
emarks: HYDROLO Wetland Hyde Primary Indica X Surface High Wa X Saturati X Water M X Sedimer	POGY rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2)	is required: che	x Water-Staine Aquatic Faul True Aquatic Hydrogen St Oxidized Rh	na (B13) c Plants (B14) ulfide Odor (C izospheres on	1) n Living Roots		Secondary Indicator Surface Soil C x Drainage Path Dry-Season W Crayfish Burro Saturation Vis	s (minimum of two required) racks (B6) erns (B10) rater Table (C2) ws (C8) ible on Aerial Imagery (C9)
emarks: IYDROLC Wetland Hydi X Surface High Wa X Saturati X Water N X Sediment X Drift Dep	DGY rology Indicators: ators (minimum of one Water (A1) tter Table (A2) on (A3) arks (B1) tt Deposits (B2) posits (B3)	is required: che	x Water-Staine Aquatic Fau True Aquatic Hydrogen St Oxidized Rh Presence of	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron	1) n Living Roots n (C4)	(C3)	Secondary Indicator Surface Soil C x Drainage Patt Dry-Season W Crayfish Burre Saturation Vis Stunted or Str	s (minimum of two required) racks (B6) erns (B10) /ater Table (C2) ws (C8) lible on Aerial Imagery (C9) essed Plants (D1)
HYDROLC Wetland Hydr Primary Indicator X Surface High Wax Saturatia X Water N X Sedimeat X Drift Dep Algal Ma	POGY rology Indicators: ators (minimum of one Water (A1) ter Table (A2) on (A3) larks (B1) tt Deposits (B2) oosits (B3) at or Crust (B4)	is required: che	x Water-Stain Aquatic Fau True Aquatic Hydrogen St Oxidized Rh Presence of Recent Iron	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in 1	1) n Living Roots n (C4)	(C3)	Secondary Indicator Surface Soil C X Drainage Patt Dry-Season W Crayfish Burro Saturation Vis Stunted or Str X Geomorphic F	s (minimum of two required) cracks (B6) erms (B10) dater Table (C2) cws (C8) ible on Aerial Imagery (C9) essed Plants (D1) costion (D2)
HYDROLC Wetland Hydi Primary Indica X Surface High Wa X Saturati X Water N X Sediment X Drift Dep Algal Ma Iron Dep	PIGY rology Indicators: ators (minimum of one Water (A1) ter Table (A2) on (A3) larks (B1) tt Deposits (B2) oosits (B3) tt or Crust (B4) oosits (B5)	·	x Water-Stain Aquatic Fau True Aquatic Hydrogen St Oxidized Rh Presence of Recent Iron Thin Muck S	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in T Surface (C7)	1) n Living Roots n (C4)	(C3)	Secondary Indicator Surface Soil C x Drainage Patt Dry-Season W Crayfish Burre Saturation Vis Stunted or Str	s (minimum of two required) cracks (B6) erms (B10) dater Table (C2) cws (C8) ible on Aerial Imagery (C9) essed Plants (D1) costion (D2)
HYDROLC Wetland Hydi Primary Indica X Surface High Wa X Saturati X Water N X Sediment X Drift Dep Algal Ma Iron Dep	POGY rology Indicators: ators (minimum of one Water (A1) ter Table (A2) on (A3) larks (B1) tt Deposits (B2) oosits (B3) at or Crust (B4)	·	x Water-Stain Aquatic Fau True Aquatic Hydrogen St Oxidized Rh Presence of Recent Iron Thin Muck S	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in 1	1) n Living Roots n (C4)	(C3)	Secondary Indicator Surface Soil C X Drainage Patt Dry-Season W Crayfish Burro Saturation Vis Stunted or Str X Geomorphic F	s (minimum of two required) cracks (B6) erms (B10) dater Table (C2) cws (C8) ible on Aerial Imagery (C9) essed Plants (D1) costion (D2)
iyprolcovertand Hydrovertand Hy	PIGY rology Indicators: ators (minimum of one Water (A1) ter Table (A2) on (A3) larks (B1) tt Deposits (B2) oosits (B3) tt or Crust (B4) oosits (B5)	nagery (B7)	x Water-Stain Aquatic Fau True Aquatic Hydrogen St Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in T Surface (C7)	11) In Living Roots In (C4) Tilled Soils (C	(C3)	Secondary Indicator Surface Soil C X Drainage Patt Dry-Season W Crayfish Burro Saturation Vis Stunted or Str X Geomorphic F	s (minimum of two required) cracks (B6) erms (B10) dater Table (C2) cws (C8) ible on Aerial Imagery (C9) essed Plants (D1) costion (D2)
iyprolcovertand Hydrovertand Hy	DGY rology Indicators: ators (minimum of one Water (A1) titer Table (A2) on (A3) arks (B1) ti Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial In Vegetated Concave	nagery (B7)	x Water-Stain Aquatic Fau True Aquatic Hydrogen St Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in Surface (C7) ell Data (D9)	11) In Living Roots In (C4) Tilled Soils (C	(C3)	Secondary Indicator Surface Soil C X Drainage Patt Dry-Season W Crayfish Burro Saturation Vis Stunted or Str X Geomorphic F	s (minimum of two required) cracks (B6) erms (B10) dater Table (C2) cws (C8) ible on Aerial Imagery (C9) essed Plants (D1) costion (D2)
HYDROLC Wetland Hydro Y Surface High Wax Saturatin X Sedimer X Sedimer Algal Ma Iron Dep Inundati Sparseh	POGY rology Indicators: ators (minimum of one Water (A1) ater Table (A2) nor (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4) oosits (B5) no Visible on Aerial In Vegetated Concave ations:	nagery (B7)	x Water-Stain Aquatic Fau True Aquatic Hydrogen St Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in Surface (C7) ell Data (D9) ain in Remarks	11) In Living Roots In (C4) Tilled Soils (C	(C3)	Secondary Indicator Surface Soil C X Drainage Patt Dry-Season W Crayfish Burro Saturation Vis Stunted or Str X Geomorphic F	s (minimum of two required) cracks (B6) erms (B10) dater Table (C2) cws (C8) ible on Aerial Imagery (C9) essed Plants (D1) costion (D2)
HYDROLC Wetland Hydw Primary Indici: X Surface High We X Saturati X Water N X Sedimer X Drift Dep Iron Dep Inundati Sparsely	POGY rology Indicators: ators (minimum of one Water (A1) ter Table (A2) on (A3) larks (B1) to Deposits (B2) sosits (B3) at or Crust (B4) sosits (B5) on Visible on Aerial Inr v Vegetated Concave ations: r Present?	nagery (B7) Surface (B8)	x Water-Stain Aquatic Fau True Aquatic Hydrogen St Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in T Surface (C7) ell Data (D9) ain in Remarks	11) In Living Roots In (C4) Tilled Soils (C	(C3)	Secondary Indicator Surface Soil C X Drainage Patt Dry-Season W Crayfish Burro Saturation Vis Stunted or Str X Geomorphic F	s (minimum of two required) cracks (B6) erms (B10) dater Table (C2) cws (C8) ible on Aerial Imagery (C9) essed Plants (D1) costion (D2)
emarks: HYDROLC Vetland Hyd Primary Indicator X Surface High W X Saturati X Water N X Sediment Iron Dep Inundati Sparseh Sparseh Surface Water Water Water Water M W Water M W W Water M W W Water M W W W W W W W W W W W W W	DGY rology Indicators: ators (minimum of one Water (A1) teter Table (A2) on (A3) arks (B1) tt Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial In Vegetated Concave ations: r Present?	nagery (B7) Surface (B8) Yes x No Yes No	x Water-Stain Aquatic Fau True Aquatic Hydrogen St Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduction in T surface (C7) fell Data (D9) ain in Remarks c): 0.5" 0"	11) Living Roots (C4) Tilled Soils (C	(C3)	Secondary Indicator Surface Soil C X Drainage Patt Dry-Season W Crayfish Burro Saturation Vis Stunted or Str X Geomorphic F	s (minimum of two required) cracks (B6) erms (B10) dater Table (C2) cws (C8) ible on Aerial Imagery (C9) essed Plants (D1) costion (D2)
emarks: ITYDROLC Wetland Hydr Primary Indic: x Surface High Wa x Saturati x Water N x Sedimet iron Dep inundati Sparseh Field Observ: Surface Wate Water Table Isolation Pin Saturation Pin	DGY rology Indicators: ators (minimum of one Water (A1) the Table (A2) on (A3) larks (B1) th Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial In v Vegetated Concave ations: r Present? Present?	hagery (B7) Surface (B8) Yes x No Yes No	x Water-Stain Aquatic Fau True Aquatic Hydrogen St Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduction in T surface (C7) fell Data (D9) ain in Remarks c): 0.5" 0"	11) Living Roots (C4) Tilled Soils (C	(C3)	Secondary Indicator Surface Soil C x Drainage Patt Dry-Season W Crayfish Burre Saturation Vis Stunted or Str x Geomorphic F X FAC-Neutral T	rs (minimum of two required) racks (B6) erns (B10) rater Table (C2) was (C8) ible on Aerial Imagery (C9) essed Plants (D1) Position (D2) fest (D5)
emarks: IYDROLC Vetland Hydi Primary Indicator X Surface High W X Saturation X Water N X Sediment X Orift Dep Inundati Sparsely Idlo Observ. Surface Water Water Table I Saturation Princludes cape Includes cape	POGY rology Indicators: ators (minimum of one Water (A1) tter Table (A2) on (A3) arks (B1) tt Deposits (B2) sosits (B3) at or Crust (B4) sosits (B5) on Visible on Aerial Inr Vegetated Concave ations: r Present? resent?	nagery (B7) Surface (B8) Yes x No Yes No Yes X No	x Water-Stain Aquatic Fau True Aquatic Hydrogen St Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in Surface (C7) ell Data (D9) ain in Remarks b): 0.5" Surface Surface	11) h Living Roots h (C4) Tilled Soils (C	(C3) (6) Hydrolog	Secondary Indicator Surface Soil C x Drainage Patt Dry-Season W Crayfish Burre Saturation Vis Stunted or Str x Geomorphic F X FAC-Neutral T	rs (minimum of two required) racks (B6) erns (B10) rater Table (C2) was (C8) ible on Aerial Imagery (C9) essed Plants (D1) Position (D2) fest (D5)
emarks: IYDROLC Vetland Hydi Primary Indicator X Surface High W X Saturation X Water N X Sediment X Orift Dep Inundati Sparsely Idlo Observ. Surface Water Water Table I Saturation Princludes cape Includes cape	POGY rology Indicators: ators (minimum of one Water (A1) tter Table (A2) on (A3) arks (B1) tt Deposits (B2) sosits (B3) at or Crust (B4) sosits (B5) on Visible on Aerial Inr Vegetated Concave ations: r Present? resent?	nagery (B7) Surface (B8) Yes x No Yes No Yes X No	x Water-Stain Aquatic Fau True Aquatic Hydrogen St Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla Depth (inches X Depth (inches	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in Surface (C7) ell Data (D9) ain in Remarks b): 0.5" Surface Surface	11) h Living Roots h (C4) Tilled Soils (C	(C3) (6) Hydrolog	Secondary Indicator Surface Soil C x Drainage Patt Dry-Season W Crayfish Burre Saturation Vis Stunted or Str x Geomorphic F X FAC-Neutral T	rs (minimum of two required) racks (B6) erns (B10) rater Table (C2) was (C8) ible on Aerial Imagery (C9) essed Plants (D1) Position (D2) fest (D5)
emarks: IYDROLC Vetland Hyd Primary Indicator X Surface High W X Saturation Algal Ma Iron Dep Inundati Sparsely Squarely Squarely Saturation Provinciudes cap Describe Rec	POGY rology Indicators: ators (minimum of one Water (A1) tter Table (A2) on (A3) arks (B1) tt Deposits (B2) sosits (B3) at or Crust (B4) sosits (B5) on Visible on Aerial Inr Vegetated Concave ations: r Present? resent?	nagery (B7) Surface (B8) Yes x No Yes No Yes X No	x Water-Stain Aquatic Fau True Aquatic Hydrogen St Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla Depth (inches X Depth (inches	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in Surface (C7) ell Data (D9) ain in Remarks b): 0.5" Surface Surface	11) h Living Roots h (C4) Tilled Soils (C	(C3) (6) Hydrolog	Secondary Indicator Surface Soil C x Drainage Patt Dry-Season W Crayfish Burre Saturation Vis Stunted or Str x Geomorphic F X FAC-Neutral T	rs (minimum of two required) racks (B6) erns (B10) rater Table (C2) was (C8) ible on Aerial Imagery (C9) essed Plants (D1) Position (D2) fest (D5)
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emarks: IYDROLC Vetland Hyd Primary Indicator X Surface High W X Saturation Algal Ma Iron Dep Inundati Sparsely Squarely Squarely Saturation Provinciudes cap Describe Rec	POGY rology Indicators: ators (minimum of one Water (A1) tter Table (A2) on (A3) arks (B1) tt Deposits (B2) sosits (B3) at or Crust (B4) sosits (B5) on Visible on Aerial Inr Vegetated Concave ations: r Present? resent?	nagery (B7) Surface (B8) Yes x No Yes No Yes X No	x Water-Stain Aquatic Fau True Aquatic Hydrogen St Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla Depth (inches X Depth (inches	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in Surface (C7) ell Data (D9) ain in Remarks b): 0.5" Surface Surface	11) h Living Roots h (C4) Tilled Soils (C	(C3) (6) Hydrolog	Secondary Indicator Surface Soil C x Drainage Patt Dry-Season W Crayfish Burre Saturation Vis Stunted or Str x Geomorphic F X FAC-Neutral T	rs (minimum of two required) racks (B6) erns (B10) rater Table (C2) was (C8) ible on Aerial Imagery (C9) essed Plants (D1) Position (D2) fest (D5)

PAMU 50 F	eld Form Qua	antitative Rating
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Wetten 5 Jan 1971

lite: Art House I am I F	Rater(s):	1	Date.
	12.76		
Metric 1. Wetland Ar	ea (size).		
nex B pts. substati Select one size class and assign score	7. YY		
>50 acres (>20.2ha) (6 pts)			
25 to <50 acres (10.1 to <20. 10 to <25 acres (4 to <10.1h;	a) (4 pts)		
3 to <10 acres (1.2 to <4ha)	(3 pts)		
0.3 to <3 acres (0.12 to <1.2 0.1 to <0.3 acres (0.04 to <0	12ha) (1 pt)		
A -0 4 means (0 Odbo) (0 rds)		andian land	1150
Metric 2. Upland but	ters and surro	inding land	use.
max 14 pes authorist 2a. Calculate average buffer width. S	etect only one and assign so	ore. Do not double ch	eck:
MEDIUM, Buffers average 2	25m to <50m (02 to < 1641)	around wetland perin	eter (1)
2b. Intensity of surrounding land use. VERY LOW. 2nd growth or	older forest, prairie, savann	ah, wildlife area, etc. (7)
VERY LOW, 2nd grown of Low, Old field (>10 years), MODERATELY HIGH, Res			
HIGH, Urban, industrial, op	en pasture, row cropping, m	ining, construction. (1)	
Metric 3. Hydrology			
00 00		On Connection 1	Score all that apply.
max 30 pts. subtonii 3a. Sources of Water. Score all that High pH groundwater (5)	apply	100 yea	r floodplain (1)
Other groundwaler (3)		Between	stream/lake and other human use (1) vetland/upland (e.g. forest), complex (1
Precipitation (1) Seasonal/Intermittent surfa	ce water (3)	Port of r	inarian or upland comdor (1)
Desganial surface water (la	ke or stream) (5)	Semi- to	lation/saturation. Score one or dbl che permanently inundated/saturated (4)
3c. Maximum water depth. Select or		Regular	ly inundated/saturated (3) ally inundated (2)
0.4 to 0.7m (15.7 to 27 6in)		Season	ally saturated in upper 30cm (12in) (1)
<0,4m (<15.7in) (1) 3e. Modifications to natural hydrolog	c regime. Score one or dou	ble check and average	
None or none apparent (12		hearwar	ource (nonstormwater)
Recovered (7) Recovering (3)	tile	filling/gr	
Recent or no recovery (1)	dike weir	dredgin	
	storrnwater input	other	
Metric 4. Habitat Al	teration and De	evelopment.	
1 3 12 3			
roox 30 pts subjects 4a. Substrate disturbance. Score of	ne or double check and aver	age.	
None or none apparent (4 Recovered (3)	1		
Recovering (2)			
Recent or no recovery (1) 4b. Habital development. Select or	ly one and assign score.		
Excellent (7)			
(4 Very good (6) Good (5)			
Moderately good (4) Fair (3)			
Poor to fair (2)			
Poor (1) 4c. Habitat alteration. Score one of	double check and average		
/ None or none apparent (\$	Check all disturbances	pheeryed	sapling removal
Recovered (6)	mowing.	herba	ceous/aquatic bed removal
Recovering (3) Recent or no recovery (1	clearcutting	sedim	entation
	selective cutting	dredo	
1 line	woody debris rem	loval farmin	
42	woody debris rem loxic pollutants		nt enrichment

Wetland 5

DRAM v. 5.0 Field Form Quantitative Rating			W BAD-106713
Site: A V 3HD	Rater(s):	(A) The	Date: ()/ 7 / 7
Lake Erie coastal/trib Lake Prân Sand Prai Relict Wet Prairies (1 Known pocurrence st	as indicated. i) and (5) vutary wetland-unrestricted in itles (Oak Openings) (10)	edrology (5)	
Category 1 Wetland.	See Question 1 Qualitativ	re Rating (-10)	
H HW Metric 6. Plant c	ommunities, i	nterspersion, mi	crotopography.
ment 20 pm Subserval Ba, Wetland Vegetation Commo		on Community Cover Scale	
Score all present using 0 to 3 se	cale. 0	Absent or comprises <0.	tha (0.2471 acres) configuous area
Aqualic bed Emergent	1		rises small part of wetland's
2 Shrub		significant part but is o	oderate quality, or comprises a
2_ Forest	2		rises significant part of wetland's
Mudflats		vegetation and is of mo	derate quality or comprises a small
Open water Other		part and is of high qual	
6b. horizontal (plan view) Inters	spersion. 3	Present and comprises a vegetation and is of hig	ignificant part, or more, of wetland's
Select only one		- vegetation and is di nig	is quality
High (5)	Narrativ	e Description of Vegetation C	
Moderately high(4) Moderate (3)	law	Low spp diversity and/or	predominance of nonnative or
Moderately low (2)	mod	disturbance tolerant na	tive species component of the vegetation,
Low (1)	11/0-9		for disturbance tolerant native spp
None (0)	430	can also be present, an	d species diversity moderate to
8c. Coverage of invasive plants to Table 1 ORAM long form for I	i. Refer		merally w/o presence of rare
or deduct points for coverage	high	A predominance of native	eo spp species, with nonnative spp
Extensive >75% cover	r (-5)	and/or disturbance tole	ant rialive spp absent or virtually
Moderate 25-75% cov		absent, and high spp di	versity and often, but not always,
Sparse 5-25% cover (- Nearly absent <5% co		the presence of rare, the	reatened, or endangered spp
Absent (1)		and Open Water Class Qualit	
6d. Microtopography.	0	Absent <0.1ha (0.247 ac	
Score all present using 0 to 3 sc		Low 0.1 to <1ha (0.247 to	
() Vegetated hummucks/ (Coarse woody debris		Moderate 1 to <4ha (2.47	
) Standing dead >25cm		High 4ha (9.88 acres) or r	npre
1 Amphibian breeding po		ography Cover Scale	
	0	Absent	
	1	Present very small amour	its or it more common
		of marginal quality	
_	- 9		into but not of bloband
57_	2	Present in moderate amou	unts, but not of highest his of highest quality
.7_	2		nts of highest quality

Project/Site: AEP Biers Run-Hopeto	wn-Delano	City/County	Ross Coun	
Applicant/Owner: AEP				State: OH Sampling Point: wbao-10031:
Investigator(s): BAO, BCR		Sec		ip, Range: unknown
Landform (hillslope, terrace, etc.):				relief (concave, convex, none): Concave
Slope (%): Lat:	39.369934	Long:		-83.023996 Datum: NAD83 UTM16N
Soil Map Unit Name:				NWI classification:
Are climatic / hydrologic conditions on the si				(If no, explain in Remarks.)
	, or Hydrology N significan			ormal Circumstances" present? Yes X No
	, or Hydrology N naturally			ded, explain any answers in Remarks.)
SUMMARY OF FINDINGS Attac	n site map showing samp	ling point loc	ations, tra	ansects, important features, etc.
Hydrophytic Vegetation Present?	Yes X No		Sampled Ar	
Hydric Soil Present?	Yes X No No	within	n a Wetland?	Yes X No
Wetland Hydrology Present?	Yes X No	_		
Remarks: PEM/PSS wetland, seep				
Entr de Welland, deep				
VEGETATION Use scientific na	mos of plants			
	Absolu	ite Dominant	Indicator	
Tree Stratum (Plot size: 30' radius) % Cov	er Species?	Status	Dominance Test worksheet:
1.				
2.				Number of Dominant Species
3.				That Are OBL, FACW, or FAC: 4 (A)
4. 5.				Total Number of Dominant
6				Total Number of Dominant Total Number of Dominant
·		= Total Cover		Species Across All Strata: 4 (B)
		Total Cover		Operator religion religion.
Sapling/Shrub Stratum (Plot size: 15' radi	ius)			Percent of Dominant Species
Salix nigra	30	Yes	OBL	That Are OBL, FACW, or FAC: 100% (A/B)
Populus deltoides	10	Yes	FAC	
3				
4				Prevalence Index worksheet:
5				Prevalence Index worksheet:
6.	40	= Total Cover		Total % Cover of: Multiply by:
Herb Stratum (Plot size: 5' radius	1	= Total Cover		Total % Cover of: Multiply by:
1. Carex sp.	_/ 50	Yes	FAC	FACW species x2 =
2. Carex sp.	20	Yes	FAC	FAC species 105 x3 = 315
Toxicodendron radicans	5	No	FAC	FACU species x4 =
Bidens sp.	10	No	FAC	UPL species x5 =
Eleocharis acicularis	10	No	OBL	Column Totals: 145 (A) 355 (B
6. Juncus tenuis	5	No	FAC	
7. Alopecurus sp. 8	5	No	FAC	Prevalence Index = B/A = 2.45
9.				
9				Hydrophytic Vegetation Indicators:
1.				,
2.				1-Rapid Test for Hydrophytic Vegetation
3.	· · · · · · · · · · · · · · · · · · ·			X 2-Dominance Test is >50%
4.	· · · · · · · · · · · · · · · · · · ·			X 3-Prevalence Index is ≤3.01
5.				4-Morphological Adaptations ¹ (Provide supporting
6.				data in Remarks or on a separate sheet)
7				Problematic Hydrophytic Vegetation ¹ (Explain)
8.				Transaction of transaction and the second
9.				¹ Indicators of hydric soil and wetland hydrology must
0	105	= Total Cover		be present, unless disturbed or problematic.
	105	- Total Cover		
Voody Vine Stratum (Plot size: 30' radi	ius)			Hydrophytic
				Vegetation
1.				
1. 2.				Present? Yes X No
1. 2.		= Total Cover		Present?
1. 2. Remarks: (Include photo numbers here or		= Total Cover		Present?

epth	Matrix			dox Features	T1	. 2		
ches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-10"	10YR 3/2	95	7.5YR 5/8	5	С	М	Silty Clay	
					<u> </u>			
		on, RM=Redu	uced Matrix, CS=Covere	ed or Coated S	Sand Grains.		on: PL=Pore Lining, I	
dric Soil Ir Histosol			Sandy Gleve	ed Matrix (S4)		Indic	ators for Problematic Coast Prairie	
	pipedon (A2)		Sandy Redo					ese Masses (F12)
Black H	istic (A3)		Stripped Ma	trix (S6)			Dark Surface	(S7)
Hydroge	en Sulfide (A4)			ky Mineral (F1)				Dark Surface (TF12)
_	d Layers (A5)			ed Matrix (F2)			Other (Explai	n in Remarks)
	uck (A10)		x Depleted Ma					
	d Below Dark Surface (A11)		Surface (F6)	_		3	
_	ark Surface (A12)			ark Surface (F7	7)		,	phytic vegetation and
	Mucky Mineral (S1) ucky Peat or Peat (S3)		X Redox Depr	essions (F8)			, ,	gy must be present, ed or problematic.
	ayer (if observed):						dilicas distalbi	su or problematic.
Type:	ayer (if observed):							
Depth (ir	nches).		•			Hydric	Soil Present?	Yes X No
/DROLO	DGY rology Indicators:							
/DROLO etland Hyd imary Indic	rology Indicators: ators (minimum of one	is required: cl						rs (minimum of two required)
/DROLO etland Hyd imary Indic Surface	rology Indicators: ators (minimum of one Water (A1)	is required: ch	Water-Stain	ed Leaves (BS	3)		Surface Soil (Cracks (B6)
YDROLO etland Hyd imary Indic Surface High Wa	rology Indicators: ators (minimum of one Water (A1) ater Table (A2)	is required: cl	Water-Stain	na (B13)	,		Surface Soil (x Drainage Pat	Cracks (B6) terns (B10)
YDROLO etland Hyd imary Indic Surface High Wa Saturati	rology Indicators: actors (minimum of one Water (A1) acter Table (A2) on (A3)	is required: cl	Water-Stain Aquatic Fau True Aquatic	na (B13) c Plants (B14)			Surface Soil (x Drainage Pat Dry-Season (Cracks (B6) terns (B10) Vater Table (C2)
YDROLO etland Hyd imary Indic Surface High Wa Saturati Water M	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) Marks (B1)	is required: cl	Water-Stain Aquatic Fau True Aquatic Hydrogen Si	na (B13) c Plants (B14) ulfide Odor (C	1)	s (C3)	Surface Soil (x Drainage Pat Dry-Season V Crayfish Burn	Cracks (B6) terns (B10) Vater Table (C2) bws (C8)
PDROLC etland Hyd imary Indic Surface High Wa Saturati Water M Sedimer	rology Indicators: actors (minimum of one Water (A1) acter Table (A2) on (A3)	is required: cl	Water-Stain Aquatic Fau True Aquatic Hydrogen Si x Oxidized Rh	na (B13) c Plants (B14)	1) Living Root	s (C3)	Surface Soil (x Drainage Pat Dry-Season (Crayfish Burn Saturation Vis	Cracks (B6) terns (B10) Vater Table (C2)
rDROLC etland Hyd imary Indic Surface High Wa Saturati Water M Sedimer	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) darks (B1) nt Deposits (B2)	is required: ct	Water-Stain Aquatic Fau True Aquatic Hydrogen Si X Oxidized Rh Presence of	na (B13) c Plants (B14) ulfide Odor (C izospheres on	1) Living Root (C4)		Surface Soil (x Drainage Pat Dry-Season (Crayfish Burn Saturation Vis	Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1)
YDROLO etland Hyd imary Indic Surface High Wa Saturati Water M Sedimea Drift Dej Algal Ma	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3)	is required: cl	Water-Stain Aquatic Fau True Aquatic Hydrogen Si X Oxidized Rh Presence of	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in T	1) Living Root (C4)		Surface Soil (x Drainage Pat Dry-Season V Crayfish Burn Saturation Vis Stunted or St	Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2)
YDROLO etland Hyd imary Indic Surface High Wa Saturati Water N Sedimer Drift Dej Algal Mi Iron Deg Inundati	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Ims	agery (B7)	Water-Stain Aquatic Fau True Aquatic Hydrogen Si X Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W	na (B13) c Plants (B14) ulfide Odor (Cizospheres on Reduced Iron Reduction in Tourface (C7) ell Data (D9)	1) Living Root (C4) Filled Soils (C		Surface Soil (x Drainage Pat Dry-Season (Crayfish Burn Saturation Vis Stunted or St x Geomorphic (Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2)
YDROLO etland Hyd imary Indic Surface High Wa Saturati Water N Sedimen Drift Dej Algal Mi Iron Deg Inundati	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) darks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	agery (B7)	Water-Stain Aquatic Fau True Aquatic Hydrogen Si X Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W	na (B13) c Plants (B14) ulfide Odor (Cizospheres on Reduced Iron Reduction in T	1) Living Root (C4) Filled Soils (C		Surface Soil (x Drainage Pat Dry-Season (Crayfish Burn Saturation Vis Stunted or St x Geomorphic (Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2)
YDROLC etland Hyd imary Indic Surface High Wa Saturati Water M Sedimei Drift Dej Algal Ma Iron Dej Inundati Sparseleld Observe	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) darks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Ims y Vegetated Concave S	agery (B7)	Water-Stain Aquatic Fau True Aquati Hydrogen Si x Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Exple	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in T Surface (C7) ell Data (D9) ain in Remarks	1) Living Root (C4) Filled Soils (C		Surface Soil (x Drainage Pat Dry-Season (Crayfish Burn Saturation Vis Stunted or St x Geomorphic (Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2)
YDROLC totland Hyd imary Indic Surface High Wa Saturati Water N Sedimee Drift Del Iron Dep Inundati Sparsele bled Observ urface Water Water Water N Sparsele	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Ima y Vegetated Concave S ations: at Present?	agery (B7) furface (B8)	Water-Stain Aquatic Fau True Aquatic Hydrogen St x Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in T surface (C7) ell Data (D9) ain in Remarks	1) Living Root (C4) Filled Soils (C		Surface Soil (x Drainage Pat Dry-Season (Crayfish Burn Saturation Vis Stunted or St x Geomorphic (Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2)
rimary Indic Surface High Wa Saturati Water M Sedime Drift Dej Algal Mi Iron Deg Inundati Sparsele ald Observ urface Water Table	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) drarks (B1) oth Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial Ima y Vegetated Concave S ations: r Present?	agery (B7) surface (B8) Yes No Yes No	Water-Stain Aquatic Fau True Aquatic Hydrogen Si X Oxidized Rh Presence Of Recent Iron Thin Muck S Gauge or W Other (Exple X Depth (inches	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reducted Iron Reduction in 1 Surface (C7) ell Data (D9) ain in Remarks	1) Living Root (C4) Filled Soils (C	C6)	Surface Soil (x Drainage Par Dry-Season \(Crayfish Burn Saturation \(X\) Stunted or St x Geomorphic FAC-Neutral	Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
YDROLC totand Hyd imary Indic Surface High Wa Saturati Water M Sedimen Drift Del Algal Mi Iron Deg Inundati Sparsele sparsele do Observ urface Wate atter Table surface Wate sturation Pr	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Imit y Vegetated Concave S ations: er Present? pseent?	agery (B7) furface (B8)	Water-Stain Aquatic Fau True Aquatic Hydrogen Si X Oxidized Rh Presence Of Recent Iron Thin Muck S Gauge or W Other (Exple X Depth (inches	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reducted Iron Reduction in 1 Surface (C7) ell Data (D9) ain in Remarks	1) Living Root (C4) Filled Soils (C	C6)	Surface Soil (x Drainage Pat Dry-Season (Crayfish Burn Saturation Vis Stunted or St x Geomorphic (Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2)
YDROLO etland Hyd imary Indic Surface High Wa Saturati Vater N Sedimen Drift Dej Algal Ma Iron Dej Inundati Sparsel eld Observ urface Wate atter Table atturation Pr toldudes cap	rology Indicators: ators (minimum of one Water (A1) ster Table (A2) on (A3) starks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Ima y Vegetated Concave S ations: ar Present? Present?	agery (B7) iurface (B8) Yes No Yes No	Water-Stain Aquatic Fau True Aquatic Hydrogen St x Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla x Depth (inches x Depth (inches	na (B13) c Plants (B14) ulfide Odor (C- izospheres on Reduced Iron Reduction in 1 Surface (C7) ell Data (D9) ain in Remarks	1) Living Root (C4) Filled Soils (6	C6)	Surface Soil (x Drainage Par Dry-Season \(Crayfish Burn Saturation \(X\) Stunted or St x Geomorphic FAC-Neutral	Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
YDROLO etland Hyd imary Indic Surface High Wa Saturati Vater N Sedimen Drift Dej Algal Ma Iron Dej Inundati Sparsel eld Observ urface Wate atter Table atturation Pr toldudes cap	rology Indicators: ators (minimum of one Water (A1) ster Table (A2) on (A3) starks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Ima y Vegetated Concave S ations: ar Present? Present?	agery (B7) iurface (B8) Yes No Yes No	Water-Stain Aquatic Fau True Aquatic Hydrogen Si X Oxidized Rh Presence Of Recent Iron Thin Muck S Gauge or W Other (Exple X Depth (inches	na (B13) c Plants (B14) ulfide Odor (C- izospheres on Reduced Iron Reduction in 1 Surface (C7) ell Data (D9) ain in Remarks	1) Living Root (C4) Filled Soils (6	C6)	Surface Soil (x Drainage Par Dry-Season \(Crayfish Burn Saturation \(X\) Stunted or St x Geomorphic FAC-Neutral	Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
YDROLO etland Hyd imary Indic Surface High Wa Saturati Vater N Sedimen Drift Dej Algal Ma Iron Dej Inundati Sparsel eld Observ urface Wate atter Table atturation Pr toldudes cap	rology Indicators: ators (minimum of one Water (A1) ster Table (A2) on (A3) starks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Ima y Vegetated Concave S ations: ar Present? Present?	agery (B7) iurface (B8) Yes No Yes No	Water-Stain Aquatic Fau True Aquatic Hydrogen St x Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla x Depth (inches x Depth (inches	na (B13) c Plants (B14) ulfide Odor (C- izospheres on Reduced Iron Reduction in 1 Surface (C7) ell Data (D9) ain in Remarks	1) Living Root (C4) Filled Soils (6	C6)	Surface Soil (x Drainage Par Dry-Season \(Crayfish Burn Saturation \(X\) Stunted or St x Geomorphic FAC-Neutral	Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
YDROLC etland Hyd imary Indicin Surface High W Saturati Water M Sedime Drift Dej Algal M Iron Dej Inundati Sparsel eld Observ urface Wate atter Table atturation Pr noludes cap escribe Rec	rology Indicators: ators (minimum of one Water (A1) ster Table (A2) on (A3) starks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Ima y Vegetated Concave S ations: ar Present? Present?	agery (B7) iurface (B8) Yes No Yes No	Water-Stain Aquatic Fau True Aquatic Hydrogen St x Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla x Depth (inches x Depth (inches	na (B13) c Plants (B14) ulfide Odor (C- izospheres on Reduced Iron Reduction in 1 Surface (C7) ell Data (D9) ain in Remarks	1) Living Root (C4) Filled Soils (6	C6)	Surface Soil (x Drainage Par Dry-Season \(Crayfish Burn Saturation \(X\) Stunted or St x Geomorphic FAC-Neutral	Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
YDROLC etland Hyd imary Indicin Surface High W Saturati Water M Sedime Drift Dej Algal M Iron Dej Inundati Sparsel eld Observ urface Wate atter Table atturation Pr noludes cap escribe Rec	rology Indicators: ators (minimum of one Water (A1) ster Table (A2) on (A3) starks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Ima y Vegetated Concave S ations: ar Present? Present?	agery (B7) iurface (B8) Yes No Yes No	Water-Stain Aquatic Fau True Aquatic Hydrogen St x Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla x Depth (inches x Depth (inches	na (B13) c Plants (B14) ulfide Odor (C- izospheres on Reduced Iron Reduction in 1 Surface (C7) ell Data (D9) ain in Remarks	1) Living Root (C4) Filled Soils (6	C6)	Surface Soil (x Drainage Par Dry-Season \(Crayfish Burn Saturation \(X\) Stunted or St x Geomorphic FAC-Neutral	Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)

ORAM v. 5.0 Field Form Quantitative Rating

Wetland 6 6.3A0-100\$13-03

Site: HEP E	BHD	cater(s): 15 No. 1-	214	Date: 10/03/13
		as (alsa)		
00	Metric 1. Wetland Ar	ea (Size).		
max 6 pts. subtated	Select one size class and assign score >50 acres (>20.2ha) (6 pts) 25 to >50 acres (10.1 to <20.10 to <25 acres (4 to <10 th <3 to <10 acres (4 to <10 th <3 acres (4 to <10 th <3 acres (0.12 to <12 to <10 acres (0.12 to <12 to <10 acres (0.12 to <12 to <10 acres (0.04 to <10 acres (0.0	2ha) (5 pts) a) (4 pts) (3 pts) na) (2pts)		
. 17	Metric 2. Upland buf	fers and surrou	inding land	use.
max 14 ms. subtotal	2a, Calculate average buffer width. St. WIDE Buffers average 50m MEDIUM. Buffers average 20 NARROW. Buffers average 22 NARROW. Buffers average 24 NARROW. Buffers average 25 Intensity of surrounding land use. VERY LOW. 2nd growth or LOW. Old field (>10 years).	elect only one and assign so (164ft) or more around well ism to <50m (82 to <164ft) a flom to <25m (32ft to <46ft) a torage <10m (<32ft) around Select one or double check older forest, prairie, savanna shrub land, young second a deviat forest pastitute, bath	ore. Do not double che and perimeter (7) round wetland perimet around wetland perimet wetland perimeter (0) and average. sh, wildlife area, etc. (7 rowth forest (5) conversation filiage.	pck. pr (4) ottor (1)
	HIGH. Urban, industrial, op-	en pasture, row cropping, mi	ning, construction. (1)	
10 11	Metric 3. Hydrology			
mus 30 pts. Inobiate	3a. Sources of Water, Score all that a High ph groundwater (5) Other groundwater (3) Other groundwater (3) Precipitation (1) Seasonal/intermittent surfac Perennal surface water (lak as Maximum water depth. Select on 3-0,7 (27-6in, (3)) 4 to 0,7 (47-6in, (3)) 4 to 0,7 (47-6in, (3)) 3e. Modifications to natural hydrologia	a water (3) e or stream) (5) ly one and assign score. (2)	O Between Part of w Part of w Part of in Part of in Part of in Part of in Regular Seasona Seasona	floodplain (1) streamhaine and other human use (T tetland/dipland (e.g. forest), complex (parian or upiánd corridor (1) atten/saluration. Score one or dol ch permanently inundated/salurated (4) y inundated/salurated (3) illy inundated (2) illy salurated in upper 30cm (12in) (1)
	None or hone apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1)		point sou	urce (nonstormwater) ading d/RR track
a 1.	Metric 4. Habitat Al	teration and De	velopment.	
T ZE	4a. Substrate disturbance. Score on None or rione apparent (4) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select on Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Peor to fair (2) Poor (1) 4c. Habitat alleration. Score one or	e or double check and average or double check and average.	ge.	
20	None or none apparent (9) Recovered (6) Recovering (3) Reconl or no recovery (1)	Check all disturbances of mowing grazing clearcutting selective cutting woody debris remotoxic pollutants	shrub/s herbaci sedime dredgin farming	d d

Wetland 6

Site: A	0 2015	10-4	et-v.		2011 100015 03
Site. A	EL DAN	Rate	r(s): 18	AD BK	Date: 10/03/1
					(, (,
a	n				
authora.	Tirs(page				
Table 1	Matric 5 S	pecial Wetla	nde		
0 0	20 111011100. 0	occial mena	nus.		
max 10 per mut	Check all that apply as	id score as indicated			
	Bog (10)	A company and a selection of			
	Fen (10)				
	Old growth	orest (10) sted wetland (5)			
		astal/tributary wetland	Uncestricted by	udenlanu (10)	
	Lake Ene oc	astal/tributary wetland	restricted hydr	ology (5)	
	Lake Plain 8	Sand Prairies (Oak Ope	nings) (10)		
	Relict Wet P				
	Known occu	rrence state/federal the	ealened or end	dangered species (10)	
	Calegory 1 V	igratory songbird/wate Velland. See Question	towl habitation	r usage (10)	
1					95454505 5 X 3 III
4 2	/ Interito b. Fi	ant commun	intes, in	terspersion, r	nicrotopography.
mma 20 pm. sub	6a Wetland Vegetation	n Communities	Manatables	Community Cover Sca	
	Score all present using		vegetation		 10.1ha (0.2471 acres) contiguous area
	Aquatic bed		1	Present and either co	mprises small part of wetland's
	/ Emergent			vegetation and is of	moderate quality, or comprises a
	Shrub Forest		-	significant part but i	s of low quality
	Mudflats		2	Present and either co	imprises significant part of wetland's
	Open water			part and is of high q	moderate quality or comprises a small
	Other		3		s significant part, or more, of wetland's
	6b. horizontal (plan vie	w) Interspersion	_	vegetation and is of	high quality
	Select only one. High (5)		Manhaella P	Continue Statement	10.
	Moderately h	igh(4)	low	Description of Vegetatio	or predominance of nonnative or
	Moderate (3)	0.0	1010	disturbance tolerant	native species
	Moderately to	w (2)	mod		ant component of the vegetation,
	Low (1)			although nonnative	and/or disturbance tolerant native spp-
	Sc. Coverage of invasion	la nunte Bofor		can also be present,	and species diversity moderate to
	to Table 1 ORAM long f	orm for list. Add		threatened or endan	generally w/o presence of rare
	or deduct points for cov		high		live species, with nonnative spp
	Extensive >7			and/or disturbance to	plerant native spp absent or virtually
	Moderate 25- Sparse 5-25%	75% cover (-3)		absent, and high spp	diversity and often, but not always.
		<5% cover (0)	_	the presence of rare,	threatened, or endangered spp
	Absent (1)	+3 W COVET (D)	Mudflat and	Open Water Class Qua	ality
	6d. Microtopography.		0	Absent <0.1ha (0.247	
	Score all present using		1	Low 0.1 to <1ha (0.24)	to 2.47 acres)
		nmucks/tussucks debris >15cm (6in)	2	Moderate 1 to <4ha (2	.47 to 9.88 acres)
	O Coarse woody) >25cm (10ln) dbh	3	High 4ha (9.88 acres)	or more
	Amphibian bre		Microtopop	raphy Cover Scale	
		7.420	0	Absent	
			1	Present very small amo	ounts or if more common
1			- 2	of marginal quality	
			2	Present in moderate an quality or in small am	nounts, but not of highest
1					
			3	Present in moderate or	

D:+(Cit	ACD Diseas Date 11st	t D-I		01-10	. D O	4.	C	
Project/Site: Applicant/Owner:	AEP Biers Run-Hop	petown-Delano		City/County	Ross Coun	State: OH	Sampling Date: 10/3/2013 Sampling Point: wbao-100313	
Investigator(s):	BAO, BCR			San	tion Townsh	ip, Range: unknown	Gamping Funt. wbab-100313-	
Landform (hillslope,		oression				relief (concave, convex, none):	Concave	
Slope (%):	Lat:	39.39	5402	Long:		-83.087597	Datum: NAD83 UTM16N	
Soil Map Unit Name		00.001	5102	Long.		NWI class		
	ogic conditions on th	e site typical for this	time of year?	Yes	X No	(If no, explain in Remark		
Are Vegetation			N significantly	-		ormal Circumstances" present		
Are Vegetation		N , or Hydrology				ded, explain any answers in Re		
						insects, important featu		
Hydrophytic Vegeta		Yes X	No No		Sampled Ar			
Hydric Soil Present		Yes X			a Wetland?		(No	
Wetland Hydrology		Yes X	No					
Remarks:								
PEM wetland within	agricultural field							
VEGETATION -	- Use scientific	names of plan				1		
Tree Stratum (Plot	eize: 201 4:	,	Absolute % Cover	Dominant Species?	Indicator	Dominance T4	4.	
1 (PIOT	size: 30' radius		% Cover	Species?	Status	Dominance Test workshee	t.	
2.						Number of Dominant Specie	S	
3.				. ——		That Are OBL, FACW, or FA		
4.					_	1		
5.						Total Number of Dominant		
6						Total Number of Dominant		
				= Total Cover		Species Across All Strata:	(B)	
Panling/Chruh Ctrat	um (Plot size: 15'	radius \				Percent of Dominant Specie		
1	uiii (Fiot size. 15	radius)				That Are OBL, FACW, or FA		
2.							()	
3.								
4.						Prevalence Index workshee		
5.						Prevalence Index workshe	ot:	
6.				T		T		
Herb Stratum (Plot	size: 5' radius	`		= Total Cover		Total % Cover of: OBL species 50	Multiply by: x1 = 50	
	sylvanicum ssp. one	illii	10	No	FACW	FACW species 35	x2 = 70	
Carex sp.	оулчальсал вор. опе		5	No	FAC	FAC species 15	x3 = 45	
3. Echinochloa cru	ıs-galli		25	Yes	FACW	FACU species	x4 =	
 Bidens sp. 			10	No	FAC	UPL species	x5 =	
Boehmeria cylir	ndrica		50	Yes	OBL	Column Totals: 100	(A) 165 (B)	
6								
7				. ———		Prevalence Index =	B/A = 1.65	
9.								
10.				. ——		Hydrophytic Vegetation In	dicators:	
11.								
12.						X 1-Rapid Test for Hy		
3.						X 2-Dominance Test		
14						X 3-Prevalence Index		
15							aptations ¹ (Provide supporting	
16							on a separate sheet) ohytic Vegetation ¹ (Explain)	
18.				. ——		- I TODIGITIALIC FIYUTO	mysso rogotation (Expidit)	
19.				. ——		¹ Indicators of hydric soil and	wetland hydrology must	
20.						be present, unless disturbed		
			100	= Total Cover				
	(0)					l		
Noody Vine Stratur	n (Plot size: 30'	radius)				Hydrophytic Vegetation		
2.							X No	
				= Total Cover		168	<u> </u>	
Remarks: (Include	photo numbers here	or on a separate sl	neet.)					
temarks: (Include	photo numbers here	or on a separate sl	neet.)					

	ription: (Describe to t	ne deptir nee					,	
epth nches)	Matrix Color (moist)	%	Color (moist)	dox Features %	Type ¹	Loc ²	Texture	Remarks
							· 	Remarks
0-10"	10YR 4/2	80	7.5R 5/8	20	RM	M	Silty Clay Loam	
F 0 0	Description D. Desclet	DM D		1 0 1 - 1		21 41	and Display Links	4 14-4-5
	concentration, D=Deplet	ion, Rivi=Real	iced Matrix, CS=Covere	d or Coated S	and Grains.		on: PL=Pore Lining, I ators for Problemati	
Histoso			Sandy Gleye	ed Matrix (S4)		maio	Coast Prairie	•
Histic E	pipedon (A2)		Sandy Redo	x (S5)			Iron-Mangane	ese Masses (F12)
_	Histic (A3)		Stripped Mar	. ,			Dark Surface	, ,
	en Sulfide (A4)			y Mineral (F1				Dark Surface (TF12)
	ed Layers (A5)			ed Matrix (F2)			Other (Explai	n in Remarks)
_	luck (A10)	A44)	x Depleted Ma					
	ed Below Dark Surface (Dark Surface (A12)	ATT)		Surface (F6) rk Surface (F7	7)		3Indicators of hydro	phytic vegetation and
_	Mucky Mineral (S1)		Redox Depre		')			pnytic vegetation and gy must be present,
	lucky Peat or Peat (S3)			(1 0)				ed or problematic.
	_ayer (if observed):							
	_ayer (IT observed):							
Type:								
	inchae):					Hydric	Soil Procent?	Voc V No
Depth (i	inches):					Hydric	Soil Present?	Yes X No
Depth (i emarks: YDROL letland Hyd rimary India	OGY trology Indicators: cators (minimum of one	is required: ch				Hydric	Secondary Indicato	rs (minimum of two required)
Depth (i emarks: YDROL fetland Hyd rimary India Surface	OGY drology Indicators: cators (minimum of one e Water (A1)	is required: ch	Water-Stain	ed Leaves (BS	9)	Hydric	Secondary Indicato	rs (minimum of two required) Cracks (B6)
Depth (i emarks: YDROL Vetland Hyd Surface High W	OGY drology Indicators: cators (minimum of one Water (A1) dater Table (A2)	is required: ch	Water-Staine Aquatic Fau	na (B13)	,	Hydric	Secondary Indicato Surface Soil (x Drainage Pat	rs (minimum of two required) Cracks (B6) terms (B10)
Popth (i Popth	OGY drology Indicators: cators (minimum of one Water (A1) //dater Table (A2) //doi.or (A3)	is required: ch	Water-Staine Aquatic Faul True Aquatic	na (B13) Plants (B14)		Hydric	Secondary Indicato Surface Soil X Drainage Pat Dry-Season \	rs (minimum of two required) Cracks (B6) Items (B10) Vater Table (C2)
Popth (i	OGY drology Indicators: cators (minimum of one e Water (A1) vater Table (A2) ion (A3) Marks (B1)	is required: ch	Water-Staine Aquatic Faul True Aquatic Hydrogen St	na (B13) : Plants (B14) ulfide Odor (C	1)		Secondary Indicato Surface Soil v X Drainage Port Dry-Season V Crayfish Burr	rs (minimum of two required) Cracks (B6) Items (B10) Vater Table (C2) ows (C8)
Popth (i	OGY drology Indicators: cators (minimum of one Water (A1) /ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2)	is required: ch	Water-Staine Aquatic Faul True Aquatic Hydrogen St x Oxidized Rh	na (B13) Plants (B14) ulfide Odor (C izospheres on	1) Living Root		Secondary Indicato Surface Soil i X Drainage Pat Dry-Season V Crayfish Burr Saturation Vi	rs (minimum of two required) Tracks (B6) tems (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9)
Pepth (i emarks: YDROL fetland Hy frimary Indic Surface High W Saturat Water I x Sedime Drift De	OGY trology Indicators: cators (minimum of one Water (A1) (ater Table (A2) ion (A3) Marks (B1) ant Deposits (B2) posits (B3)	is required: ch	Water-Staine Aquatic Faul True Aquatic Hydrogen St X Oxidized Rh Presence of	na (B13) : Plants (B14) ulfide Odor (C	1) Living Root (C4)	ts (C3)	Secondary Indicato Surface Soli i X Drainage Pat Dry-Season \ Crayfish Burr Saturation Vi Stunted or St	rs (minimum of two required) Cracks (B6) terms (B10) Vater Table (C2) vws (C8) sible on Aerial Imagery (C9) ressed Plants (D1)
Popth (i emarks: YDROL Vetland Hyd rrimary India Surface High W Saturat Water I X Sedime Drift De Algal W	OGY drology Indicators: cators (minimum of one Water (A1) /ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2)	is required: ch	Water-Staine Aquatic Faul True Aquatic Hydrogen St X Oxidized Rh Presence of	na (B13) Plants (B14) Ulfide Odor (C izospheres on Reduced Iron Reduction in 1	1) Living Root (C4)	ts (C3)	Secondary Indicato Surface Soil X Drainage Pat Dry-Season \ Crayfish Burr Saturation Vi Stunted or St	rs (minimum of two required) Cracks (B6) terms (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2)
Popth (i emarks: YDROL Vetland Hyd rimary India Surface High W Saturat W Water I X Sedime Drift De Algal M Iron De	OGY drology Indicators: cators (minimum of one a Water (A1) dater Table (A2) ion (A3) Marks (B1) ntt Deposits (B2) popolis (B3) lat or Crust (B4)		Water-Stain Aquatic Fau True Aquatic Hydrogen Si x Oxidized Rh Presence of Recent Iron	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in T curface (C7)	1) Living Root (C4)	ts (C3)	Secondary Indicato Surface Soil v X Drainage Por Dry-Season v Crayfish Burr Saturation viv Stunted or St X Geomorphic	rs (minimum of two required) Cracks (B6) terms (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2)
Popth (i emarks: YDROL Vetland Hyc Vetland Hyc Finary India Surface High W Saturat Water I X Sedime Drift De Algal M Iron De Inundat	OGY drology Indicators: cators (minimum of one a Water (A1) dater Table (A2) dion (A3) Marks (B1) ent Deposits (B2) posits (B3) lat or Crust (B4) eposits (B5)	agery (B7)	Water-Stain Aquatic Faur True Aquatic Hydrogen St x Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in T curface (C7)	1) Living Roof (C4) Filled Soils (ts (C3)	Secondary Indicato Surface Soil v X Drainage Por Dry-Season v Crayfish Burr Saturation viv Stunted or St X Geomorphic	rs (minimum of two required) Cracks (B6) terms (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2)
Popth (i emarks: YDROL Vetland Hyc Vetland Hyc Finary India Surface High W Saturat Water I X Sedime Drift De Algal M Iron De Inundat	OGY Irology Indicators: cators (minimum of one Water (A1) //ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) //posits (B5) tion Visible on Aerial Im. //ly Vegetated Concave S	agery (B7)	Water-Stain Aquatic Faur True Aquatic Hydrogen St x Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in 1 curface (C7) ell Data (D9)	1) Living Roof (C4) Filled Soils (ts (C3)	Secondary Indicato Surface Soil v X Drainage Por Dry-Season v Crayfish Burr Saturation viv Stunted or St X Geomorphic	rs (minimum of two required) Cracks (B6) terms (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2)
Pepth (i emarks: YDROL Vetland Hyv Frimary Indic Surface High W Saturat Water I x Sedime Drift De Algal M Iron De Inundal Sparse	OGY drology Indicators: cators (minimum of one Water (A1) dion (A3) Marks (B1) ent Deposits (B2) posits (B3) lat or Crust (B4) posits (B5) tion Visible on Aerial Im. ly Vegetated Concave S vations:	agery (B7)	Water-Stain Aquatic Faau True Aquatic Hydrogen St X Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) Plants (B14) Iffide Odor (C Izospheres on Reduced Iron Reduction in T Iurface (C7) ell Data (D9) in in Remarks	1) Living Roof (C4) Filled Soils (ts (C3)	Secondary Indicato Surface Soil v X Drainage Por Dry-Season v Crayfish Burr Saturation viv Stunted or St X Geomorphic	rs (minimum of two required) Cracks (B6) terms (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2)
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Pepth (i emarks: YDROL Vetland Hyc Vetland Hyc Vetland Hyc Surface High W Saturat X Sedime Drift De Inundal Sparse Inundal Sparse Surface Water 1 X Sedime Drift De Inundal Sparse S	OGY drology Indicators: cators (minimum of one e Water (A1) dater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) ion Visible on Aerial Im. ly Vegetated Concave S vations: er Present? Present? Present?	agery (B7) Surface (B8) Yes No Yes No Yes No	Water-Stain Aquatic Fauu True Aquatic Hydrogen St x Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) Plants (B14) Plants (B14) Iffide Odor (C Iffide O	1) Living Root (C4) Filled Soils (ts (C3) C6)	Secondary Indicato Surface Soli i X Drainage Pat Dry-Season \ Crayfish Burr Saturation Vi Stunted or St X Geomorphic FAC-Neutral	rs (minimum of two required) Tracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)

ORAM v. 5.0 Field Form Quantitative Rating

ite: AEP	6-H 17	Rater(s): BAO. BI	Date: 40m43
	Metric 1. Wetland	Area (size).	
2 2	Wettic I. Wedand	Allow (Gillo).	
say 5 pts subjets		score	
	>50 acres (>20.2ha) (6 25 to <50 acres (10.1 to	pts) <20 2ha) (5 pts)	
	10 to <25 acres (4 to <	10.1ha) (4 pls)	
	3 to <10 acres (1.2 to <		
	0.3 to <3 acres (0.12 to 0.1 to <0.3 acres (0.04	to <0.12ha) (1 pt)	
	<0.1 acres (0.04ha) (0	pts)	or these felicification
4	Metric 2. Upland	buffers and surrou	nding land use.
E 1			Mary and Annihila Schweife
tax i e bit annyon		th. Select only one and assign sco e 50m (164ft) or more around wetla	
	The STATE OF	erage 10m to <25m (32ft to <82ft) fers average <10m (<32ft) around v	around wettand permeter (1)
	and the formation of account and the Dring	select one or double check	and average.
	MODERATELY HIGH	ears), shrub land, young second gr Residential, fenced pasture, park,	Conservation made, new randw here (c)
	HIGH, Urban, industri	al, open pasture, row cropping, min	ning, construction. (1)
Con. Large	Metric 3. Hydrold	gy.	
10 14			and the second s
ax 30 pts - subto		that apply.	3b Connectivity. Score all that apply. 100 year floodplain (1)
	High pH groundwater Other groundwater (3)		Between stream/lake and other human use (1)
	✓ Precipitation (1)		Part of wetland/upland (e.g. forest), complex (1 Part of riparian or upland comider (1)
	Seasonal/Intermittent Perennial surface wat	surface water (3) er (take or stream) (5)	3rt Duration inundation/saturation. Score one of dbl che
	3c. Maximum water depth. Sel-	ect only one and assign score.	Semi- to permanently inundated/saturated (4) Regularly inundated/saturated (3)
	>0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 2	7 (Sin) (2)	Seasonally inundated (2)
	Table 1 and Company R. Walle 1985.		Seasonally saturated in upper 30cm (12in) (1)
		rologic regime. Score one or doub	le check and average.
	None or none appare Recovered (7)	nt (12) Check all disturbances obs	point source (nonstamwater)
	Recovering (3)	Sc tile	///illing/grading
	Recent or no recover	(1) dike	road bed/RR track dredging
		stormwater input	other
	700 / 111.00.1	Altanation and Day	volonment
125 0	Metric 4. Habita	Alteration and De	velopilient.
	End and Substitute distribute one Sp	ore one or double check and averag	ge.
mak 20 ptg subil	None or none appare	nt (4)	
	Recovered (3)		
	Recovering (2) Recent or no recover	y (†)	
	4b. Habital development. Sele	ct only one and assign score.	
	Excellent (7) Very good (6)		
	Good (5)		
	Moderately good (4)		
	Poor to fair (2)		
	Poor (1)	ne or double check and average.	
			pserved
	None or none appart	mowing	shrub/sapling removal
	Recovering (3)	grazing	herbaceous/equatic bed removal
	Recent or no recove	ry (1) Clearcutting	
T		selective cutting	dredging
180		selective cutting woody debris remove toxic poliutants	

Site:	AEP BHD	Rater(s): BNO	BR Date:
	Date -		1	
	26.5			
	supportair first page	to the state of the second		
0	Metric !	5. Special Wetland	is.	
U	00.0			
ma: 10 pts		apply and score as indicated.		
		(10) (10)		
		growth forest (10)		
	Mai	ture (crested wetland (5)	Tugata	1.00
	Lak	e Erie coastal/tributary wetland-un e Erie coastal/tributary wetland-re	restricted hyd	rology (10)
	Lak	e Plain Sand Prairies (Oak Openir	ids) (10)	04) (5)
	Rel	id Wet Prairies (10)		
	Kne	own occurrence state/federal threa	tened or enda	ingered species (10)
	Sig	nificant migratory songbird/water fi legory 1 Wetland See Question 1	Own habitation	usage (10)
	Ca	legory I vvenand. See Question I	Alan int	erenersion microtonography
11	Zh5 Metric	6. Plant communi	nes, me	erspersion, microtopography.
9	(NU)	Vegetation Communities	Vanetation	Community Cover Scale
max 20 VII		sent using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.2471 acres) contiguous at
		uatic bed	1	Present and either comprises small part of welland's
		nergent		vegetation and is of moderate quality, or comprises a significant part but is of low quality
	The second secon	rub	2	Present and either comprises significant part of wetland's
		rest adflats		vegetation and is of moderate quality or comprises a sn
		en water		part and is of high quality
		her	3	Present and comprises significant part, or more, of wellar
		al (plan viaw) interspersion	-	vegetation and is of high quality
	Select only of	ne: ah (5)	Narrative D	escription of Vegetation Quality
		oderately high(4)	low	Low spp diversity and/or predominance of nonnative or
		oderate (3)	-	disturbance tolerant native species Native spp are dominant component of the vegetation.
		oderately low (2)	mod	although nonnalive and/or disturbance tolerant nalive s
		w (1) one (0)		can also be present, and species diversity moderate to
		je of invasive plants. Refer		moderately high, but generally w/o presence of rare
	to Table 1 O	RAM long form for list. Add		A predominance of native species, with nonnative spp
	or deduct po	ints for coverage	high	and/or disturbance tolerant native spp absent or virtual
		xtensive >75% cover (-5) oderate 25-75% cover (-3)		absent, and high spp diversity and often, but not alway
		parse 5-25% cover (-1)		the presence of rare, threatened, or endangered spp-
		early absent <5% cover (0)	en carrier and	d Open Water Class Quality
		bsent (1)	Mudflat an	Absent <0.1ha (0.247 acres)
	6d. Microto	pography. esent using () to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 acres)
	V	egetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.88 acres)
		oarse woody debris > 15cm (6in)	3	High 4ha (9.88 acres) or more
		tanding dead >25cm (10in) dbh	Microtono	graphy Cover Scale
	0 A	mphibian breeding pools	0	Absent
- 1			1	Present very small amounts or if more common
1			-	of marginal quality Present in moderate amounts, but not of highest
10			2	quality or in small amounts of highest quality
			3	Present in moderate or greater amounts
				and of highest quality

End of Quantitative Rating. Complete Categorization Worksheets.

8

Project/Site: AEP Biers Run-Hopetown-Delano		City/County:	Ross Count	y Sampling Date: 10/4/2013
pplicant/Owner: AEP				State: OH Sampling Point: wbao-10041
nvestigator(s): BAO, BCR		Sect	ion, Township	p, Range: unknown
andform (hillslope, terrace, etc.):			Local re	elief (concave, convex, none): Concave
lope (%): Lat: 39.411515		Long:		82.986085 Datum: NAD83 UTM16N
oil Map Unit Name:				NWI classification:
are climatic / hydrologic conditions on the site typical for this time	of year?	Yes	X No	(If no, explain in Remarks.)
re Vegetation N , Soil N , or Hydrology 1	N significantly of			ormal Circumstances" present? Yes X No
re Vegetation N , Soil Y , or Hydrology 1				led, explain any answers in Remarks.)
SUMMARY OF FINDINGS Attach site map show			ations tra	nsects important features etc
lydrophytic Vegetation Present? Yes X	No		Sampled Are	
lydric Soil Present? Yes X	No No		a Wetland?	
Vetland Hydrology Present? Yes X	No	***************************************	u modulia.	100 <u>X</u> 110
Remarks:				
FFO/PEM wetland located abutting the Scioto River. Wetland is	within floodplain	of Scioto River	and contains	s naturally problematic soils due to frequent flooding events.
/EGETATION Use scientific names of plants.				
·	Absolute	Dominant	Indicator	
ree Stratum (Plot size: 30' radius)	% Cover	Species?	Status	Dominance Test worksheet:
1. Acer saccharinum	10	No	FACW	L
2. Fraxinus pennsylvanica	30	Yes	FACW	Number of Dominant Species
3. Acer negundo		Yes	FACU	That Are OBL, FACW, or FAC: 9 (A)
4. Juglans nigra	5 5	No No	FACU	Total Number of Dominant
Cratageus sp. Platanus occidentalis	20	Yes	FACW	Total Number of Dominant
Tratarius occidentaris	75	= Total Cover	TAOW	Species Across All Strata: 10 (B)
		10101 00101		(B)
Sapling/Shrub Stratum (Plot size: 15' radius)				Percent of Dominant Species
1. Salix nigra	10	Yes	OBL	That Are OBL, FACW, or FAC: 90% (A/B
Robinia pseudoacacia	10	Yes	FACU	
3.				
4.				Prevalence Index worksheet:
5				Prevalence Index worksheet:
6.				
	20	= Total Cover		Total % Cover of: Multiply by:
lerb Stratum (Plot size: 5' radius)		.,	E 4 6144	OBL species 25 x1 = 25
Lysimachia nummularia Carex sp.	20	Yes No	FACW	FACW species 102 x2 = 204 FAC species 105 x3 = 315
3. Polygonum sp.	10	No	FAC	FACU species 20 x4 = 80
4. Phalaris arundinacea	5	No	FACW	UPL species x5 =
5. Solidago sp.	15	Yes	FAC	Column Totals: 252 (A) 624 (E
Symphyotrichum ericoides	5	No	FACU	, ,,
7. Microstegium vimineum	35	Yes	FAC	Prevalence Index = B/A = 2.48
8. Phragmites australis	2	No	FACW	-
9. Toxicodendron radicans	5	No	FAC	
Boehmeria cylindrica	15	Yes	OBL	Hydrophytic Vegetation Indicators:
Verbesina alternifolia	15	Yes	FACW	
2				1-Rapid Test for Hydrophytic Vegetation
3				X 2-Dominance Test is >50%
4				X 3-Prevalence Index is ≤3.01
5. 6.				4-Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
6 7.				Problematic Hydrophytic Vegetation (Explain)
r				- Toblematic riyuropriyiic vegetation (Explain)
9.				¹ Indicators of hydric soil and wetland hydrology must
o.				be present, unless disturbed or problematic.
	137	= Total Cover		
Voody Vine Stratum (Plot size: 30' radius)				Hydrophytic
1				Vegetation
				Present? Yes X No
2.				
2.		= Total Cover		
2. temarks: (Include photo numbers here or on a separate sheet.		= Total Cover		

OIL								
	ription: (Describe to the	he depth nee	ded to document			bsence of	indicators.)	
Depth	Matrix			Redox Feature		. 2		
nches)	Color (moist)	%	Color (moist)	%	Type1	Loc ²	Texture	Remarks Problematic soil, abutting rive
0-10"	10YR 4/2	100					Sandy Silt	frequent depositon
,,	oncentration, D=Depleti	on, RM=Redu	uced Matrix, CS=0	covered or Coated	Sand Grains.		on: PL=Pore Linir	
ydric Soil II Histoso			Sandu	Gleyed Matrix (S	4)	Indic		atic Hydric Soils ³ : irie Redox (A16)
	pipedon (A2)			Redox (S5)	+)			anese Masses (F12)
	listic (A3)			ed Matrix (S6)			Dark Surfa	
	en Sulfide (A4)			Mucky Mineral (F	-1)			ow Dark Surface (TF12)
	d Layers (A5)			Gleyed Matrix (F.				plain in Remarks)
	uck (A10)			ed Matrix (F3)			_	
	ed Below Dark Surface (A11)		Dark Surface (F6	,		2	
_	lark Surface (A12)			ed Dark Surface (,		,	drophytic vegetation and
	Mucky Mineral (S1) ucky Peat or Peat (S3)		Redox	Depressions (F8))			ology must be present, urbed or problematic.
_							uriless dist	urbed of problematic.
	ayer (if observed):							
Type:						Usalala	0 - 11 D +0	Yes X No
roblematic S	ioils that are floodplain s	soils not fully o	developed due to	requent flooding a	and silt deposit		Soil Present?	
emarks: roblematic S	ioils that are floodplain s	soils not fully o	developed due to	requent flooding a	and silt deposit		Soli Present?	
emarks: roblematic S	ioils that are floodplain s				and silt deposit			sators (minimum of two required)
YDROLO Vetland Hyd Surface	OGY Irology Indicators: ators (minimum of one) Water (A1)		neck all that apply) -Stained Leaves (Secondary Indic	sators (minimum of two required) oil Cracks (B6)
PYDROLO Wetland Hyd Primary Indic Surface High We	DGY Irology Indicators: ators (minimum of one: Water (A1) ater Table (A2)		neck all that apply Water Aquati	Stained Leaves (i	B9)		Secondary Indio Surface S x Drainage	ators (minimum of two required) oil Cracks (B6) Patterns (B10)
YDROLO Wetland Hyd Primary Indic Surface High We Saturati	OGY Irology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3)		neck all that apply Water Aquati	Stained Leaves (i c Fauna (B13) equatic Plants (B1	B9)		Secondary Indic Surface S X Drainage Dry-Seas	Lators (minimum of two required) oil Cracks (B6) Patterns (B10) on Water Table (C2)
YDROLO Vetland Hyd rimary Indic Surface High W: Saturati X Water M	OGY Irology Indicators: ators (minimum of one) Water (A1) ater Table (A2) ion (A3) Marks (B1)		neck all that apply Water Aquati True A	Stained Leaves (i c Fauna (B13) quatic Plants (B1: gen Sulfide Odor (B9) 4) C1)	ion	Secondary Indic Surface S x Drainage Dry-Seas Crayfish E	cators (minimum of two required) oil Cracks (B6) Patterns (B10) on Water Table (C2) turrows (C8)
emarks: roblematic S YPDROLO Vetland Hyd Primary Indic Surface High W: Saturati X Water N X Sedime	DGY Irology Indicators: autors (minimum of one Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2)		neck all that apply Water Aquat True / Hydro	Stained Leaves (c Fauna (B13) quatic Plants (B1. gen Sulfide Odor (ed Rhizospheres	B9) 4) C1) on Living Root	ion	Secondary Indic Surface S x Drainage Dry-Sease Crayfish E Saturatior	vators (minimum of two required) oil Cracks (B6) Patterns (B10) on Water Table (C2) Jurrows (C8) Visible on Aerial Imagery (C9)
emarks: roblematic S VYDROLO Vetland Hyd rimary Indic Surface High W: Saturati X Water N X Sedime X Drift De	OGY Irology Indicators: eators (minimum of one Water (A1) ater Table (A2) on (A3) darks (B1) mit Deposits (B2) posits (B3)		neck all that apply Water Aquati True # Hydron Oxidiz Presei	Stained Leaves (c Fauna (B13) quatic Plants (B1 gen Sulfide Odor (ed Rhizospheres :	B9) 4) C1) on Living Root on (C4)	s (C3)	Secondary Indic Surface S X Drainage Dry-Sease Crayfish E Saturation Stunted o	rators (minimum of two required) oil Cracks (B6) Patterns (B10) on Water Table (C2) turrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1)
emarks: roblematic S VYDROLC Vetland Hyd rrimary Indic Surface High W. Saturati X Water N X Sedime X Drift De Algal M.	DGY Irology Indicators: autors (minimum of one Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2)		water Aquati True A Hydror Oxidiz Presse Recer	Stained Leaves (c Fauna (B13) quatic Plants (B1. gen Sulfide Odor (ed Rhizospheres	B9) 4) C1) on Living Root on (C4) n Tilled Soils (6	s (C3)	Secondary Indic Surface S x Drainage Dry-Sease Crayfish E Saturatior Stunted o x Geomorpi	vators (minimum of two required) oil Cracks (B6) Patterns (B10) on Water Table (C2) Jurrows (C8) Visible on Aerial Imagery (C9)
emarks: roblematic S YDROLC Vetland Hyd Primary Indic Surface High W: Saturati X Water M X Sedime X Drift De Algal M. Iron De	POGY Irology Indicators: ators (minimum of one 1 Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	is required: cl	neck all that apply Water Aquati True # Hydro; Oxidiz Prese: Recer Thin N	Stained Leaves (c Fauna (B13) quatic Plants (B1.) gen Sulfide Odor (ed Rhizospheres loce of Reduced to the reduction in the ron Reduction in	B9) 4) C1) on Living Root on (C4) on Tilled Soils (6)	s (C3)	Secondary Indic Surface S x Drainage Dry-Sease Crayfish E Saturatior Stunted o x Geomorpi	cators (minimum of two required) oil Cracks (B6) Patterns (B10) on Water Table (C2) turrovs (C8) Visible on Aerial Imagery (C9) 'Stressed Plants (D1) ilc Position (D2)
emarks: roblematic S IYDROLC Vetland Hyd Primary Indic Surface High W: Saturati X Water M: X Sedime Algal M: Iron Dej Inundati	DGY Irology Indicators: autors (minimum of one water (A1) autor (A2) ion (A3) autors (B2) ion (A3) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	is required: cl	neck all that apply Water Aquati True # Hydror Oxidiz Prese Recer Thin h Gauge	Stained Leaves (c Fauna (B13) quatic Plants (B13) quatic Plants (B13) en Sulfide Odor (ed Rhizospheres nace of Reduced In thron Reduction in luck Surface (C7)	B9) 4) C1) on Living Root on (C4) n Tilled Soils ((s (C3)	Secondary Indic Surface S x Drainage Dry-Sease Crayfish E Saturatior Stunted o x Geomorpi	cators (minimum of two required) oil Cracks (B6) Patterns (B10) on Water Table (C2) turrovs (C8) Visible on Aerial Imagery (C9) 'Stressed Plants (D1) ilc Position (D2)
emarks: roblematic S HYDROLC Vetland Hyd Primary Indic Surface High W. Saturati X Water N X Sedime X Drift De Algal M Iron De Inundati Sparsel	DGY Irology Indicators: autors (minimum of one Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Ima y Vegetated Concave S	is required: cl	neck all that apply Water Aquati True # Hydror Oxidiz Prese Recer Thin h Gauge	Stained Leaves (c Fauna (B13) quatic Plants (B1) quatic Plants (B1) gen Sulfide Odor (ed Rhizospheres noce of Reduced In thon Reduction in tuck Surface (To or Well Data (D9) or Well Data (D9)	B9) 4) C1) on Living Root on (C4) n Tilled Soils ((s (C3)	Secondary Indic Surface S x Drainage Dry-Sease Crayfish E Saturatior Stunted o x Geomorpi	cators (minimum of two required) oil Cracks (B6) Patterns (B10) on Water Table (C2) turrovs (C8) Visible on Aerial Imagery (C9) 'Stressed Plants (D1) ilc Position (D2)
emarks: roblematic S IYDROLC Wetland Hyd Primary Indic Surface High W. Saturati X Water N X Sedime X Drift De Algal M. Iron Dej Inundati Sparsel	OGY Irology Indicators: Lators (minimum of one) Water (A1) Later Table (A2) Lon (A3) Marks (B1) Lon (B3) Lon (B3) Lon (B4) Lon (is required: cl	neck all that apply Water Aquati True # Hydror Oxidiz Prese Recer Thin h Gauge	Stained Leaves (c Fauna (B13) quatic Plants (B1- gen Sulfide Odor (ed Rhizospheres : coe of Reduced In t Iron Reduction in luck Surface (C7) or or Well Data (D9 (Explain in Reman	B9) 4) C1) on Living Root on (C4) n Tilled Soils ((s (C3)	Secondary Indic Surface S x Drainage Dry-Sease Crayfish E Saturatior Stunted o x Geomorpi	cators (minimum of two required) oil Cracks (B6) Patterns (B10) on Water Table (C2) turrovs (C8) Visible on Aerial Imagery (C9) 'Stressed Plants (D1) ilc Position (D2)
emarks: roblematic S IYDROLC Vetland Hyd Primary Indic Surface High W. Saturati X Water N Algal M. Iron Dej Inundati Sparsel Sparsel Surface Water Vater Table	OGY Irology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) darks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Imit by Vegetated Concave S vations: er Present? Present?	agery (B7) rurface (B8) YesNo YesNo	meck all that apply Water Aquati True # Hydror Oxidiz Presei Recer Thin N Gauge Other X Depth (i x Depth (i	Stained Leaves (c Fauna (B13) quatic Plants (B13) quatic Plants (B16) gen Sulfide Odor (c ed Rhizospheres noe of Reduced In the Iron Reduction in duck Surface (C7) or Well Data (D9 (Explain in Remaranches): nches):	B9) 4) C1) on Living Root on (C4) on Tilled Soils ((s (C3)	Secondary Indic Surface S X Drainage Dry-Sease Crayfish E Saturatior Stunted o X Geomorpi X FAC-Neur	cators (minimum of two required) oil Cracks (B6) Patterns (B10) on Water Table (C2) turrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) ilc Position (D2)
emarks: roblematic S VYDROLC Vetland Hyd Primary Indic Surface High W. Saturati X. Water N X. Sedime Algal M. Iron Dej Inundati Sparsel ield Observ Surface Wate Vater Table Saturation Pr	DGY Irology Indicators: ators (minimum of one: Water (A1) ater Table (A2) fon (A3) Marks (B1) ater Table (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Ima by Vegetated Concave S vations: er Present? Present? Present?	is required: cl aggry (B7) rurface (B8) Yes No	meck all that apply Water Aquati True # Hydror Oxidiz Presei Recer Thin N Gauge Other X Depth (i x Depth (i	Stained Leaves (c Fauna (B13) quatic Plants (B13) quatic Plants (B16) gen Sulfide Odor (c ed Rhizospheres noe of Reduced In the Iron Reduction in duck Surface (C7) or Well Data (D9 (Explain in Remaranches): nches):	B9) 4) C1) on Living Root on (C4) on Tilled Soils ((s (C3)	Secondary Indic Surface S x Drainage Dry-Sease Crayfish E Saturatior Stunted o x Geomorpi	cators (minimum of two required) oil Cracks (B6) Patterns (B10) on Water Table (C2) turrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) ilc Position (D2)
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emarks: roblematic S YYDROLC Vetland Hyd Primary Indic Surface High W. Saturati X. Water N. Saturati X. Drift De Inundati Sparsel Ield Observ Surface Water Table Saturation Princludes cap	DGY Irology Indicators: ators (minimum of one: Water (A1) ater Table (A2) fon (A3) Marks (B1) ater Table (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Ima by Vegetated Concave S vations: er Present? Present? Present?	sgery (B7) surface (B8) Yes No Yes No	weck all that apply Water Aquati True A Hydron Oxidiz Prese Recer Thin N Gauge Other x Depth (i x Depth (i	Stained Leaves (c Fauna (B13) quatic Plants (B1 gen Sulfide Odor led Rhizospheres noe of Reduced In Iton Reduction Induck Surface (C7) or Well Data (D9 (Explain in Remaranches):	BB9) 4) C1) on Living Root on (C4) n Tilled Soils (4)) ks)	s (C3) C6)	Secondary Indic Surface S X Drainage Dry-Sease Crayfish E Saturatior Stunted o X Geomorpi X FAC-Neur	vators (minimum of two required) oil Cracks (B6) Patterns (B10) n Water Table (C2) turrows (C8) I Visible on Aerial Imagery (C9) Stressed Plants (D1) nic Position (D2) ral Test (D5)
emarks: roblematic S IYPDROLC Vetland Hyd Primary Indic Surface High W. Saturatia X. Water N. X. Sedime X. Drift De Inundatt Sparsel Indid Observ Surface Water Water T able Saturation P. Saturation P. Saturation P. Indiddes cap	DGY Irology Indicators: Lators (minimum of one) Water (A1) Ater Table (A2) Irology Indicators: Lators (minimum of one) Water (A1) Ater Table (A2) Irology Indicators: Lators (minimum of one) Water (A1) Indicators Indicat	sgery (B7) surface (B8) Yes No Yes No	weck all that apply Water Aquati True A Hydron Oxidiz Prese Recer Thin N Gauge Other x Depth (i x Depth (i	Stained Leaves (c Fauna (B13) quatic Plants (B1 gen Sulfide Odor led Rhizospheres noe of Reduced In Iton Reduction Induck Surface (C7) or Well Data (D9 (Explain in Remaranches):	BB9) 4) C1) on Living Root on (C4) n Tilled Soils (4)) ks)	s (C3) C6)	Secondary Indic Surface S X Drainage Dry-Sease Crayfish E Saturatior Stunted o X Geomorpi X FAC-Neur	vators (minimum of two required) oil Cracks (86) Patterns (810) n Water Table (C2) turrows (C8) I Visible on Aerial Imagery (C9) Stressed Plants (D1) nic Position (D2) ral Test (D5)
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emarks: roblematic S YYDROLC Wetland Hyd Primary Indic Surface High W. Saturati X. Water N. X. Sedime X. Drift De Algal M. Iron De; Inundati Sparsel ield Observ Surface Water Table Saturation Princludes cap Describe Rei	DGY Irology Indicators: Lators (minimum of one) Water (A1) Ater Table (A2) Irology Indicators: Lators (minimum of one) Water (A1) Ater Table (A2) Irology Indicators: Lators (minimum of one) Water (A1) Indicators Indicat	sgery (B7) surface (B8) Yes No Yes No	weck all that apply Water Aquati True A Hydron Oxidiz Prese Recer Thin N Gauge Other x Depth (i x Depth (i	Stained Leaves (c Fauna (B13) quatic Plants (B1 gen Sulfide Odor led Rhizospheres noe of Reduced In Iton Reduction Induck Surface (C7) or Well Data (D9 (Explain in Remaranches):	BB9) 4) C1) on Living Root on (C4) n Tilled Soils (4)) ks)	s (C3) C6)	Secondary Indic Surface S X Drainage Dry-Sease Crayfish E Saturatior Stunted o X Geomorpi X FAC-Neur	vators (minimum of two required) oil Cracks (B6) Patterns (B10) n Water Table (C2) turrows (C8) I Visible on Aerial Imagery (C9) Stressed Plants (D1) nic Position (D2) ral Test (D5)
emarks: roblematic S AYDROLC Vetland Hyd Primary Indic Surface High W. Saturatia X. Water N. X. Sedime X. Drift De Algal M. Iron De; Inundati Sparsel Inundati Sparsel Saturation Princludes cap Describe Rei	DGY Irology Indicators: Lators (minimum of one) Water (A1) Ater Table (A2) Irology Indicators: Lators (minimum of one) Water (A1) Ater Table (A2) Irology Indicators: Lators (minimum of one) Water (A1) Indicators Indicat	sgery (B7) surface (B8) Yes No Yes No	weck all that apply Water Aquati True A Hydron Oxidiz Prese Recer Thin N Gauge Other x Depth (i x Depth (i	Stained Leaves (c Fauna (B13) quatic Plants (B1 gen Sulfide Odor led Rhizospheres noe of Reduced In Iton Reduction Induck Surface (C7) or Well Data (D9 (Explain in Remaranches):	BB9) 4) C1) on Living Root on (C4) n Tilled Soils (4)) ks)	s (C3) C6)	Secondary Indic Surface S X Drainage Dry-Sease Crayfish E Saturatior Stunted o X Geomorpi X FAC-Neur	vators (minimum of two required) oil Cracks (B6) Patterns (B10) n Water Table (C2) turrows (C8) I Visible on Aerial Imagery (C9) Stressed Plants (D1) nic Position (D2) ral Test (D5)

ORAM v. 5.0 Field Form Quantitative Rating

Site: Att	BHD	Rater(s): BNO	BR	Date: 10/04/13
	Metric 1. Wetland	Area (size).		
3 3				
max 6 pts. sub/o	Select one size class and assign : >50 acres (>20 2ha) (6	SCORE-		
	25 to <50 agres (10.1 to	<20.2ha) (5 pts)		
	10. to <25 acres (4 to <1 3 to <10 acres (1.2 to <	0.1ha) (4 pts)		
	0.3 to <3 acres (0.12 to	<1.2ha) (2pts)		
	0.1 to <0.3 acres (0.04 <0.1 acres (0.04ha) (0.04ha)			
VI 100	Metric 2. Upland	ouffers and surr	ounding land u	ise.
7 10				
man he pts: subto	2a. Calculate average buffer wid	50m (154ff) or more around	welland perimeter (7)	
	MEDILIM Buffore quar	and 25m to <50m (82 to <164	Iff) around wetland perimete	r (4)
	NARROW, Buffers ave	rage 10m to <25m (32fl to < ers average <10m (<32fl) aro	s2ff) around wetland perime und wetland perimeter (0)	ter (1)
	26. Intensity of surrounding land	use. Select one or double cl	neck and average.	
	The state of the s	th or older forest, prairie, savi ears), shrub land, young seco	nd arough forces! (5)	
	MODERATELY HIGH	Residential, fenced pasture,	park, conservation tiliage, the	ew fallow field. (3)
	Metric 3. Hydrolo	il, open pasture, row cropping	mining, construction (1)	
83 3	3 INECTIC 3. Hydroid	gy.		
may 30 pts. subs	3a. Sources of Water. Score all	that apply	3b. Connectivity. Sc	care all that apply.
	High pH groundwater (Other groundwater (3)	5)	Between s	loodplain (1) stream/lake and other human use (1)
	Precipitation (1)		Part of we	tland/upland (e.g. forest), complex (1)
	Seasonal/Intermittent s	curface water (3)	3d. Duration inundat	arian or upland corridor (1) lion/saturation. Score one or dbl cher
	3c. Maximum water depth. Sele	ct only one and assign score	Semi- to p	ermanently inundated/saturated (4)
	>0.7 (27 6in) (3) 0.4 to 0.7m (15,7 to 27	Sin\ /2\	Seasonall	inundated/saturated (3) y inundated (2)
	1 1 10 des (+15 75) (4)		Seasonall	y saturated in upper 30cm (12in) (1)
		ologic regime. Score one or	cheaned	
	None or none apparent Recovered (7)	ditch	point sour	ce (nonstormwater)
	Recovering (3)	(1) file dike	filling/grad road bed/i	
	Recent or no recovery	weir	dredging	12.12
		stormwater inpu		
12/11	Metric 4. Habitat	Alteration and	Development.	
12 7	13			
max 20 per such	None or none apparer	re one or double check and a ni (4)	verage	
	Recovered (3)	24.7		
	Recent or no recovery	(1)		
	4b. Habitat development. Sele-	d only one and assign score		
	Excellent (7) Very good (6)			
	Good (5)			
	Moderately good (4)			
	Poor to fair (2)			
	Poor (1) 4c. Habital alteration. Score or	ne or double chack and avera	qe.	
	None or none appare	nt (9) Check all disturbance	es observed	pling removal
		mawing	SS/Gurina	hinid scrooter
	Recovered (6)			ous/aquatic bed removal
	Recovered (6) Recovering (3) Recent or no recover	grazing clearcutting	≥ sediment	tation
11/17	Recovering (3)	grazing	sediment dredging emoval starming	tation
i	Recovering (3)	grazing clearcutting selective cutting	sediment dredging emoval sfarming	tation

te: APP	BH1)	Rater(s): 1/3	10 W	Date: /0/04/13
45 subclass first, 3) 45 10 ccs. authorized	Lake Erie coastal/fributa Lake Plain Sand Prairie Relict Wei Prairies (10)	indicatéd: (5) any welland-unrestricted hydrony welland-restricted hydrony	rology (5)	
	Significant migratory so	nabird/water fowl habital	or usage (10)	
	Category 1 Wetland, Si	ee Question 1 Qualitative	Rating (-10)	icrotonography
5 50	Metric 6. Plant co	mmunities, ir	iterspersion, in	icrotopograpity
E20 pts. subjoin	6a. Welland Vegetation Commun	ities. Vegetatio	n Community Cover Scale	
	Score all present using 0 to 3 scal		Absent or comprises <	0.1ha (0.2471 acres) contiguous area
	Aquatic bed	- 1	Present and either com	prises small part of wetland's noderate quality, or comprises a
	☐ Emergent		significant part but is	
	9 Forest	2	Present and either con	prises significant part of wetland's
	Mudflats			moderate quality or comprises a sma
	Open water	3	part and is of high qu	rality s significant part, or more, of wetland
	6b. horizontal (plan view) Intersp		vegetation and is of t	
	Select only one.			
	High (5)		Description of Vegetation	or predominance of nonnative or
	Moderately high(4) Moderate (3)	low	disturbance tolerant	
	Moderately low (2) Low (1) None (0) 6c. Coverage of invasive plants, to Table 1 ORAM long form for fis		although nonnative a can also be present, moderately high, but threatened or endan	
	or deduct points for coverage	high	A predominance of na	tive species, with nonnalive spp
	Extensive >75% cover		and/or disturbance to	olerant native spp absent or virtually o diversity and often, but not always,
	Moderate 25-75% cove Sparse 5-25% cover (-		the presence of rare	, threatened, or endangered spp
	Nearly absent <5% com	ver (0)		
	Absent (1)		Absent <0.1ha (0.247	
	Bd. Microtopography Score all present using 0 to 3 scr		Low 0.1 to <1ha (0.24)	
	Vegetaled hummucks/		Moderate 1 to <4ha (2.47 to 9.88 acres)
	/ Coarse woody debris	>15cm (6in) 3	High 4ha (9.88 acres)	or more
	Standing dead >25cm		ography Cover Scale	
	Amphibian breeding p	oois Witchoto	Absent	
		1	Present very small an	nounts or if more common
0			of marginal quality	converte that was of highway
N		2	Present in moderate a	amounts, but not of highest mounts of highest quality
100		3	Present in moderate of	
			and of highest quali	

roject/Site: A	EP Biers Run-Hopetow	n-Delano		City/County	Ross Coun	tv	Sampling Date: 10/3/2013
	EP					State: OH	Sampling Point: wbao-100313
nvestigator(s): B	AO, BCR			Sect	ion, Townshi	ip, Range: unknown	
andform (hillslope, te	rrace, etc.): Depress	on			Local r	elief (concave, convex, none):	Concave
lope (%):	Lat:	39.395402	<u>!</u>	Long:		-83.087597	Datum: NAD83 UTM16N
oil Map Unit Name:						NWI class	ification:
re climatic / hydrologi	ic conditions on the site	typical for this time	e of year?	Yes	X No	(If no, explain in Remark	(S.)
re Vegetation		or Hydrology			Are "No	ormal Circumstances" present	? Yes X No
re Vegetation	N , Soil N	or Hydrology	N naturally prob	lematic?	(If need	ded, explain any answers in Re	marks.)
SUMMARY OF FI	NDINGS Attach	site map show	wing sampling	point loca	ations, tra	insects, important featu	ıres, etc.
lydrophytic Vegetation	n Present?	Yes X	No		Sampled Ar		
lydric Soil Present?		Yes X	No	within	a Wetland?	Yes	K No
etland Hydrology Pre	esent?	Yes X	No				
Remarks:							
EM wetland within ag	ricultural field						
ECETATION I							
EGETATION C	Jse scientific nan	ies of plants.	Absolute	Dominant	Indicator	1	
ree Stratum (Plot siz	e: 30' radius)	% Cover	Species?	Status	Dominance Test workshee	ot:
l.							
2.						Number of Dominant Specie	s
l						That Are OBL, FACW, or FA	C: 2 (A)
·							
·						Total Number of Dominant	
i				= Total Cover		Total Number of Dominant Species Across All Strata:	2 (B)
				- Total Cover		opedes Adioss Ali Strata.	(B)
apling/Shrub Stratum	(Plot size: 15' radiu	s)				Percent of Dominant Specie	s
						That Are OBL, FACW, or FA	
2.							
3.							
4						Prevalence Index workshe	
5						Prevalence Index workshe	ot:
6.				= Total Cover		Total % Cover of:	Multiply by:
lerb Stratum (Plot siz	te: 5' radius)		- Total Cover		OBL species 50	x1 = 50
Polygonum pensy.		,	10	No	FACW	FACW species 35	x2 = 70
2. Carex sp.			5	No	FAC	FAC species 15	x3 = 45
3. Echinochloa crus-	galli		25	Yes	FACW	FACU species	x4 =
1. Bidens sp.			10	No	FAC	UPL species	x5 =
5. Boehmeria cylindri	ica		50	Yes	OBL	Column Totals: 100	(A) 165 (B
7.						Describer of landary of	D/A - 4.05
						Prevalence Index =	B/A = 1.65
).							
						Hydrophytic Vegetation In	dicators:
-							
-						X 1-Rapid Test for Hy	
·						X 2-Dominance Test	
						X 3-Prevalence Index	
·							aptations ¹ (Provide supporting
<u></u>							on a separate sheet) ohytic Vegetation1 (Explain)
·							oriyao vogotatori (Explairi)
						¹ Indicators of hydric soil and	wetland hydrology must
						be present, unless disturbed	
			100	= Total Cover			
oody Vine Stratum	(Plot size: 30' radiu	s)				Hydrophytic	
·						Vegetation	V N-
ć				= Total Cover		Present? Yes	X No
				- rotal Cover			
emarks: (Include ph	oto numbers here or or	a senarate sheet)			1	
		ooperate ancet.	,				

	cription: (Describe to the	ne aeptn nee			J 1110 u		,	
Depth inches)	Matrix Color (moist)	%	Color (moist)	dox Features %	Type ¹	Loc ²	Texture	Remarks
			Odioi (moist)			Loc	Texture	remans
0-10"	10YR 4/2	80	7.5R 5/8	20	RM	M	Silty Clay Loam	
	Concentration, D=Depleti	on, RM=Redu	iced Matrix, CS=Covere	d or Coated S	Sand Grains.		on: PL=Pore Lining,	
-	Indicators:		Candy Clay	ed Matrix (C4)		Indic	ators for Problemati	•
Histos	Epipedon (A2)		Sandy Gleye	ed Matrix (S4)				e Redox (A16) lese Masses (F12)
_	Histic (A3)		Stripped Ma	. ,			Dark Surface	, ,
	jen Sulfide (A4)			y Mineral (F1))			Dark Surface (TF12)
	ed Layers (A5)			ed Matrix (F2)				in in Remarks)
	luck (A10)		x Depleted Ma					,
	ed Below Dark Surface (A11)		Surface (F6)				
Thick I	Dark Surface (A12)		Depleted Da	rk Surface (F	7)		3Indicators of hydro	ophytic vegetation and
	Mucky Mineral (S1)		Redox Depr	essions (F8)				gy must be present,
5 cm N	fucky Peat or Peat (S3)						unless disturb	ed or problematic.
Restrictive	Layer (if observed):							
Type:								
Depth (inches):					Hydric	Soil Present?	Yes X No
emarks:						,	John Fresentr	
							Son Fresent?	
IYDROL							Soli Fresent?	
HYDROL Wetland Hy Primary Indi	OGY drology Indicators: cators (minimum of one	is required: ch					Secondary Indicate	ors (minimum of two required)
HYDROL Wetland Hy Primary Indi Surfac	OGY drology Indicators: cators (minimum of one e Water (A1)	is required: cf	Water-Stain	ed Leaves (BS	9)		Secondary Indicate Surface Soil	ors (minimum of two required) Cracks (B6)
HYDROL Wetland Hy Primary Indi Surfac High W	OGY drology Indicators: cators (minimum of one e Water (A1) /ater Table (A2)	is required: ch	Water-Stain Aquatic Fau	na (B13)	,		Secondary Indicate Surface Soil X Drainage Pa	ors (minimum of two required) Cracks (B6) tterns (B10)
HYDROL Wetland Hy Primary Indi Surfac High W Satura	OGY drology Indicators: cators (minimum of one Water (A1) //dater Table (A2) ition (A3)	is required: ch	Water-Stain Aquatic Fau True Aquati	na (B13) c Plants (B14)			Secondary Indicate Surface Soil X Drainage Pa Dry-Season	ors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2)
HYDROL Wetland Hy Primary Indi Surfac High W Satura Water	OGY drology Indicators: cators (minimum of one e Water (A1) /ater Table (A2) tion (A3) Marks (B1)	is required: ch	Water-Stain Aquatic Fau True Aquati Hydrogen S	na (B13) c Plants (B14) ulfide Odor (C	1)		Secondary Indicate Surface Soil X Drainage Pa Dry-Season' Crayfish Bur	ors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8)
HYDROL Wetland Hy Primary Indi Surfac High W Satura Water x Sedim	OGY drology Indicators: cators (minimum of one Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)	is required: ch	Water-Stain Aquatic Fau True Aquati Hydrogen S x Oxidized Rh	na (B13) c Plants (B14) ulfide Odor (C izospheres on	1) Living Root		Secondary Indicate Surface Soil X Drainage Pa Dry-Season Craylish Bun Saturation V	ors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rovs (C8) isible on Aerial Imagery (C9)
HYDROL Wetland Hy Primary Indi Surfac High W Satura Water x Sedim Drift Di	OGY drology Indicators: cators (minimum of one Water (A1) /dater Table (A2) /dion (A3) Marks (B1) ant Deposits (B2) eposits (B3)	is required: ch	Water-Stain Aquatic Fau True Aquati Hydrogen S X Oxidized Rh Presence of	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron	1) Living Root	s (C3)	Secondary Indicate Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation Stunted or S	ors (minimum of two required) Cracks (86) tterns (B10) Water Table (C2) rows (C8) tisble on Aerial Imagery (C9) tressed Plants (D1)
HYDROL Wetland Hy Primary Indi Surfac High W Satura Water X Sedim Drift Do Algal N	OGY drology Indicators: cators (minimum of one Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)	is required: ch	Water-Stain Aquatic Fau True Aquati Hydrogen S x Oxidized Rh Presence of Recent Iron	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron	1) Living Root	s (C3)	Secondary Indicate Surface Soil X Drainage Pa Dry-Season Crayfish Bun Saturation V Stunted or S X Geomorphic	ors (minimum of two required) Cracks (B6) Itterns (B10) Water Table (C2) rows (C8) Isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2)
HYDROL Wetland Hy Primary Indi Surfac High W Satura Water X Sedim Drift D Algal M Iron De	OGY drology Indicators: cators (minimum of one e Water (A1) fater Table (A2) tition (A3) Marks (B1) ent Deposits (B2) posits (B3) fat or Crust (B4) eposits (B5)		Water-Stain Aquatic Fau True Aquati Hydrogen S x Oxidized Rh Presence of Recent Iron Thin Muck S	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in T surface (C7)	1) Living Root	s (C3)	Secondary Indicate Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation Stunted or S	ors (minimum of two required) Cracks (B6) Itterns (B10) Water Table (C2) rows (C8) Isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2)
HYDROL Wetland Hy Surfac High W Satura Water X Sedim Drift Do Algal M Iron Do	OGY drology Indicators: cators (minimum of one e Water (A1) fater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4)	agery (B7)	Water-Stain Aquatic Fau True Aquatii Hydrogen S x Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron	1) Living Root (C4) Filled Soils (G	s (C3)	Secondary Indicate Surface Soil X Drainage Pa Dry-Season Crayfish Bun Saturation V Stunted or S X Geomorphic	ors (minimum of two required) Cracks (B6) Itterns (B10) Water Table (C2) rows (C8) Isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2)
Primary Indi Surfac High W Satura Water x Sedim Drift Dr Algal N Iron De Inunda Sparse	OGY drology Indicators: cators (minimum of one Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) dat or Crust (B4) eposits (B5) tion Visible on Aerial Ima ity Vegetated Concave S	agery (B7)	Water-Stain Aquatic Fau True Aquatii Hydrogen S x Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in 1 Surface (C7) ell Data (D9)	1) Living Root (C4) Filled Soils (G	s (C3)	Secondary Indicate Surface Soil X Drainage Pa Dry-Season Crayfish Bun Saturation V Stunted or S X Geomorphic	ors (minimum of two required) Cracks (B6) Itterns (B10) Water Table (C2) rows (C8) Isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2)
HYDROL Wetland Hy Primary Indi Surfac High W Satura Water X Sedim Drift D Algal N Iron D0 Inunda Sparse	OGY drology Indicators: cators (minimum of one a Water (A1) dater Table (A2) tion (A3) Marks (B1) ant Deposits (B2) eposits (B3) flat or Crust (B4) eposits (B5) tion Visible on Aerial Imit by Vegetated Concave S vations:	agery (B7) surface (B8)	Water-Stain Aquatic Fau True Aquati Hydrogen S x Oxidized RR Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in T surface (C7) ell Data (D9) in in Remarks	1) Living Root (C4) Filled Soils (G	s (C3)	Secondary Indicate Surface Soil X Drainage Pa Dry-Season Crayfish Bun Saturation V Stunted or S X Geomorphic	ors (minimum of two required) Cracks (B6) Itterns (B10) Water Table (C2) rows (C8) Isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2)
HYDROL Wetland Hy Primary Indi Surfac High V Satura Water x Sedim Drift D Algal N Iron Dc Inunda Sparse Field Obser	OGY drology Indicators: cators (minimum of one e Water (A1) // Ater Table (A2) // Liton (A3) // Marks (B1) // met Deposits (B2) // eposits (B3) // lat or Crust (B4) // eposits (B5) // ton Visible on Aerial Im // Vegetated Concave S // vations: // Liter Present?	agery (B7) urface (B8) Yes No	Water-Stain Aquatic Fau True Aquatii Hydrogen S x Oxidized RR Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in T surface (C7) ell Data (D9) sin in Remarks	1) Living Root (C4) Filled Soils (G	s (C3)	Secondary Indicate Surface Soil X Drainage Pa Dry-Season Crayfish Bun Saturation V Stunted or S X Geomorphic	ors (minimum of two required) Cracks (B6) Itterns (B10) Water Table (C2) rows (C8) Isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2)
HYDROL Wetland Hy Primary Indi Surfac High V Satura Water x Sedim Drift D Algal N Iron De Inunda Suprase Field Obser Surface W Water Table	OGY drology Indicators: cators (minimum of one Water (A1) dater Table (A2) dion (A3) Marks (B1) ent Deposits (B2) eposits (B3) dat or Crust (B4) eposits (B5) dion Visible on Aerial Imit ely Vegetated Concave S vations: ter Present? Present?	agery (B7) surface (B8)	Water-Stain Aquatic Fau True Aquati Hydrogen S x Oxidized RR Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduction in T surface (C7) ell Data (D9) in in Remarks): :	1) Living Root (C4) Filled Soils (s (C3)	Secondary Indicate Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Sturted or S X Geomorphic FAC-Neutral	ors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)
HYDROL Wetland Hy Primary Indi Surfac High W Satura Water X Sedim Drift D Iron DO Inunda Sparse Field Obser Surface Wa	OGY drology Indicators: cators (minimum of one Water (A1) dater Table (A2) dion (A3) Marks (B1) ent Deposits (B2) eposits (B3) dat or Crust (B4) eposits (B5) dion Visible on Aerial Imit ely Vegetated Concave S vations: ter Present? Present?	agery (B7) surface (B8) Yes No Yes No	Water-Stain Aquatic Fau True Aquati Hydrogen S X Oxidized Rh Presence Of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduction in T surface (C7) ell Data (D9) in in Remarks): :	1) Living Root (C4) Filled Soils (s (C3)	Secondary Indicate Surface Soil X Drainage Pa Dry-Season Crayfish Bun Saturation V Stunted or S X Geomorphic	ors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)
HYDROL Wetland Hy Primary India Surfac High W Satura Water X Sedim Drift Do Iron Do Inunda Sparss Field Obser Surface Wa Water Table Saturation F (includes ca	OGY drology Indicators: cators (minimum of one e Water (A1) dion (A3) Marks (B1) ent Deposits (B2) eposits (B3) flat or Crust (B4) eposits (B5) tion Visible on Aerial Imally Vegetated Concave S vations: ter Present? resent?	agery (B7) urrface (B8) Yes No Yes No Yes No	Water-Stain Aquatic Fau True Aquati Hydrogen S x Oxidized RR Presence of Recent Iron Thin Muck S Gauge or W Other (Expla x Depth (inches x Depth (inches	na (B13) c Plants (B14) ulfide Odor (C izcospheres on Reduced Iron Reduction in 1 surface (C7) ell Data (D9) in in Remarks););	1) Living Root (C4) Filled Soils (6	s (C3) C6)	Secondary Indicate Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Sturted or S X Geomorphic FAC-Neutral	ors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)
HYDROL Wetland Hy Primary India Surfac High W Satura Water X Sedim Drift Do Iron Do Inunda Sparss Field Obser Surface Wa Water Table Saturation F (includes ca	OGY drology Indicators: cators (minimum of one e Water (A1) rater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aerial Im etic Visible	agery (B7) urrface (B8) Yes No Yes No Yes No	Water-Stain Aquatic Fau True Aquati Hydrogen S x Oxidized RR Presence of Recent Iron Thin Muck S Gauge or W Other (Expla x Depth (inches x Depth (inches	na (B13) c Plants (B14) ulfide Odor (C izcospheres on Reduced Iron Reduction in 1 surface (C7) ell Data (D9) in in Remarks););	1) Living Root (C4) Filled Soils (6	s (C3) C6)	Secondary Indicate Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Sturted or S X Geomorphic FAC-Neutral	ors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)
Wetland Hy Primary India Surfac High W Satura Water X Sedim Drift D Iron De Inunda Sparse Field Obser Surface Wa Water Table Saturation F (includes ca Describe Re	OGY drology Indicators: cators (minimum of one e Water (A1) rater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aerial Im etic Visible	agery (B7) urrface (B8) Yes No Yes No Yes No	Water-Stain Aquatic Fau True Aquati Hydrogen S x Oxidized RR Presence of Recent Iron Thin Muck S Gauge or W Other (Expla x Depth (inches x Depth (inches	na (B13) c Plants (B14) ulfide Odor (C izcospheres on Reduced Iron Reduction in 1 surface (C7) ell Data (D9) in in Remarks););	1) Living Root (C4) Filled Soils (6	s (C3) C6)	Secondary Indicate Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Sturted or S X Geomorphic FAC-Neutral	ors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)
HYDROL Wetland Hy Primary India Surfac High W Satura Water X Sedim Drift Do Iron Do Inunda Sparss Field Obser Surface Wa Water Table Saturation F (includes ca	OGY drology Indicators: cators (minimum of one e Water (A1) rater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aerial Im etic Visible	agery (B7) urrface (B8) Yes No Yes No Yes No	Water-Stain Aquatic Fau True Aquati Hydrogen S x Oxidized RR Presence of Recent Iron Thin Muck S Gauge or W Other (Expla x Depth (inches x Depth (inches	na (B13) c Plants (B14) ulfide Odor (C izcospheres on Reduced Iron Reduction in 1 surface (C7) ell Data (D9) in in Remarks););	1) Living Root (C4) Filled Soils (6	s (C3) C6)	Secondary Indicate Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Sturted or S X Geomorphic FAC-Neutral	ors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)
Wetland Hy Primary India Surfac High W Satura Water X Sedim Drift D Iron D Inunda Sparse Guld Obser Surface Wa Water Table Saturation F Includes ca Describe Re	OGY drology Indicators: cators (minimum of one e Water (A1) rater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aerial Im etic Visible	agery (B7) urrface (B8) Yes No Yes No Yes No	Water-Stain Aquatic Fau True Aquati Hydrogen S x Oxidized RR Presence of Recent Iron Thin Muck S Gauge or W Other (Expla x Depth (inches x Depth (inches	na (B13) c Plants (B14) ulfide Odor (C izcospheres on Reduced Iron Reduction in 1 surface (C7) ell Data (D9) in in Remarks););	1) Living Root (C4) Filled Soils (6	s (C3) C6)	Secondary Indicate Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Sturted or S X Geomorphic FAC-Neutral	ors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)
HYDROL Wetland Hy Primary India Surfac High W Satura Water X Sedim Drift D Iron De Inunda Sparse Field Obser Surface Wa Water Table Saturation F (includes ca Describe Re	OGY drology Indicators: cators (minimum of one e Water (A1) rater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aerial Im etic Visible	agery (B7) urrface (B8) Yes No Yes No Yes No	Water-Stain Aquatic Fau True Aquati Hydrogen S x Oxidized RR Presence of Recent Iron Thin Muck S Gauge or W Other (Expla x Depth (inches x Depth (inches	na (B13) c Plants (B14) ulfide Odor (C izcospheres on Reduced Iron Reduction in 1 surface (C7) ell Data (D9) in in Remarks););	1) Living Root (C4) Filled Soils (6	s (C3) C6)	Secondary Indicate Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Sturted or S X Geomorphic FAC-Neutral	ors (minimum of two required) Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)

MASI	v I	5.0	Field	Form	Quant	tative	Rating

Wetland9 W. Bro-100813-01

Site: AFP-E	SHD	Rater(s): BAO, BR	Date: 10/03/13
Van Tiese	Metric 1. Wetland A	rea (size).	
O O		re. 0.2ha) (5 pls) ha) (4 pls) 1(3 pls) 2ha) (2pls)	
, 1 ,	<0.1 acres (0.04ha) (0 pts) Metric 2. Upland bu		ing land use.
rnax 14 pto subfeit	2a Calculate average buffer width: WIDE Buffers average 50 MEDIUM. Buffers average NARROW. Buffers average VERY NARROW. Buffers i VERY LOW. 2nd growth or LOW. Old field (>10 years) MODERATELY HIGH. Res	Select only one and assign score. Em (164ft) or more around wetland pr 25m to <50m (82 to <164ft) around e 10m to <25m (82 to <164ft) around so 10m to <25m (32 ft to <62ft) around yetlar. Solect one or double check and a rolder forest, prairie, savannah, wild, shrub land, young second growth sidential, lenced pasture, park, conserp assure, row cropping, mining, serp assure, mining, serp assure, mining, serp assure.	to not double check. srimeter (7) wetlend perimeter (4) dd wetland perimeter (1) id perimeter (0) vorage. life azea, etc. (7) torest. (5) ervation tillage, new fallow field. (3)
1 7	Metric 3. Hydrology		onstruction (1)
твох 36 рів. — зчибура	High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surfa- Perennial surface water (al 3c. Maximum water depth. Select or >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) <0.4m (<15.7in) (1)	ce water (3) (be or stream) (5) (by one and assign score.	Semi- to permanently inundated/saturated (4) Regularly inundated/saturated (3) Seasonally inundated (2) Seasonally saturated in upper 30cm (12in) (
		Check all disturbances observed ditch file dike weir stormwater input	point source (nonstormwater) filling/grading road bed/RR track dredging other form to the source
75 14.5	Metric 4. Habitat Al	teration and Develo	pment.
Tread 20 pbs. subblee	4a. Substrate disturbance. Score on None or none apparent (4) Recovered (3) Recovering (2) Recovering (2) Recovering (3) Ab. Habitat development. Select only Excellent (7) Vory good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor to fair (2) None or none apparent (9) Recovered (6)	one and assign score. Souble check and average. Chack all disturbances observed	shrub/sapling removal
14.5	Recovering (3) Recent or no recovery (1)	grazing clearcutting selective culting woody debris removal toxic pollutants	harbaceous/aquatic bed removal sedimentation deadring farming nutrient enrichment

Well land 9

ORAM v	5.0 Field Form Quantitative Rating			18,000,000	W- BAD 100813-0
Site:	AEP BHD	Rater	(s): BAE	, BR	Date: 10/03/13
O 10 ps	Lake Erie coastall Lake Plain Sand F	ore as indicated. (10) rettand (5) Intbutary wetland-tributary wetland-	unrestricted hydrestricted hydro		
				angered species (10)	
	Category 1 Wetta	nd. See Question	1 Qualitative F		rotonography
5 froix 20 pts.	14.5 section Control of the Control			Community Cover Scale	orotopography.
	Score all present using 0 to		0		ha (0.2471 acres) contiguous area
	Aquatic bed / Emergent / Shrub		-1	Present and either compri	ses small part of wetland's derate quality, or comprises a
	Forest Mudilats Open water		2	Present and either compris	ses significant part of wetland's derate quality or comprises a small
	6b: horizontal (plan view) In	terspersion.	3.		gnificant part, or more, of wetland's
	Select only one.		100 VIII 100		
	High (5) Moderately high(4		Narrative D	escription of Vegetation Qu	
	Moderate (3)		low	disturbance tolerant nati	redominance of nonnative or
	Moderately low (2) Low (1) None (0) 6c. Coverage of invasive pla to Table 1 ORAM long form	ants. Refer for list. Add	mod	Native spp are dominant of aithough nonnative and/ can also be present, and moderately high, but ger threatened or endangere	omponent of the vegetation, or disturbance tolerant native spp i species diversity moderate to lerally w/o presence of rare id spp
	or deduct points for coverage Extensive >75% co Moderate 25-75% Sparse 5-25% cov	over (-5) cover (-3) er (-1)	high	and/or disturbance tolera absent, and high spp divi	species, with normative spp inf native spp absent or virtually ersity and often, but not always, eatened, or endangered spp
	Nearly absent <5% Absent (1)	cover (0)	46.000000000000000000000000000000000000		
	6d. Microtopography.		Mudflat and	Open Water Class Quality Absent <0.1ha (0.247 acre	
	Score all present using 0 to 3	scale	1	Low 0.1 to <1ha (0.247 to 2	
	Vegetated hummu	cks/tussucks	2	Moderate 1 to <4ha (2.47	
	Coarse woody deb		3	High 4ha (9.88 acres) or m	
	Standing dead >25		4400 77 5 7 6	Parts Labor	
	/ Amphibian breeding	g pools		raphy Cover Scale	
			1	Absent Present very small amount	s or if more common
11			2	Present in moderate amount quality or in small amount	
1			3	Present in moderate or gre and of highest quality	
4.5				T Survey trightest dentity	

End of Quantitative Rating. Complete Categorization Worksheets.

8

Project/Site: AE	P Biers Run-Hopeto	own-Delano		City/County:	Ross Count	tv	Sampling Date: 10/3/2013
Applicant/Owner: AE				. , ,			Sampling Point: wbao-100313
	O, BCR			Sect	ion, Townshi	ip, Range: unknown	
andform (hillslope, terr	ace, etc.):					elief (concave, convex, none)	: Concave
ope (%):	Lat:	39.392	304	Long:		-83.079428	Datum: NAD83 UTM16N
oil Map Unit Name:						NWI clas	sification:
e climatic / hydrologic	conditions on the s	ite typical for this	time of year?	Yes	X No	(If no, explain in Rema	rks.)
		, or Hydrology		_		ormal Circumstances" presen	,
_		, or Hydrology				ded, explain any answers in R	
		_				insects, important feat	
ydrophytic Vegetation		Yes X	No		Sampled Ar		
ydric Soil Present?		Yes X	No	within	a Wetland?	Yes	X No
etland Hydrology Pres	sent?	Yes X	No				
emarks: FO wetland abutting N				osition of silt			
EGETATION U	se scientific na	mes of plants					
ee Stratum (Plot size	: 30' radius	`	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test workshe	ent:
. Platanus occidental		-'	30	Yes	FACW	Dominance rest WORKShe	et.
. Acer negundo			35	Yes	FAC	Number of Dominant Spec	ies
Fraxinus pennsylva	nica		10	No	FACW	That Are OBL, FACW, or F	
Ulmus americana			20	Yes	FACW		
						Total Number of Dominant	
1						Total Number of Dominant	
			95	= Total Cover		Species Across All Strata:	(B)
pling/Shrub Stratum	(Plot size: 15' rad	ius \				Percent of Dominant Speci	96
. Lonicera japonica	(1 101 3126. 13 180	103)	10	Yes	FACU	That Are OBL, FACW, or F	
Fraxinus pennsylva	nica		10	Yes	FACW	, . , . , . , . , . , . , . , .	
. Acer negundo			10	Yes	FAC		
. Ulmus americana			10	Yes	FACW	Prevalence Index worksho	
i						Prevalence Index worksho	et:
3.				= Total Cover		T. 100 0 6	
erb Stratum (Plot size	e: 5' radius	`	40	= Total Cover		Total % Cover of: OBL species 2	x1 = 2
I. Polygonum sp.	. O ladido	-′	5	No	FAC	FACW species 104	
Lobelia siphilitica			2	No	OBL	FAC species 66	x3 = 198
. Toxicodendron radi	cans		10	Yes	FAC	FACU species 12	x4 = 48
. Bidens sp.			2	No	FAC	UPL species	x5 =
. Urtica dioica			10	Yes	FACW	Column Totals: 184	(A) 456 (I
. Verbesina alternifoli				Yes	FACW		
. Dichanthelium cland . Solidago sp.	destinum		2 2	No No	FACW	Prevalence Index :	= B/A = 2.48
. Smilax bona-nox				No	FACU		
					17100	Hydrophytic Vegetation I	ndicators:
						, , , , , , , , , , , , , , , , , , , ,	
!.						1-Rapid Test for H	ydrophytic Vegetation
. <u> </u>						X 2-Dominance Test	
·						X 3-Prevalence Inde	
							daptations ¹ (Provide supporting or on a separate sheet)
							or on a separate sneet) ophytic Vegetation1 (Explain)
3.							
).						¹ Indicators of hydric soil and	d wetland hydrology must
).						be present, unless disturbe	d or problematic.
	·		45	= Total Cover			
	Plot size: 30' rad	line \				Hydrophytic	
Inady Vine Stratus (F		iuo)		No	FAC	Vegetation	
Voody Vine Stratum (F 1. Toxicodendron radio 2. Vitis riparia			2	No	FACW		s X No
				No = Total Cover			s_X_ No

OIL						canca of		
	ription: (Describe to t	he depth need			nfirm the ab	sence or	indicators.)	
Depth	Matrix			dox Features	- 1	. 2		
inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-10"	10YR 5/3	100					Sandy Silt Loam	
					_			
						2		
	oncentration, D=Deplet	ion, RM=Redu	ced Matrix, CS=Covere	d or Coated Sa	and Grains.		on: PL=Pore Lining, N	
ydric Soil I			0			Indica	ators for Problematic	
Histoso				ed Matrix (S4)			Coast Prairie	
	pipedon (A2) listic (A3)		Sandy Redo Stripped Ma				Dark Surface	ese Masses (F12)
_	en Sulfide (A4)			y Mineral (F1)				Dark Surface (TF12)
_ , .	ed Layers (A5)			ed Matrix (F2)			X Other (Explai	
	luck (A10)		x Depleted Ma				Out (Explain	
	ed Below Dark Surface	(A11)		Surface (F6)				
	Oark Surface (A12)	(****)		rk Surface (F7))		3Indicators of hydro	phytic vegetation and
_	Mucky Mineral (S1)		Redox Depre	. ,	,		,	gy must be present,
	lucky Peat or Peat (S3)			,				ed or problematic.
_	ayer (if observed):							,
	ayer (ii observed):							
Type:						District of the		Yes X No
	nches):	that not fully de	eveloped due to freque	nt flooding and	silt deposition		Soil Present?	100 <u>X</u> 110
emarks: oblematic S	Soils are floodplain soils	that not fully d	eveloped due to freque	nt flooding and	silt deposition		Soil Present?	, , , , , , , , , , , , , , , , , , ,
emarks: roblematic S	Soils are floodplain soils	that not fully de	eveloped due to freque	nt flooding and	silt deposition		Soil Present?	
emarks: roblematic S	Soils are floodplain soils OGY drology Indicators:			nt flooding and	silt deposition			
emarks: roblematic S	OGY frology Indicators:		eck all that apply)				Secondary Indicato	rs (minimum of two required)
YDROLO Wetland Hydermary India Surface	OGY drology Indicators: ators (minimum of one		eck all that apply) Water-Stain	ed Leaves (B9)			Secondary Indicato Surface Soil (rs (minimum of two required) Cracks (B6)
YDROLO Wetland Hyd Surface High W	OGY OGY Irrology Indicators: cators (minimum of one Water (A1) later Table (A2)		eck all that apply) Water-Stain Aquatic Faur	ed Leaves (B9) na (B13)			Secondary Indicato Surface Soil (X Drainage Pat	rs (minimum of two required) Tracks (B6) terms (B10)
YDROLO Wetland Hyd Surface High W Saturat	OGY drology Indicators: actors (minimum of one e Water (A1) ater Table (A2) ion (A3)		eck all that apply) Water-Stain Aquatic Fau True Aquatic	ed Leaves (B9) na (B13) c Plants (B14)			Secondary Indicato Surface Soil (x Drainage Pat Dry-Season (rs (minimum of two required) Tracks (B6) Leters (B10) Vater Table (C2)
YDROLO Vetland Hyo Surface High W Saturat Water I	OGY drology Indicators: attors (minimum of one attors (A1) attors (A2) ion (A3) Marks (B1)		eck all that apply) Water-Stain Aquatic Fau True Aquatic Hydrogen St	ed Leaves (B9) na (B13) c Plants (B14) ulfide Odor (C1)	on	Secondary Indicato Surface Soil 6 X Drainage Pat Dry-Season \(\) Crayfish Burn	rs (minimum of two required) Cracks (B6) Items (B10) Water Table (C2) ows (C8)
YDROLO Vetland Hyc Surface High W Saturat Water N X Sedime	OGY frology Indicators: eators (minimum of one Water (A1) (ater Table (A2) ion (A3) Marks (B1) int Deposits (B2)		eck all that apply) Water-Stain Aquatic Fau True Aquatic Hydrogen St Oxidized Rh	ed Leaves (B9) na (B13) : Plants (B14) ulfide Odor (C1 izospheres on I) Living Roots	on	Secondary Indicato Surface Soil (x Drainage Pat Dry-Season V Crayfish Burn Saturation Vis	rs (minimum of two required) Tracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9)
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Wetland 10

shrub/sapiling removal herbacecus/aquatic bed removal sedimentation dredging farming nutrient enrichment.

ORAM v. 5.0 Field	Form Quantilative Rating			M-1840/00218-02
Site: AEP	BHD	Rater(s): Pr	10, BR	Date: 10/03/13
Site: HEP max 6 pts sumion max 14 pts. scotc max 30 pts. scotc	Metric 1. We Select one size class at 50 acres 192 25 to <50 acres 192 25 to <50 acre 10 to <25 acre 0.1 to <20 acre 0.1 to <20 acre 0.2 to <25 acre Metric 2. Up Wide acre Wid	tland Area (size). Id assign score. 10.2ha) (6 pts) 10.5 (10.1 to <20.2ha) (5 pts) 10.5 (10.1 to <20.2ha) (5 pts) 10.5 (10.1 to <20.2ha) (5 pts) 10.6 (10.1 to <20.2ha) (5 pts) 10.7 (10.4 to <10.1 ths) (4 pts) 10.7 (10.4 to <10.1 ths) 10.7 (10.4 ths) 10.7 (10.	sign score. Do not dou ind wetland perimeter (* 156/ff) around wetland o 6 <82ft) around wetland o 6 <82ft) around wetland o 6 <82ft) around wetland perimete 6 check and average avannah, wilder area, accord growth forest. (5) 6, park, conservation to ping, mining, construction 3b. Connect 16 16 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	ind use. The principle of the control of the contr
12 3 rese 20 pis. #ul	None or nor Recovered Recovered Recovered Recovered Recovered Recovered Recovering Recovered Recovering Recove	abtraf hydrolosic regime. Score one ne apparent (12) (3) (5) (6) (7) (7) (8) (8) (9) (9) (9) (9) (9) (10) (10) (10) (10) (10) (10) (10) (10	or double check and as nees observed property of the check and as nees observed property of the check and as need to be check and as or age.	verage; oint source (nonstamwater) liing/grading oad bed/RR track redging ther excessiven sy

Poor to fair (2)
Poor (1)
Ac. Habital alteration. Score one or double check and average.

None or none apparent (9)
Recovered (6)
Recovering (3)
Recovering (3)
Recent or no recovery (1)
Recovering (3)
Recent or no recovery (1)
Recovering (3)
Recent or no recovery (1)

Poor to fair (2)

last revised 1 February 2001 j/m

Wet land D

	5.0 Field F	form Quantifative Rating			W-BAG-100513-0
Site:	ACP	BHD	Rater(s): B	HO, BR	Date: 10/03/13
	34				
	sublicital first p				
		7	Materia		
0	3.4	Metric 5. Special	vvettands.		
max 10 ols.	nubititat	Check all that apply and score as	indicated		
		Bog (10)	marcared		
		Fen (10)			
		Old growth forest (10) Mature forested wetlan	A (E)		
			ary wetland-unrestricted h	vdrology (10)	
		Lake Erle coastal/tribut	ary wetland-restricted hyd	rology (5)	
		Lake Plain Sand Prairie Relict Wet Prairies (10)			
			e/federal threatened or en	dangered species (10)	
		Significant migratory so	ngbird/water fowl habitat i	or usage (10)	
	_	Calegory 1 Wetland, S	ee Question 1 Qualitative	Rating (-10)	
6	201	Metric 6. Plant co	mmunities, in	terspersion, mic	rotopography
0	19			and the second serve	eropography.
мын 20 pu	4mpligne	Ba. Wetland Vegetation Commun	llies. Vegetatio	n Community Cover Scale	
		Score all present using 0 to 3 scal	0	Absent or comprises <0.11	na (0.2471 acres) conliguous area
		Emergent	- 1	Present and either comprise vegetation and is of modern	ses small part of wetland's lerate quality, or comprises a
		Shrub		significant part but is of li	ow quality
		⊋ Forest Mudflats	2	Present and either compris	ses significant part of wetland's
		Open water		part and is of high quality	erate quality or comprises a small
		Other	3		nificant part, or more, of wetland's
		6b. horizontal (plan view) Interspe Select only one.	ersion.	vegetation and is of high	quality
		High (5)	Narrative I	Description of Vegetation Qu	alle.
		Moderately high(4)	low		redominance of nonnative or
		Moderate (3)		disturbance tolerant nativ	e species
		Moderately low (2)	mod	Native spp are dominant co	emponent of the vegetation.
		None (0)		can also be present, and	or disturbance tolerant native spp species diversity moderate to
		5c. Coverage of Invasive plants. I	Refer	moderately high, but gen	erally w/o presence of rare
		to Table 1 ORAM long form for list, or deduct points for coverage		threatened or endangere	d spp
		Extensive >75% cover (-	high high	A predominance of native s	pecies, with nonnative spp nt native spp absent or virtually
		Moderate 25-75% cover	(-3)	absent, and high spp dive	ersity and often, but not always,
		Sparse 5-25% cover (-1)		the presence of rare, three	atened, or endangered spp.
		Nearly absent <5% cove Absent (1)		d Open Water Class Quality	
		6d. Microtopography.	0	Absent <0.1ha (0.247 acre	c)
		Score all present using 0 to 3 scale	1	Low 0.1 to <1ha (0.247 to 2	(47 acres)
		Vegetaled hummucks/tus Coarse woody debris > 13		Moderate 1 to <4ha (2.47 t	o 9.88 acres)
		Standing dead >25cm (1)		High 4ha (9.88 acres) or mo	oca -
		Amphibian breeding pool		raphy Cover Scale	
			.0	Absent	
			- 1	Present very small amounts	or If more common
			2	of marginal quality Present in moderate amount	fe but not of highest
IT 2	2			quality or in small amounts	s of highest quality
			3	Present in moderate or great	
				and of highest quality	



Wetland 11		
Project/Site: AEP Biers Run-Hopetown-Delano		ling Date: 8/27/2013
Applicant/Owner: AEP		ling Point: wbao-082713-05
Investigator(s): BAO, JAC	Section, Township, Range: unknown	
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none): Conca	
Slope (%): Lat: 39.402775		tum: NAD83 UTM16N
Soil Map Unit Name:	NWI classification	
Are climatic / hydrologic conditions on the site typical for this time of y	<u> </u>	, , , , ,
Are Vegetation Y , Soil Y , or Hydrology Y		res X No
Are Vegetation N, Soil N, or Hydrology N		
	sampling point locations, transects, important features, e	ic.
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No	Is the Sampled Area within a Wetland? Yes X	No
Wetland Hydrology Present? Yes X No		140
Remarks:		
PEM in soybean field		
.,		
VEGETATION Use scientific names of plants.		
, and the same of plants.	Absolute Dominant Indicator	
Tree Stratum (Plot size: 30' radius)	% Cover Species? Status Dominance Test worksheet:	
1		
2	Number of Dominant Species	
3.	That Are OBL, FACW, or FAC:	2 (A)
4	——————————————————————————————————————	
5	Total Number of Dominant = Total Cover Species Across All Strata:	2 (B)
	= Total Cover Species Across All Strata:	2 (B)
Sapling/Shrub Stratum (Plot size: 15' radius)	Percent of Dominant Species	
1.	That Are OBL, FACW, or FAC:	100% (A/B)
2.		, ,
3.		
4.	Prevalence Index worksheet:	
5.	Prevalence Index worksheet:	
6.		
_	= Total Cover Total % Cover of:	Multiply by:
Herb Stratum (Plot size: 5' radius)		1 = 85
Alisma subcordatum Eleocharis acicularis		3 = 20
Eleochans aciculans Solidago sp.		45
4. Glycine max		(5 = 25
5. Cyperus esculentus	10 No FACW Column Totals: 115 (A	
6. Carex sp.	5 No FAC	· ——``
7. Polygonum sp.	5 No FAC Prevalence Index = B/A =	1.52
8.		
9.		
10	Hydrophytic Vegetation Indicators	3:
11	 <u></u>	
12	X 1-Rapid Test for Hydrophyt	c Vegetation
13 14	X 2-Dominance Test is >50% X 3-Prevalence Index is ≤3.0	ı
15.	4-Morphological Adaptation	
16.	data in Remarks or on a se	
17.	Problematic Hydrophytic V	
18.		
19.	¹ Indicators of hydric soil and wetland	hydrology must
20.	be present, unless disturbed or prob	
	115 = Total Cover	
Woody Vine Stratum (Plot size: 30' radius)	Hydrophytic	
1	Vegetation	
2	Present? Yes X	No
	= Total Cover	
Domarko: (Include photo numbers here or on a conttt)		
Remarks: (Include photo numbers here or on a separate sheet.)		
US Army Corpo of Engineers	Mi	dweet Region version 2.0

SOIL Sampling Point: wbao-08271:

0-1" 10YR 5/2 80 10YR 5/8 20 RM 1 1-8" 10YR 8/1 80 10YR 5/8 20 RM 1 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2L	Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils 3: Cast Prairie Redox (A16) Iron-Manganese Masses (F12) Dark Surface (S7) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)	
Color (moist)	M Clay Loam M Clay Loam Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils 3: Coast Prairie Redox (A16) Iron-Manganese Masses (F12) Dark Surface (S7) Very Shallow Dark Surface (TF12)	
0-1" 10YR 5/2 80 10YR 5/8 20 RM 1 1-8" 10YR 8/1 80 10YR 5/8 20 RM 1 Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Fype: C=Concentration, D=Depletion, RM=Reduc	M Clay Loam M Clay Loam Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils 3: Coast Prairie Redox (A16) Iron-Manganese Masses (F12) Dark Surface (S7) Very Shallow Dark Surface (TF12)	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Purple CSoll Indicators: Histosol (A1) Sandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Histic (A3) Stripped Matrix (S4) Stripfed Matrix (S6) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Stratified Layers (A5) Loamy Gleyed Matrix (F2) 2 cm Muck (A10) x Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8)	M Clay Loam Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils 3: Coast Prairie Redox (A16) Iron-Manganese Masses (F12) Dark Surface (S7) Very Shallow Dark Surface (TF12)	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 dydric Soil Indicators: Histosol (A1) Sandy Gleyed Matrix (S4) Histo Epipedon (A2) Sandy Redox (S5) Black Histic (A3) Stripped Matrix (S6) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Stratified Layers (A5) Loamy Gleyed Matrix (F2) 2 cm Muck (A10) x Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Redox Dark Surface (F8)	Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : Coast Prairie Redox (A16) Iron-Manganese Masses (F12) Dark Surface (S7) Very Shallow Dark Surface (TF12)	
Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4)	Indicators for Problematic Hydric Soils 3:	
Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4)	Indicators for Problematic Hydric Soils 3:	
Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4)	Indicators for Problematic Hydric Soils 3:	
Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4)	Indicators for Problematic Hydric Soils 3:	
Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4)	Indicators for Problematic Hydric Soils 3:	
Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4)	Indicators for Problematic Hydric Soils 3:	
Histosol (A1)	Coast Prairie Redox (A16) Iron-Manganese Masses (F12) Dark Surface (S7) Very Shallow Dark Surface (TF12)	
Histic Epipedon (A2)	Iron-Manganese Masses (F12) Dark Surface (S7) Very Shallow Dark Surface (TF12)	
Black Histic (A3) Stripped Matrix (S6) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Stratified Layers (A5) Loamy Gleyed Matrix (F2) 2 cm Muck (A10) x Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8)	Dark Surface (S7) Very Shallow Dark Surface (TF12)	
Hydrogen Sulfide (A4)	Very Shallow Dark Surface (TF12)	
Stratified Layers (A5) Loamy Gleyed Matrix (F2) 2 cm Muck (A10) x Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8)		
2 cm Muck (A10) x Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8)	Other (Explain in Remarks)	
Depleted Below Dark Surface (A11)		
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Redox Depressions (F8)		
Sandy Mucky Mineral (S1) Redox Depressions (F8)	3 Indicators of hydronhytic vegetation	
	³ Indicators of hydrophytic vegetation and wetland hydrology must be present,	
	unless disturbed or problematic.	
	unless disturbed of problematic.	
estrictive Layer (if observed):		
Type: Depth (inches): Hy	ydric Soil Present? Yes X No	
YDROLOGY etland Hydrology Indicators:		_
rimary Indicators (minimum of one is required: check all that apply)	Secondary Indicators (minimum of two require	(he
x Surface Water (A1) Water-Stained Leaves (B9)	Surface Soil Cracks (B6)	<i>,</i> u,
High Water Table (A2) x Aquatic Fauna (B13)	x Drainage Patterns (B10)	
Saturation (A3) True Aquatic Plants (B14)	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 	9)
Drift Deposits (B3) Presence of Reduced Iron (C4)	x Stunted or Stressed Plants (D1)	
x Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)	
Iron Deposits (B5) Thin Muck Surface (C7)	x FAC-Neutral Test (D5)	
Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9)		
Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks)		
eld Observations:		
urface Water Present? Yes x No Depth (inches): 1.5"		
/ater Table Present? Yes No x Depth (inches):		
	drology Present? Yes X No	
ncludes capillary fringe)		
escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available	e:	
remarks:		
uatic fauna: Frog species		

Wetland!

ORAM v. 5.0 Field Form Quantitative Rating

Metric 1. Wetland Area (size), Metric 2. Wetland Area (size),	1775
Selections size class and assign score. >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2ha) (5 pts) 10 to <25 acres (10.1 to <20.2ha) (5 pts) 10 to <25 acres (10.1 to <2.2ha) (6 pts) 3 to <10 acres (10.2 to <1.2ha) (4 pts) 3 to <10 acres (10.2 to <1.2ha) (2 pts) 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt) <0.1 acres (0.04ha) (0 pts) Metric 2. Upland buffers and surrounding land use. WIDE, Buffers average 50m (164ft) or more around welland perimeter (7) MEDIUM. Buffers average 50m (164ft) or more around welland perimeter (4) NARROW, Buffers average 50m (164ft) or more around welland perimeter (7) VERY NARROW. Buffers average (10m to <25m (32ft to <42th) around welland perimeter (1) VERY LOW. 2nd growth or older forest, praifie, savannah, wildlife areas, etc. (7) 1. LOW. Old field (>10 years), shrub land, young second growth forest. (5) MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3) HIGH. Urban, midstrial, open pasture, row cropping, mining, construction. (1) Metric 3. Hydrology. 3a. Sources of Water. Score all that apply. Differ groundwater (3) Precipitation (1) Seasonal/International surface water (3) Precipitation (1) Seasonal/International surface water (3) Precipitation (1) Seasonal/International surface water (3) Powner water (3) Recovering (3)	
Metric 2. Upland buffers and surrounding land use. Metric 2. Upland buffers and surrounding land use.	
WIDE. Buffers average 50m (164th) or more around wetland perimeter (1) MEDIUM. Buffers average 50m (162th) or incre around wetland perimeter (4) NARROW. Buffers average 10m to <25m (32th to <45th) around wetland perimeter (1) VERY NARROW. Buffers average 10m to <25m (32th to <45th) around wetland perimeter (1) VERY LONG W. Buffers average 10m to <25m (32th) around wetland perimeter (1) VERY LONG W. Buffers average 10m to <25m (32th) around wetland perimeter (1) VERY LONG W. Buffers average 10m to <25m (32th) around wetland perimeter (1) VERY LONG V. Det fineld (1) VERY LONG W. Buffers average 10m to <25m (32th) around wetland perimeter (1) VERY LONG V. Det fineld (1	
Metric 3. Hydrology. Metric 3. Hydrology. Metric 3. Hydrology.	
High pH groundwater (5) Other groundwater (5) Precipitation stream/take and other hu Part of veetland/upland (e.g. forest) Part of veetland/upland	
None or none apparent (12) Recovered (7) Recovered (7) Recovering (3) Recent or no recovery (1) Recent or no recovery (1) Recovering (3) Recent or no recovery (1)	(1) complex (1) one or dol on saturated (4)
Metric 4. Habitat Alteration and Development.	
Ag. Substrate disturbance. Score one or double check and siverage. None or none apparent (4) Recovering (2) Recovering (2) Recovering (3) Recovering (4) Recovering (5) Recovering (5) Recovering (5) Recovering (6) Recovering (7) Re	
Loxic pollutants untrient enrichment	

Wetland 11

RAM v. 5.0 Field Fo	rm Quantitative Rating		Wage !
the same of the sa	otome - Octoro	Rater(s): WO, TH	Date: 1/1-1/1
subtotel frat pa	Lake Erie coesta/tributa Lake Plain Sand Prairie Relict Wet Prairies (10)	indicated. d (5) any wetland-unrestricted hydrology yetland-restricted hydrology (Oak Openings) (10)	gy (5)
	Significant migratory so Category 1 Welland, S	e/federal threatened or endan ingbird/water fowl habitat or use see Question 1 Qualitative Rat	sage (10)
3 2			ommunity Cover Scale
mex 20 pla: substitut	6a. Wetland Vegetation Commun Score all present using 0 to 3 scs		Absent or comprises <0.1ha (0.2471 acres) contiguous area
	Aquatic bed	1	Present and either comprises small part of wetland's
	Emergent		vegetation and is of moderate quality, or comprises a
	Shrub		significant part but is of low quality
	Forest	2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small
	Mudflats.		part and is of high quality
	Open water	3	Present and comprises significant part, or more, of watland
	Other		vegetation and is of high quality
	6b. hadzontal (plan view) Intersp	persion.	Vogetalion and a regulation
	Select only one. High (5)	Narrative De	scription of Vegetation Quality
	Moderately high(4)	low	Low spp diversity and/or predominance of nonnative or
	(\ Moderate (3)		disturbance tolerant native species
	Moderately low (2) Low (1) None (0) 6c. Coverage of invasive plants to Table 1 ORAM long form for its	mad Refer ist. Add	Native spp are dominant component of the vegetation, although nonnative and/or desurbance tolerant native spi can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
	or deduct points for coverage Extensive >75% cove Moderate 25-75% cove Sparse 5-26% pover (high r (-5) ver (-3)	A predominance of native species, with nonnetive 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
	Nearly absent <5% co	over (0)	De Control de La
	Absent (1)	Mudflat and	Open Water Class Quality
	6d. Microtopography.	0	Absent <0.1ha (0.247 acres)
	Score all present using 0 to 3 so	pole 1	Low 0.1 to <1ha (0.247 to 2.47 acres) Moderate 1 to <4ha (2.47 to 9.88 acres)
	Vegetated hummucks	Mussucks 2	High 4ha (9.88 acres) or more
	© Coarse woody debris	>15cm (6ln) 3	Tuffit and force deseal of turne
	6 Standing dead >25cm		raphy Cover Scale
	Amphibian breading (pools Microtopog	Absent
		- 0	Present very small amounts or if more common
			of marginal quality
		- 2	Present in moderate amounts, but not of highest
- 1 L V			quality or in small amounts of highest quality
at-egory 1		3	Present in moderate or greater amounts
- 1 m		.5	and of highest quality
-			and of highest desired

End of Quantitative Rating. Complete Categorization Worksheets.

8

	Long:	Local es X No Are "N (If nee cocations, trathe Sampled Ar thin a Wetland? Int Indicator ? Status	ip, Range: unknown relief (concave, convex, none): Concave -83.059585
nvestigator(s): BAO, JACandform (fillslope, terrace, etc.): Slope (%): Lat: 39.409781 Slope (%): Lat: 39.409781 Vere Vegetation Y., Soil Y., or Hydrology Y., signific vere Vegetation N., Soil Y., or Hydrology Y., signific vere Vegetation N., Soil N., or Hydrology Y., signific vere Vegetation N., Soil N., or Hydrology N., vere Vegetation Present? Yes X., No., vere Vegetation Present? Yes X., No., vere	Long: Y cantly disturbed? Illy problematic? mpling point I s wi poring. Seep wetla solute Cover Domina Specier	Local es X No Are "N (If nee cocations, trathe Sampled Ar thin a Wetland? Int Indicator ? Status	p, Range: unknown Concave -83 059585
.andform (hillslope, terrace, etc.):	Long: Y cantly disturbed? Illy problematic? mpling point I s wi poring. Seep wetla solute Cover Domina Specier	Local es X No Are "N (If nee cocations, trathe Sampled Ar thin a Wetland? Int Indicator ? Status	No Concave Concave
Siol Map Unit Name:	y Y Y Cantly disturbed? Illy problematic? In pling point I Is will will be w	es X No Are 'N (If nee cocations, tra the Sampled Ar thin a Wetland? and nt Indicator ? Status	
Soil Map Unit Name:	y Y Y Cantly disturbed? Illy problematic? In pling point I Is will will be w	es X No Are "N (If nee cocations, tra the Sampled Ar thin a Wetland? and nt Indicator ? Status	NWI classification: (If no, explain in Remarks.) ormal Circumstances* present? Yes X No ded, explain any answers in Remarks.) nsects, important features, etc. as Yes X No Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A) Total Number of Dominant Species Across All Strata: 3 (B)
Abstrace climatic / hydrologic conditions on the site typical for this time of year? Were Vegetation Y., Soil Y., or Hydrology Y., signific twee Vegetation N., Soil N., or Hydrology Y., signific twee Vegetation Present? SUMMARY OF FINDINGS — Attach site map showing sar hydrophytic Vegetation Present? Yes X. No Welland Hydrology Present? WEGETATION — Use scientific names of plants. Abstrace Stratum (Plot size: 30' radius) 9, 6 1. 2. 3. 4. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	cantly disturbed? Illy problematic? mpling point I Is wi poing. Seep wetla solute Domina Specier	Are "N (If nee ocations, tra the Sampled Arthin a Wetland? and Int Indicator ? Status	(If no, explain in Remarks.)
ve Vegetation Y Soil Y or Hydrology Y signific ve Vegetation Y Soil N or Hydrology N natura SUMMARY OF FINDINGS — Attach site map showing sar hydrophytic Vegetation Present? Yes X No Wetland Hydrology Present?	cantly disturbed? Illy problematic? mpling point I Is wi poing. Seep wetla solute Domina Specier	Are "N (If nee ocations, tra the Sampled Arthin a Wetland? and Int Indicator ? Status	Dominance Test worksheet:
ve Vegetation N., Soil N., or Hydrology N. natura SUMMARY OF FINDINGS Attach site map showing sar dydrophytic Vegetation Present? Yes X. No Vetland Hydrology Present? Yes X. No Vetland Hydrolog	Illy problematic? mpling point I Is wi bring. Seep wetla solute Cover Domina Specier	(If nee	Dominance Test worksheet:
SUMMARY OF FINDINGS Attach site map showing sar	Is will bring. Seep wetla solute Domina Species	ocations, tra the Sampled Ar thin a Wetland? and Indicator Status	Dominance Test worksheet:
Hydrophytic Vegetation Present? Yes X No Yes X Yes X No Yes X No Yes X Yes X No Yes X Yes X No Yes X Y	Is will bring. Seep wetla solute Domina Species	the Sampled Arthin a Wetland? Ind Indicator Status	Ves _ X _ No
Ves X No No No No No No No	wing. Seep wetla	nt Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A: Total Number of Dominant Species Across All Strata: 3 (B:
Wetland Hydrology Present? Yes X No Permarks: Small PEM wetland location between ag fields that gets hydrology from a sp VEGETATION Use scientific names of plants. Abs 1: 2: 3. 4. 5: Sapling/Shrub Stratum (Plot size: 15' radius) 1: 2:	solute Domina Cover Species	nt Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A: Total Number of Dominant Species Across All Strata: 3 (B:
Remarks: Small PEM wetland location between ag fields that gets hydrology from a sp VEGETATION Use scientific names of plants. Abs Free Stratum (Plot size: 30' radius) % (1. 2. 3. 4. 5. Sapling/Shrub Stratum (Plot size: 15' radius) 1. 2.	solute Domina Cover Species	nt Indicator ? Status	Number of Dominant Species 3 (A) Total Number of Dominant 3 (B)
VEGETATION Use scientific names of plants. VEGETATION Use scientific names of plants. Abstrace Stratum (Plot size: 30' radius)	solute Domina Cover Species	nt Indicator ? Status	Number of Dominant Species 3 (A) Total Number of Dominant 3 (B)
VEGETATION Use scientific names of plants. Abtered Stratum (Plot size: 30' radius) 9; 0 1. 2. 3. 4. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	solute Domina Cover Species	nt Indicator ? Status	Number of Dominant Species 3 (A) Total Number of Dominant 3 (B)
Abs Free Stratum (Plot size: 30' radius)	Cover Species	? Status	Number of Dominant Species 3 (A) Total Number of Dominant 3 (B)
Abs Free Stratum (Plot size: 30' radius)	Cover Species	? Status	Number of Dominant Species 3 (A) Total Number of Dominant 3 (B)
Abs Free Stratum (Plot size: 30' radius)	Cover Species	? Status	Number of Dominant Species 3 (A) Total Number of Dominant 3 (B)
Tree Stratum (Plot size: 30' radius)	Cover Species	? Status	Number of Dominant Species 3 (A) Total Number of Dominant 3 (B)
1. 2. 3. 4. 5			Number of Dominant Species 3 (A) Total Number of Dominant 3 (B)
2. 3. 4. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	= Total Co	ver	That Are OBL, FACW, or FAC: 3 (A) Total Number of Dominant Species Across All Strata: 3 (B)
4. 5. Sapling/Shrub Stratum (Plot size: 15' radius) 1. 2.	= Total Co	ver	That Are OBL, FACW, or FAC: 3 (A) Total Number of Dominant Species Across All Strata: 3 (B)
1	= Total Co	ver	Total Number of Dominant Species Across All Strata: 3 (B)
1. 2.	= Total Co	ver	Species Across All Strata: 3 (B)
1. 2.	= Total Co	ver	
1. 2.			Percent of Dominant Species
1. 2.			Percent of Dominant Species
2.			
			That Are OBL, FACW, or FAC: 100% (A
3.			
4.			Prevalence Index worksheet:
5.			Prevalence Index worksheet:
6.			
	= Total Co	ver	Total % Cover of: Multiply by:
Herb Stratum (Plot size: 5' radius)			OBL species 114 x1 = 114
	20 No	OBL	FACW species x2 =
	5 No	FAC	FAC species 5 x3 = 15
	2 No 2 No	OBL OBL	FACU species 5 x4 = 20 UPL species x5 =
	2 No 35 Yes	OBL	UPL species x5 = Column Totals: 124 (A) 149
	5 No	FACU	Column Totals. 124 (A) 149
	30 Yes	OBL	Prevalence Index = B/A = 1.20
	25 Yes	OBL	
9.			
0.			Hydrophytic Vegetation Indicators:
1.			
2.			X 1-Rapid Test for Hydrophytic Vegetation
3.			X 2-Dominance Test is >50%
4			X 3-Prevalence Index is ≤3.01
5			4-Morphological Adaptations ¹ (Provide supporting
6			data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
7			- Tobiematic riyurophiytic vegetation (Explain)
9.			¹ Indicators of hydric soil and wetland hydrology must
0.			be present, unless disturbed or problematic.
	124 = Total Co	ver	
Voody Vine Stratum (Plot size: 30' radius)			Hydrophytic
1			Vegetation
2.			Present? Yes X No No
	= Total Co	ver	
Remarks: (Include photo numbers here or on a separate sheet.)			

SOIL Sampling Point: wbao-08271:

nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-8"	10YR 3/1	98	10YR 5/8	2	RM	M	Silty Clay	
0-0	10111 0/1		10111 3/0		TAW	141	Oilty Ciay	
,,		etion, RM=Reduc	ed Matrix, CS=Covere	ed or Coated S	and Grains.		ion: PL=Pore Lining, I	
dric Soil Ind						Indic	ators for Problemati	•
Histosol (,		· ·	ed Matrix (S4)			Coast Prairie	. ,
	pedon (A2)		Sandy Redo	. ,				ese Masses (F12)
Black His			Stripped Ma				Dark Surface	
	Sulfide (A4)			ky Mineral (F1				Dark Surface (TF12)
	Layers (A5)			ed Matrix (F2)			Other (Explai	n in Remarks)
2 cm Muc		(011)	x Depleted Ma					
	Below Dark Surface k Surface (A12)	(ATT)		Surface (F6) ark Surface (F1	7)		3Indicators of built-	phytic vegetation and
	k Surface (A12) icky Mineral (S1)			ark Surface (F. ressions (F8)	')			pnytic vegetation and gy must be present,
	ky Peat or Peat (S3	`	Redux Depi	103310115 (1-0)				ed or problematic.
		,					unicas uistuibi	oa o, probiomado.
	ver (if observed):							
Type: Depth (inc							Soil Present?	Yes X No
	ov.							
YDROLO								
YDROLO	logy Indicators:	e is required: che	rck all that apply)				Secondary Indicato	rs (minimum of two required)
YDROLO detland Hydro	logy Indicators: ors (minimum of one	e is required: che		ned Leaves (BS	3)		Secondary Indicato (mini Surface Soil	rs (minimum of two required) Tracks (B6)
YDROLO retland Hydro rimary Indicat x Surface V	logy Indicators: ors (minimum of one	e is required: che			3)			Cracks (B6)
YDROLO etland Hydro rimary Indicat X Surface V X High Wate	ors (minimum of one vater (A1) er Table (A2)	e is required: che	Water-Stain Aquatic Fau				(mini Surface Soil x Drainage Pat	Cracks (B6)
YDROLO letland Hydro rimary Indicat x Surface V x High Wate	ology Indicators: ors (minimum of one /ater (A1) er Table (A2) n (A3)	e is required: che	Water-Stain Aquatic Fau True Aquati	ına (B13)			(mini Surface Soil x Drainage Pat	Cracks (B6) terns (B10) Vater Table (C2)
YDROLO Vetland Hydro rimary Indicat x Surface V High Wate X Saturation Water Ma	ology Indicators: ors (minimum of one /ater (A1) er Table (A2) n (A3)	e is required: che	Water-Stain Aquatic Fau True Aquati x Hydrogen S	ina (B13) ic Plants (B14)	1)	s (C3)	(mini Surface Soil of x Drainage Pat Dry-Season V Crayfish Burn	Cracks (B6) terns (B10) Vater Table (C2)
YDROLO Vetland Hydro Verimary Indicat X Surface V X High Wate X Saturation Water Ma	ors (minimum of one later (A1) er Table (A2) n (A3) rks (B1) Deposits (B2)	e is required: che	Water-Stain Aquatic Fau True Aquati x Hydrogen S Oxidized Rh	ina (B13) ic Plants (B14) sulfide Odor (C	1) Living Roots	s (C3)	(mini Surface Soil of X Drainage Pat Dry-Season N Crayfish Burr Saturation Vi	Cracks (B6) terns (B10) Vater Table (C2) ows (C8)
YDROLO Vetland Hydro Primary Indicat x Surface V X High Wat x Saturation Water Ma Sediment Drift Depo	ors (minimum of one later (A1) er Table (A2) n (A3) rks (B1) Deposits (B2)	e is required: che	Water-Stain Aquatic Fau True Aquati x Hydrogen S Oxidized Rh Presence of	una (B13) ic Plants (B14) Sulfide Odor (C nizospheres on	1) Living Roots (C4)		(mini Surface Soil of X Drainage Pat Dry-Season N Crayfish Burr Saturation Vi	Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1)
Vetland Hydro Vetland Hydro Vetland Hydro X Surface V X High Wat X Saturation Water Ma Sediment Drift Depo	logy Indicators: ors (minimum of one /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4)	e is required: che	Water-Stain Aquatic Fau True Aquati x Hydrogen S Oxidized Rh Presence of Recent Iron	una (B13) ic Plants (B14) Sulfide Odor (C nizospheres on f Reduced Iron	1) Living Roots (C4)		(mini Surface Soil x Drainage Pat Dry-Season \ Crayfish Burr Saturation Vi	Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2)
YDROLOG Vetland Hydro Primary Indicat X Surface V X High Wat X Saturatior Water Ma Sediment Drift Depo X Algal Mat Iron Depo	logy Indicators: ors (minimum of one /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4)		Water-Stain Aquatic Fau True Aquati x Hydrogen S Oxidized Rt Presence of Recent Iron Thin Muck S	una (B13) ic Plants (B14) sulfide Odor (C nizospheres on f Reduced Iron Reduction in 1	1) Living Roots (C4)		(mini Surface Soil x Drainage Pat Dry-Season \ Crayfish Burr Saturation Vi Stunted or St x Geomorphic	Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2)
YDROLO Vetland Hydro rrimary Indicat x Surface V High Wata X Saturation Water Ma Sediment Drift Depc Algal Mat Iron Depc Inundation	logy Indicators: ors (minimum of one /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5)	nagery (B7)	Water-Stain Aquatic Fau True Aquatit X Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W	una (B13) ic Plants (B14) sulfide Odor (C nizospheres on f Reduced Iron Reduction in 7 Surface (C7)	1) Living Roots (C4) Filled Soils (C		(mini Surface Soil x Drainage Pat Dry-Season \ Crayfish Burr Saturation Vi Stunted or St x Geomorphic	Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2)
YDROLO detland Hydro frimary Indicat x Surface V High Wata Saduration Water Ma Sediment Drift Depc Algal Mat Inundation Sparsely	logy Indicators: ors (minimum of on vater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) i Visible on Aerial Ir vegetated Concave	nagery (B7)	Water-Stain Aquatic Fau True Aquatit X Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W	una (B13) ic Plants (B14) culfide Odor (C nizospheres on f Reduced Iron Reduction in Surface (C7) /ell Data (D9)	1) Living Roots (C4) Filled Soils (C		(mini Surface Soil x Drainage Pat Dry-Season \ Crayfish Burr Saturation Vi Stunted or St x Geomorphic	Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2)
x Surface V x High Wate x Saturation Water Ma Sediment Drift Depo x Algal Mat Iron Depo Inundation	logy Indicators: ors (minimum of one /date (A1) ar Table (A2) a (A3) briks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) I Visible on Aerial Ir //egetated Concave	nagery (B7)	Water-Stain Aquatic Fau True Aquatit X Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W	una (B13) ic Plants (B14) ic Plants (B14) sulfide Odor (C nizospheres on f Reduced Iron Reduction in Surface (C7) /ell Data (D9) ain in Remarks	1) Living Roots (C4) Filled Soils (C		(mini Surface Soil x Drainage Pat Dry-Season \ Crayfish Burr Saturation Vi Stunted or St x Geomorphic	Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2)
YDROLO Vetland Hydro Vetland Hydro Surface V High Wata Saturation Water Mas Sediment Drift Depc Inundation Sparsely Sparsely United Observate Four face V Veter Mas Veter Ma	logy Indicators: ors (minimum of on- later (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Ir /egetated Concave lons: Present?	nagery (B7) Surface (B8)	Water-Stain Aquatic Fau True Aquati X Hydrogen S Oxidized Ri Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	una (B13) ic Plants (B14) ic Plants (B14) sulfide Odor (C nizospheres on f Reduced Iron Reduction in T Surface (C7) /ell Data (D9) ain in Remarks	1) Living Roots (C4) Filled Soils (C		(mini Surface Soil x Drainage Pat Dry-Season \ Crayfish Burr Saturation Vi Stunted or St x Geomorphic	Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2)
YDROLO Vetland Hydro virinary Indicat x Surface V x High Wat x Saturatior Water Ma Sediment Drift Depc Inundation Sparsely ield Observat viridace Water Vater Table Pr	logy Indicators: ors (minimum of on/ vater (A1) or Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B3) or Visible on Aerial Ir vegetated Concave ions: Present?	nagery (B7) Surface (B8) Yes x No	Water-Stain Aquatic Fau True Aquati X Hydrogen S Oxidized RF Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	una (B13) ic Plants (B14) sulfide Odor (C nizospheres on f Reduction in n Surface (C7) /ell Data (D9) ain in Remarks s): 1" s): 5"	1) Living Roots (C4) Filled Soils (C	C6)	(mini Surface Soil x Drainage Pat Dry-Season \ Crayfish Burr Saturation Vi Stunted or St x Geomorphic	Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2)
YDROLO Vetland Hydro Vetland Hydro Vetland Hydro X Surface V X High Wat X Saturation Water Ma Sediment Iron Depo Inundation Sparsely Vetled Observat Vater Table Priaturation Pres Vater Table Priaturation	logy Indicators: ors (minimum of one /dater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) I Visible on Aerial Ir //egetated Concave lons: Present? esent?	magery (B7) Surface (B8) Yes x No Yes x No	Water-Stain Aquatic Fau True Aquati X Hydrogen S Oxidized Rr Presence of Recent Iron Thin Muck S Gauge or W Other (Expli	una (B13) ic Plants (B14) sulfide Odor (C nizospheres on f Reduction in n Surface (C7) /ell Data (D9) ain in Remarks s): 1" s): 5"	1) Living Roots (C4) Filled Soils (C	C6)	(mini Surface Soil (mini Surface Surfac	Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
YDROLO Vetland Hydro Vetland Hydro X Surface V X High Wata X Saturation Water Ma Sediment Drift Depc Inundation Sparsely Sparsely Full Observation Full Company Full Compa	logy Indicators: ors (minimum of on/ yater (A1) or Table (A2) r (A3) Trks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B3) in Visible on Aerial Ir Vegetated Concave lons: Present? esent? early any fringe)	nagery (B7) Surface (B8) Yes x No Yes x No Yes x No	Water-Stain Aquatic Fau True Aquati X Hydrogen S Oxidized Rr Presence of Recent Iron Thin Muck S Gauge or W Other (Expli	una (B13) ic Plants (B14) iuffide Odor (C iuffide Odor (C iuffice Odor (C iuff	1) Living Roots (C4) Filled Soils (C	Hydrolo	(mini Surface Soil (mini Surface Surfac	Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
IYDROLO Wetland Hydro Primary Indicator X Surface V X High Wat X Saturation Water Ma Sediment Drift Depc Inundation Sparsely Sparsely Surface Water Table Pt Saturation Pres Includes capille	logy Indicators: ors (minimum of on/ yater (A1) or Table (A2) r (A3) Trks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B3) in Visible on Aerial Ir Vegetated Concave lons: Present? esent? early any fringe)	nagery (B7) Surface (B8) Yes x No Yes x No Yes x No	Water-Stain Aquatic Fau True Aquati X Hydrogen S Oxidized RF Presence of Recent Iron Thin Muck \$ Gauge or W Other (Expla	una (B13) ic Plants (B14) iuffide Odor (C iuffide Odor (C iuffice Odor (C iuff	1) Living Roots (C4) Filled Soils (C	Hydrolo	(mini Surface Soil (mini Surface Surfac	Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
YDROLO Vetland Hydro Vetland Hydro X Surface V X High Wata X Saturation Water Mas Sediment Drift Depc X Algal Mat Iron Depc Inundation Sparsely Vetler Table Pratierate Water Vater Table Pratierate Water Sparsely Vetler Table Pratierate Water Vater Table Prati	logy Indicators: ors (minimum of on/ yater (A1) or Table (A2) r (A3) Trks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B3) in Visible on Aerial Ir Vegetated Concave lons: Present? esent? early any fringe)	nagery (B7) Surface (B8) Yes x No Yes x No Yes x No	Water-Stain Aquatic Fau True Aquati X Hydrogen S Oxidized RF Presence of Recent Iron Thin Muck \$ Gauge or W Other (Expla	una (B13) ic Plants (B14) iuffide Odor (C iuffide Odor (C iuffice Odor (C iuff	1) Living Roots (C4) Filled Soils (C	Hydrolo	(mini Surface Soil (mini Surface Surfac	Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
YDROLO Vetland Hydro Vetland Hydro X Surface V X High Wat X Saturation Drift Depc Inundation Sparsely Vetled Describe Reco	logy Indicators: ors (minimum of on/ yater (A1) or Table (A2) r (A3) Trks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B3) in Visible on Aerial Ir Vegetated Concave lons: Present? esent? early any fringe)	magery (B7) Surface (B8) Yes x No Yes x No Yes x No Jes y No Jes	Water-Stain Aquatic Fau True Aquati X Hydrogen S Oxidized RF Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	una (B13) ic Plants (B14) iuffide Odor (C iuffide Odor (C iuffice Odor (C iuff	1) Living Roots (C4) Filled Soils (C	Hydrolo	(mini Surface Soil (mini Surface Surfac	Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
YDROLO Vetland Hydro Vetland Hydro X Surface V X High Wat X Saturation Drift Depc Inundation Sparsely Vetled Describe Reco	logy Indicators: ors (minimum of on/ dater (A1) er Table (A2) (A3) rrks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B3) or Visible on Aerial Ir vegetated Concave ions: Present? esent? earty ary fringe)	magery (B7) Surface (B8) Yes x No Yes x No Yes x No Jes y No Jes	Water-Stain Aquatic Fau True Aquati X Hydrogen S Oxidized RF Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	una (B13) ic Plants (B14) iuffide Odor (C iuffide Odor (C iuffice Odor (C iuff	1) Living Roots (C4) Filled Soils (C	Hydrolo	(mini Surface Soil (mini Surface Surfac	Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)

Wetland 2 Ubio 22715"

Site: AFF Noge 40 Ja De 100	Rater(s): (M	TAC	Date: 1/27/13
2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	A CONTRACT	7	
Metric 1. Wetla	and Area (size).		
max 6 pts season Select one size class and a	ssign score		
>50 acres (>20.2 25 to <50 acres (10.1 to <20.2ha) (5 pts)		
3 to <10 acres (1	4 to <10.1ha) (4 pts) ,2 to <4ha) (3 pts)		
0.3 to <3 acres (0.1 to <0.3 acr	0.12 to <1.2ha) (2pts) (0.04 to <0.12ha) (1 pt)		
<0.1 acres (0.04)	na) (0 pts)	alina lan	d ueo
Metric 2. Upla	nd buffers and s	urrounding land	ı use.
max14 ch. subtent 2a. Calculate average buff	er width. Select only one and	assign score. Do not double	check.
A APPROVED TO A STREET	verage 50m (164ft) or more ar rs average 25m to <50m (82 to	< 184ff) sround watland beni	neter (4)
	ers average 10m to <25m (32 V. Buffers average <10m (<32		0)
	g land use. Select one or dot d growth or older forest, prairie		. (7)
LOW: Old field	(>10 years), shrub land, young	second growin torest. (b)	e, new fallow field. (3)
HIGH. Urban, in	idustrial, open pasture, row cre	opping, mining, construction, ((1)
Metric 3. Hyd	rology.		
vnas 30 pta. subtotal 3a Sources of Water. So	ore all that apply.	3b. Connectivity	y. Score all that apply. ear floodplain (1)
High pH ground	water (5)	Bestwe	een stream/lake and other human use (1)
Precipitation (1)		Part	of wetland/upland (e.g. forest), complex (1) of riparian or upland corridor (1)
Parannial surface	ce water (lake or stream) (5) . Select only one and assign	soom Semi	indation/saturation. Score one or dbl chec - to permanently mundated/saturated (4)
>0.7 (27.6in) (3))	Sees	larly inundated/saturated (3) onally inundated (2)
	7 to 27.6(n) (2)) (1)	Seas	onally saturated in upper 30cm (12in) (1)
3e. Modifications to natur None or none a	(12) hydrologic regime. Score o	bances observed	the sale of the sa
5 Recovered (7) Recovering (3)	ditch	point	source (nonstormwater) /grading
Recent or no re	The second second second	road	bed/RR track
	stormwate		
Metric 4. Hat	itat Alteration a	nd Developmen	t.
14 2 171-71	e. Score one or double check		
None or none a	apparent (4)	and arrange	
Recovered (3) Recovering (2)			
Recent or no no	scovery (1) L. Select only one and assign:	score.	
Excellent (7) Very good (6)			
Good (5) Moderately go	nd (4)		
Fair (3)			
(2)	Score one or double check and	overage	
4c. Habitat alteration.		chances observed	Account Concept
Recovered (6)	mowling	shir	ub/sapling removal baccous/aquatic bed removal
Recent or no		mry.	dimentation dging
745	woody d	ebris removal / fam	ming. Inent enrichment

Wetland 12

RAM v. 5,0 Fleld Form Quantite	tive Rating		V605.83/6-1
): (SAD, T	At Date: \$/17/15/3
max 10 pts. subtotal Check all t	c 5. Special Wetland that apply and score as indicated. Bog (10) Fon (10) Old growth forest (10)	s.	
	Mature forested welfand (5) Lake Erie coestal/Inibutary welland-un Lake Erie coestal/Inibutary welland-un Lake Plain Sand Prairies (Oak Openir Reilia Wel Frairies (10) Known occulmence state/federal tirea Significant migratory songbird/wafer in Category 1 Wetland. See Question 1 C 6. Plant communit	stricted hydrologs) (10) tened or endar owl habitat or o Qualitative Ra	ggy (5) Ingered species (10) Issaes (10)
way 20 ms subjets 6n Wetla	and Vegetation Communities.	Vegetation (Community Cover Scale
may 20 pts. subjets 68. Wette Score all	present using 0 to 3 scala	0	Absent or comprises < 0.1ha (0.2471 acres) contiguous area
2.	Aquatic bed Emergent Shrob	-1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality.
2	Forest Mudflats Open water	.2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a sma part and is of high quality
	Other	3	Present and comprises significant part, or more, of wetland vegetation and is of high quality
6b. horiz Select on	ontal (plan view) Interspersion.	-	APPROXIMATE AND APPROXIMATE AN
Selector	High (5)	Narrative D	escription of Vegetation Quality
	Moderately high(4)	low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
fic. Cov	Moderate (3) Moderately low (2) Low (1) None (0) erage of invasive plants. Refer 1 ORAM long form for list. Add	mod	Native spp are dominant component of the vegetation, although nonnelive and/or disturbance loterant native spi can also be present, and species diversity moderate to moderately high, but generally who presence of rare threatened or endangered spp
or deduc	t points for coverage Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1)	high	A predominance of native species, with nonative 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
V	Nearly absent <5% cover (0)	Mudflet an	d Open Water Class Quality
4.1	Absent (1) rotopography.	0	Absent <0.1ha (0.247 acres)
Score a	present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 acres)
Score a	Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.88 acres) High 4ha (9.88 acres) or more
2 8	Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh	3	
T	Amphibian breeding pools		graphy Cover Scale Absent
_		1	Present very small amounts or if more common of marginal quality
(in region)		2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality Present in moderate or greater amounts
		3	

	AEP Biers Run-Hopet	rown Delano		City/County	Page Count		
Project/Site: Applicant/Owner:	AEP BIEIS RUIT-HOPE	OWII-Delallo		City/County.	Ross Count		Sampling Date: 8/27/2013 Sampling Point: wbao-0827
pplicant/Owner: vestigator(s):	BAO, JAC			Con	tion Townshi	ip, Range: unknown	oampling Funt: W080-0827
vestigator(s): andform (hillslope,				500		relief (concave, convex, none): (`anaaua
					Local		
ope (%):	Lat:	39.41026	12	Long:		-83.0589	Datum: NAD83 UTM16
oil Map Unit Name						NWI classifi	
	ogic conditions on the s			Yes		(If no, explain in Remarks	
e Vegetation		, or Hydrology				ormal Circumstances" present?	Yes X No
e Vegetation	N , Soil N		N naturally prob			ded, explain any answers in Rema	
UMMARY OF	FINDINGS Atta	ch site map sho	owing samplin	g point loc	ations, tra	ansects, important featu	res, etc.
ydrophytic Vegeta		Yes X	No		Sampled Are		
dric Soil Present		Yes X	No	within	a Wetland?	Yes X	No
etland Hydrology	Present?	Yes X	No				
emarks: EM in center of ag	ricultural field adjacent	to pond; water pump	present				
EGETATION	Use scientific n	ames of plants.					
011 (5: :			Absolute	Dominant	Indicator	L	
ee Stratum (Plot	size: 30' radius)	% Cover	Species?	Status	Dominance Test worksheet:	
-						Number of Dominant Species	
·——						That Are OBL, FACW, or FAC	2 (A
						ODE, 17.011, 011 AO	(^
						That Are OBL, FACW, or FAC	. 2 (A
						1	,
						Total Number of Dominant	
				= Total Cover		Species Across All Strata:	(B
pling/Shrub Strat	um (Plot size: 15' ra	dius)				Percent of Dominant Species	
. Salix nigra			2	No	OBL	That Are OBL, FACW, or FAC	100% (A
·							
						Prevalence Index worksheet:	
						Prevalence Index worksheet:	
3.						Tovalence index worksheet.	
			2	= Total Cover		Total % Cover of:	Multiply by:
erb Stratum (Plot	size: 5' radius)				OBL species 62	x1 = 62
. Leersia virginica		_	70	Yes	FACW	FACW species 85	x2 = 170
. Epilobium color			40	Yes	OBL	FAC species 5	x3 = 15
Scirpus atrovire			10	No	OBL	FACU species 2	x4 = 8
Typha angustifo			5	No	OBL	UPL species	x5 =
Apocynum canr			5	No	FAC	Column Totals: 154	(A) 255
Dipsacus fullon	um		<u>2</u> 	No No	FACU		
. Juncus torreyi . Persicaria sagit	4-4-		15	No No	FACW	Prevalence Index = B	/A = 1.66
Persicaria sagit	tata			NO	UBL		
						Hydrophytic Vegetation Indi	cators:
						, spiny ao vogotadon mai	
· 						X 1-Rapid Test for Hydr	ophytic Vegetation
						X 2-Dominance Test is	
						X 3-Prevalence Index is	
							tations ¹ (Provide supporting
		· · · · · · · · · · · · · · · · · · ·				data in Remarks or o	
		·				Problematic Hydroph	ytic Vegetation ¹ (Explain)
						1Indicators of hydric soil and we	
						be present, unless disturbed or	r problematic.
			152	= Total Cover			
oody Mac Otr-t	o (Diet eine: 201	dius \				Hudronhutio	
oody Vine Stratur	n (Plot size: 30' ra	dius)				Hydrophytic Vegetation	
						-	X No
						rieseller Tes	^ NU
				= Total Cover			
				= Total Cover			

SOIL Sampling Point: wbao-08271;

Profile Desc Depth	Matrix		Red	lox Features				
inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-8"	10YR 4/1	70	10YR 6/8	30	RM	M	Clay	
						- 1		
		tion, RM=Red	uced Matrix, CS=Covere	d or Coated	Sand Grains.		on: PL=Pore Lining	
ydric Soil I						Indic	ators for Problema	
Histoso			Sandy Gleye)			e Redox (A16)
	pipedon (A2) Histic (A3)		Sandy Redox Stripped Mat				Dark Surface	nese Masses (F12)
	en Sulfide (A4)		Loamy Muck	. ,	4)			v Dark Surface (TF12)
_ , .	ed Layers (A5)		Loamy Gleye		,			ain in Remarks)
	luck (A10)		x Depleted Ma		.)		Other (Expire	alli ili Kelliaiks)
	ed Below Dark Surface	(A11)	Redox Dark					
	Dark Surface (A12)	···/	Depleted Da				3Indicators of hydr	rophytic vegetation and
_	Mucky Mineral (S1)		Redox Depre					ogy must be present,
	lucky Peat or Peat (S3)							bed or problematic.
	_ayer (if observed):							
Type:								
Depth (i	ncnes):					Hydric	Soil Present?	Yes X No
	OGY							
IYDROL								
IYDROL	OGY drology Indicators: cators (minimum of one	is required: c	heck all that apply)				Secondary Indica	tors (minimum of two required)
IYDROLO Vetland Hyd	drology Indicators:	is required: c	heck all that apply) x Water-Staine	ed Leaves (B	39)			tors (minimum of two required)
IYDROL Vetland Hyd Primary India Surface	drology Indicators: cators (minimum of one	is required: c			39)			l Cracks (B6)
Primary India Surface High W	drology Indicators: cators (minimum of one e Water (A1)	is required: c	x Water-Staine	na (B13)			Surface Soi x Drainage Pa	l Cracks (B6)
Vetland Hyd Primary India Surface High W x Saturat	drology Indicators: cators (minimum of one e Water (A1) /ater Table (A2)	is required: c	x Water-Staine Aquatic Faur	na (B13) : Plants (B14	4)		Surface Soi x Drainage Pa	I Cracks (B6) atterns (B10) Water Table (C2)
Vetland Hyd Primary India Surface High W x Saturat Water I	drology Indicators: cators (minimum of one e Water (A1) /ater Table (A2) cion (A3)	is required: c	x Water-Staine Aquatic Faur True Aquatic Hydrogen Su	na (B13) : Plants (B14 ulfide Odor (C	4)	s (C3)	Surface Soi x Drainage Pa Dry-Season Crayfish Bu	I Cracks (B6) atterns (B10) Water Table (C2)
Vetland Hyder Primary India Surface High W X Saturat Water I Sedime	drology Indicators: cators (minimum of one e Water (A1) /ater Table (A2) tion (A3) Marks (B1)	is required: c	x Water-Staine Aquatic Faur True Aquatic Hydrogen Su	na (B13) Plants (B14 Ilfide Odor (C zospheres o	i) C1) in Living Root	s (C3)	Surface Soi X Drainage Pa Dry-Season Crayfish Bu Saturation V	I Cracks (B6) atterns (B10) Water Table (C2) rrows (C8)
Vetland Hyv Primary India Surface High W x Saturat Water I Sedime	drology Indicators: cators (minimum of one be Water (A1) /ater Table (A2) cion (A3) Marks (B1) ent Deposits (B2)	is required: c	x Water-Staine Aquatic Faur True Aquatic Hydrogen Su x Oxidized Rhi Presence of	na (B13) Plants (B14 ulfide Odor (C zospheres o Reduced Iro	i) C1) in Living Root		Surface Soi x Drainage Pa Dry-Season Crayfish Bu Saturation \ Stunted or S	I Cracks (B6) atterns (B10) Water Table (C2) rrows (C8) /isible on Aerial Imagery (C9)
IYDROLO Vetland Hyc Primary Indio Surface High W Saturat Water I Sedime Drift De Algal M	drology Indicators: cators (minimum of one a Water (A1) rater Table (A2) cion (A3) Marks (B1) ent Deposits (B2) eposits (B3)	is required: c	x Water-Staine Aquatic Faur True Aquatic Hydrogen Su x Oxidized Rhi Presence of	na (B13) Plants (B14) Ilfide Odor (C zospheres o Reduced Iron Reduction in	i) C1) In Living Root In (C4)		Surface Soi x Drainage Pa Dry-Season Crayfish Bu Saturation \ Stunted or S	I Cracks (B6) atterns (B10) Water Table (C2) rrows (C8) //sible on Aerial Imagery (C9) Stressed Plants (D1) Position (D2)
IYDROL Vetland Hyg- Primary Indic Surface High W x Saturat Water I Drift De Algal M Iron De	drology Indicators: cators (minimum of one a Water (A1) rater Table (A2) cion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4)		x Water-Staine Aquatic Faur True Aquatic Hydrogen Su x Oxidized Rhi Presence of Recent Iron I	na (B13) Plants (B14 Ilfide Odor (C zospheres o Reduced Iro Reduction in urface (C7)	(i) (C1) on Living Root on (C4) Tilled Soils (G		Surface Soi X Drainage Po Dry-Season Crayfish Bu Saturation V Stunted or S Geomorphic	I Cracks (B6) atterns (B10) Water Table (C2) rrows (C8) //sible on Aerial Imagery (C9) Stressed Plants (D1) Position (D2)
IYDROL Vetland Hyc Primary Indie Surface High W X Saturat Water I Sedime Drift De Algal M Iron De	drology Indicators: cators (minimum of one 2 Water (Art) (ater Table (A2) (ion (A3) Marks (B1) ant Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5)	nagery (B7)	x Water-Staine Aquatic Faur True Aquatic Hydrogen Su x Oxidized Rhi Presence of Recent Iron I Thin Muck S	na (B13) Plants (B14 Iffide Odor (Cizospheres o Reduced Iro Reduction in urface (C7)	(i) C1) In Living Root In (C4) Tilled Soils (f		Surface Soi X Drainage Po Dry-Season Crayfish Bu Saturation V Stunted or S Geomorphic	I Cracks (B6) atterns (B10) Water Table (C2) rrows (C8) //sible on Aerial Imagery (C9) Stressed Plants (D1) Position (D2)
IYDROL Vetland Hyv Primary Indie Surface High W X Saturat Water I Sedime Drift De Algal M Iron De Inundal Sparse	drology Indicators: actors (minimum of one be Water (A1) (atter Table (A2) ion (A3) Marks (B1) mtt Deposits (B2) eposits (B3) lat or Crust (B4) poposits (B5) tion Visible on Aerial Im ly Vegetated Concave:	nagery (B7)	x Water-Staine Aquatic Faur True Aquatic Hydrogen St. x Oxidized Rhi Presence of Recent Iron I Thin Muck S Gauge or We	na (B13) Plants (B14 Iffide Odor (Cizospheres o Reduced Iro Reduction in urface (C7)	(i) C1) In Living Root In (C4) Tilled Soils (f		Surface Soi X Drainage Po Dry-Season Crayfish Bu Saturation V Stunted or S Geomorphic	I Cracks (B6) atterns (B10) Water Table (C2) rrows (C8) //sible on Aerial Imagery (C9) Stressed Plants (D1) Position (D2)
IYDROL: Vetland Hyv Primary Indic Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse	drology Indicators: actors (minimum of one be Water (A1) (atter Table (A2) ion (A3) Marks (B1) mtt Deposits (B2) eposits (B3) lat or Crust (B4) poposits (B5) tion Visible on Aerial Im ly Vegetated Concave:	nagery (B7)	x Water-Staine Aquatic Faur True Aquatic Hydrogen Su x Oxidizzed Rhi Presence of Recent Iron I Thin Muck S Gauge or W Other (Expla	na (B13) : Plants (B14) : Plants (B14) Ilfide Odor (C zospheres o Reduced Iro Reduction in urface (C7) ell Data (D9) in in Remark	(i) C1) In Living Root In (C4) Tilled Soils (f		Surface Soi X Drainage Po Dry-Season Crayfish Bu Saturation V Stunted or S Geomorphic	I Cracks (B6) atterns (B10) Water Table (C2) rrows (C8) //sible on Aerial Imagery (C9) Stressed Plants (D1) Position (D2)
IYDROL: Vetland Hyv Primary Indic Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse	drology Indicators: cators (minimum of one a Water (A1) dater Table (A2) ion (A3) Marks (B1) ent Deposits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aerial Im by Vegetated Concave: vations: er Present?	nagery (B7) Surface (B8)	x Water-Staine Aquatic Faur True Aquatic Hydrogen Su x Oxidizzed Rhi Presence of Recent Iron I Thin Muck S Gauge or W Other (Expla	na (B13) Plants (B14) Plants (B15) Plants (B	(i) C1) In Living Root In (C4) Tilled Soils (f		Surface Soi X Drainage Po Dry-Season Crayfish Bu Saturation V Stunted or S Geomorphic	I Cracks (B6) atterns (B10) Water Table (C2) rrows (C8) //sible on Aerial Imagery (C9) Stressed Plants (D1) Position (D2)
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IYDROL Wetland Hyv Primary Indid Surface High W X Saturat Water I Sedime Drift De Algal M Iron De Inundal Sparse Surface Wat Water Table Saturation P	drology Indicators: actors (minimum of one be Water (A1) (atter Table (A2) ion (A3) Marks (B1) mtt Deposits (B2) eposits (B3) lat or Crust (B4) poposits (B5) tion Visible on Aerial Im ly Vegetated Concave: vations: ere Present? Present?	nagery (B7) Surface (B8) Yes No Yes No	x Water-Staine Aquatic Faur True Aquatic Hydrogen St. x Oxidized Rhit Presence of Recent Iron I Thin Muck S Gauge or W. Other (Expla x Depth (inches) x Depth (inches)	na (B13) Plants (B14) Plants (B	c) C1) In Living Root In (C4) Tilled Soils (C4) CS)	C6)	Surface Soi x Drainage P. Dry-Seape P. Dry-Seape P. Crayfish Bu Saturation \ Stunted or S Geomorphic	I Cracks (B6) atterns (B10) Water Table (C2) rrows (C8) //sible on Aerial Imagery (C9) Stressed Plants (D1) Position (D2) I Test (D5)
IYDROL Wetland Hy Frimary India Surface High W x Saturat Water I Sedime Drift De Algal M Iron De Inundal Sparse Surface Wat Water Table Saturation P includes caj	drology Indicators: cators (minimum of one a Water (A1) later Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aerial Im ly Vegetated Concave: vations: er Present? Present?	nagery (B7) Surface (B8) Yes No Yes No Yes No	x Water-Staine Aquatic Faur True Aquatic Hydrogen St. x Oxidized Rhit Presence of Recent Iron I Thin Muck S Gauge or W. Other (Expla x Depth (inches) x Depth (inches)	na (B13) Plants (B14) Plants (B14) Iffide Odor (C zospheres o Reduced Iro Reduction in urface (C7) In in Remark	or District Control of	C6)	Surface Soi x Drainage P. Dry-Seape P. Dry-Seape P. Crayfish Bu Saturation \ Stunted or S Geomorphic	I Cracks (B6) atterns (B10) Water Table (C2) rrows (C8) //sible on Aerial Imagery (C9) Stressed Plants (D1) Position (D2) I Test (D5)
IYDROL Wetland Hy Frimary India Surface High W x Saturat Water I Sedime Drift De Algal M Iron De Inundal Sparse Surface Wat Water Table Saturation P includes caj	drology Indicators: cators (minimum of one a Water (A1) later Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aerial Im ly Vegetated Concave: vations: er Present? Present?	nagery (B7) Surface (B8) Yes No Yes No Yes No	x Water-Staine Aquatic Faur True Aquatic Hydrogen Su x Oxidized Rhi Presence of Recent Iron I Thin Muck S Gauge or We Other (Expla x Depth (inches) Depth (inches)	na (B13) Plants (B14) Plants (B14) Iffide Odor (C zospheres o Reduced Iro Reduction in urface (C7) In in Remark	or District Control of	C6)	Surface Soi x Drainage P. Dry-Seape P. Dry-Seape P. Crayfish Bu Saturation \ Stunted or S Geomorphic	I Cracks (B6) atterns (B10) Water Table (C2) rrows (C8) //sible on Aerial Imagery (C9) Stressed Plants (D1) Position (D2) I Test (D5)
IYDROL Wetland Hy Frimary India Surface High W x Saturat Water I Sedime Drift De Algal M Iron De Inundal Sparse Surface Wat Water Table Saturation P includes caj	drology Indicators: cators (minimum of one a Water (A1) later Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aerial Im ly Vegetated Concave: vations: er Present? Present?	nagery (B7) Surface (B8) Yes No Yes No Yes No	x Water-Staine Aquatic Faur True Aquatic Hydrogen Su x Oxidized Rhi Presence of Recent Iron I Thin Muck S Gauge or We Other (Expla x Depth (inches) Depth (inches)	na (B13) Plants (B14) Plants (B14) Iffide Odor (C zospheres o Reduced Iro Reduction in urface (C7) In in Remark	or District Control of	C6)	Surface Soi x Drainage P. Dry-Seape P. Dry-Seape P. Crayfish Bu Saturation \ Stunted or S Geomorphic	I Cracks (B6) atterns (B10) Water Table (C2) rrows (C8) //sible on Aerial Imagery (C9) Stressed Plants (D1) Position (D2) I Test (D5)
IYDROL Wetland Hy Frimary India Surface High W x Saturat Water I Sedime Drift De Algal M Iron De Inundal Sparse Surface Wat Water Table Saturation P includes caj	drology Indicators: cators (minimum of one a Water (A1) later Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aerial Im ly Vegetated Concave: vations: er Present? Present?	nagery (B7) Surface (B8) Yes No Yes No Yes No	x Water-Staine Aquatic Faur True Aquatic Hydrogen Su x Oxidized Rhi Presence of Recent Iron I Thin Muck S Gauge or We Other (Expla x Depth (inches) Depth (inches)	na (B13) Plants (B14) Plants (B14) Iffide Odor (C zospheres o Reduced Iro Reduction in urface (C7) In in Remark	or District Control of	C6)	Surface Soi x Drainage P. Dry-Seape P. Dry-Seape P. Crayfish Bu Saturation \ Stunted or S Geomorphic	I Cracks (B6) atterns (B10) Water Table (C2) rrows (C8) //sible on Aerial Imagery (C9) Stressed Plants (D1) Position (D2) I Test (D5)
IYDROL Wetland Hy Frimary India Surface High W X Saturat Water I Sedime Drift De Algal W Iron De Inundat Sparse Surface Wat Water Table Saturation P includes cap Describe Re	drology Indicators: cators (minimum of one a Water (A1) later Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aerial Im ly Vegetated Concave: vations: er Present? Present?	nagery (B7) Surface (B8) Yes No Yes No Yes No	x Water-Staine Aquatic Faur True Aquatic Hydrogen Su x Oxidized Rhi Presence of Recent Iron I Thin Muck S Gauge or We Other (Expla x Depth (inches) Depth (inches)	na (B13) Plants (B14) Plants (B14) Iffide Odor (C zospheres o Reduced Iro Reduction in urface (C7) In in Remark	or District Control of	C6)	Surface Soi x Drainage P. Dry-Seape P. Dry-Seape P. Crayfish Bu Saturation \ Stunted or S Geomorphic	I Cracks (B6) atterns (B10) Water Table (C2) rrows (C8) //sible on Aerial Imagery (C9) Stressed Plants (D1) Position (D2) I Test (D5)
IYDROL Wetland Hy Frimary India Surface High W X Saturat Water I Sedime Drift De Algal W Iron De Inundat Sparse Surface Wat Water Table Saturation P includes cap Describe Re	drology Indicators: cators (minimum of one a Water (A1) later Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aerial Im ly Vegetated Concave: vations: er Present? Present?	nagery (B7) Surface (B8) Yes No Yes No Yes No	x Water-Staine Aquatic Faur True Aquatic Hydrogen Su x Oxidized Rhi Presence of Recent Iron I Thin Muck S Gauge or We Other (Expla x Depth (inches) Depth (inches)	na (B13) Plants (B14) Plants (B14) Iffide Odor (C zospheres o Reduced Iro Reduction in urface (C7) In in Remark	or District Control of	C6)	Surface Soi x Drainage P. Dry-Seape P. Dry-Seape P. Crayfish Bu Saturation \ Stunted or S Geomorphic	I Cracks (B6) atterns (B10) Water Table (C2) rrows (C8) //sible on Aerial Imagery (C9) Stressed Plants (D1) Position (D2) I Test (D5)
IYDROL Wetland Hy Frimary India Surface High W X Saturat Water I Sedime Drift De Algal W Iron De Inundat Sparse Surface Wat Water Table Saturation P includes cap Describe Re	drology Indicators: cators (minimum of one a Water (A1) later Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aerial Im ly Vegetated Concave: vations: er Present? Present?	nagery (B7) Surface (B8) Yes No Yes No Yes No	x Water-Staine Aquatic Faur True Aquatic Hydrogen Su x Oxidized Rhi Presence of Recent Iron I Thin Muck S Gauge or We Other (Expla x Depth (inches) Depth (inches)	na (B13) Plants (B14) Plants (B14) Iffide Odor (C zospheres o Reduced Iro Reduction in urface (C7) In in Remark	or District Control of	C6)	Surface Soi x Drainage P. Dry-Seape P. Dry-Seape P. Crayfish Bu Saturation \ Stunted or S Geomorphic	I Cracks (B6) atterns (B10) Water Table (C2) rrows (C8) //sible on Aerial Imagery (C9) Stressed Plants (D1) Position (D2) I Test (D5)

Wetland

ORAM v. 5.0 Field Form Quantitative Rating

Site: AEP Hoyelburn Delano R	later(s): (A)	Date: 1/7/1/2011
	- Internal	
Metric 1. Wetland Are	ea (size).	
max 8 nts. subtotal Select one size class and assign score.		
>50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.	Zha) (5 pts)	
10 to <25 agres (4 to <10.1hs 13 to <10 agres (1.2 to <4ha) () (4 pts)	
0.3 to <3 scres (0.12 to <1.2)	na) (2pts)	
0.1 to <0.3 acres (0.04 to <0. <0.1 acres (0.04ha) (0 pts)		
Metric 2. Upland buf	fers and surrounding	land use.
	slect only one and assign score. Do not o	
MEDIUM, Buffers average 2	5m to <50m (82 to <164tt) around worth	and perimeter (1)
VERY NARROW, Buffers at	Palest and or double check and overage	Herei (o)
	shrub land, young second growth forest. dential, fenced pasture, park, conservation	
HIGH. Urban, industrial, op	on pasture, row cropping, mining, consec-	Glon. (1)
Metric 3. Hydrology		
max 90 pts. subjeted 3a. Sources of Water. Score all that a	apply. 3b. Conn	ectivity. Score all that apply. 1100 year floodplain (1)
High pH groundwater (5) Other groundwater (3)		Between stream/lake and other human use (1
Precipitation (1)	se umine (3)	Part of wetland/upland (e.g. forest), complex Part of riparian or upland corridor (1)
Seasonal/Intermittent surface Perennial surface water (la)	w or stream) (5)	tion inundation/saturation. Score one or dbl ch Semi- to permanently inundated/saturated (4
3c. Maximum water depth. Select or	1	Regularly inundated/saturated (3) Seasonally inundated (2)
0.4 to 0.7m (15.7 to 27.6in)		Seasonally saturated in upper 30cm (12in) (1
3e. Modifications to natural hydrologic	c regime. Score one or double check and	d average.
None or none apparent (12 Repovered (7)	Check all disturbances observed ditch	Ipaint source (nonstarmwater)
Recovering (3) Recent or no recovery (1)	dike 2	filling/grading road bed/RR track
Hecent of No lectavity (1)	weir stomwater input	other
C 100		
Metric 4. Habitat Al	teration and Developm	nent.
max 20 pls. subjected dis Substrate disturbance. Score or	no or double check and average.	
None or none apparent (4) Recovered (3)		
Recovering (2)		
Recent or no recovery (1) 4b. Habitat development. Select on	ly one and assign score.	
Excellent (7) Very good (6)		
Good (5) Moderately good (4)		
Fair (3)		
Poor to fair (2) Poor (1)	Control of the State of the Sta	
Ac. Habital alteration. Score one o	Check all disturbances observed	4
Recovered (6)	mowing grazing	shrub/sapling removal herbaceous/aquatic bed removal
Recovering (3) Recent of no recevery (1)	clearcutting	sedimentation dredging
	selective cutting woody debris removal	farming
143	toxic pollutants	nutrient enrichment

Wetland 13

AM v. 5.0 Field Form Quantitative Rating		What I FILE
ite: AEP Hope tour - Value Rater(s): RYD I	Date: // Date:
1/5		
mubitalist Strik premi		
Metric 5. Special Wetland	s.	
O 12 mente of about		
10 pts. subtout Check all that apply and score as indicated.		
Bog (10)		
Fers (10) Old growth (crest (10)		
Makers formeted worland (5)		
Lava Eria constal/fributary wetland-un	restricted hydro	ology (10)
I ake Erie coastal/tributary wetland-res	stricted hydrolo	gy (5)
Lake Plain Sand Prairies (Oak Openin	igs) (10)	
Relict Wet Prairies (10) Known occurrence state/federal threa	tened or endan	gered species (10)
Constituted migratory combint/water for	owl habitat or u	sage (10)
Category 1 Wetland See Question 1	Qualitotive Ra	fing (-10)
Metric 6 Plant communit	ties, inte	rspersion, microtopography.
3		
es 20 pts. subtotal 6a Wetland Vegetation Communities		ommunity Cover Scale Absent or comprises <0.1ha (0.2471 acres) contiguous are
Score all present using 0 to 3 scale.	0	Present and either comprises small part of welland's
Aquatic bed	- 1	vegetation and is of moderate quality, or comprises a
Emergent Strub		significant part but is of low quality
Forest	2	Present and either comprises significant part of wetland's
Mudfiats		vegetation and is of moderate quality or comprises a sm part and is of high quality
Open water	3	Present and comprises significant part; or more, of wellan
6b. horizontal (plan view) Interspersion.		vegetation and is of high quality
Select only one		The state of the s
High (5)		escription of Vegetation Qualify Low spp diversity and/or predominance of normative or
Moderately high(4)	low	elisturbance tolerant native species
Moderate (3)	mod	Abstive can are deminant component of the vegetation,
Moderately low (2) Low (1)	ill.ed	allbough nonnative and/or disturbance tolerant native st
None (0)		can also be present, and species diversity moderate to
Bc. Coverage of invasive plants, Refer		moderately high, but generally w/o presence of rare threatened or endangered Spp
to Table 1 ORAM long form for list. Add	high	A predominance of native species, with nonnative spp
or deduct points for coverage	7.00	and/or disturbance tolerant native spp absent or virtually
Extensive >75% cover (-5)	7,400	and/or disturbance tolerant native spp absent or virtually
Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1)		and/or disturbance tolerant native spp absent or virtually
Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0)		and/or disturbance tolerant native spp absent or virtual absent, and high spp diversity and often, but not always the presence of rare, threatened, or endangered spp
Extensive > 75% cover (-5) Modorate 25 - 75% cover (-3) Sparse 5-25% cover (-1) Nearly absent -5% cover (0) Absent (1)		and/or disturbance tolerant native spp absent or virtual absent, and high spp diversity and often, but not always the presence of rare, threatened, or endangered spp d Open Water Class Quality Absent <0, the (0.247 acres)
Extensive > 75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1) 6d. Microtopography. Sens all present using 0 to 3 scale.	Mudflat and	and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and offen, but not always the presence of rare, threatened, or endangered spp of Open Water Class Quality [Absent < 0, this (0.247 acres) [Low 0.1 to +this (0.247 acres)
Extensive 75% cover (-5) Moderate 25-75% cover (-5) Sparse 5-25% cover (-1) Nearly absent -5% cover (0) Absent (1) 6d. Microtophography. Score all present using 0 to 3 scale:	Mudflat en	and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and offer, but not always the presence of rare, threatened, or endangered spp d Open Water Class Quality Absent <0.1ha (0.247 acres) Low 0.1 ho <1ha (0.247 lo 2.47 acres) Moderate 1 to <4ha (2.47 to 2.98 acres)
Extensive > 75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1) 6d. Microthography. Scorn all pregent using 0 to 3 scale. O Vegetated hummucks/fussuchs: Cansie woody debris > 15cm (6in)	Mudflat and	and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and offen, but not always the presence of rare, threatened, or endangered spp of Open Water Class Quality [Absent < 0, this (0.247 acres) [Low 0.1 to +this (0.247 acres)
Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1) 6d. Microlopography. Score all present using 0 to 3 scale. Ocarise woody debra >15cm (6in) Standing dead >25cm (10in) dbr.	Mudflat and 0 1 2 3	and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and offer, but not always the presence of rare, threatened, or endangered spp of the presence of rare, threatened, or endangered spp of the present <0.1ha (0.247 acres) Low 0.1ha <0.247 acres) Low 0.1 to <1ha (0.247 to 2.47 acres) Moderate 1 to <4ha (2.47 to 9.68 acres) High 4ha (9.88 acres) or more graphy Cover Scale
Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1) 6d. Microtopography. Score all present using 0 to 3 scale. Vegetated hummrucks/fussucks Coarse woody debris >15cm (6in)	Mudflat and 0 1 2 3	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 of Open Water Class Quality [Absent < 0, tha (0.247 acres) [Low 0.1 to +1th (0.247 to 2.47 acres) [Moderate 1 to <4ha (2.47 to 9.88 acres) [High 4ha (9.88 acres) or more [graphy Cover Scale [Absent]
Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1) 6d. Microtopography. Score all present using 0 to 3 scale. Coarse woody debra >15cm (6in) Standing dead >25cm (6in) dbir.	Mudifat and 0 1 2 3 Microtopo	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 of Open Water Class Quality [Absent <0, that (0.247 acres) Low 0, 11 < 1ha (0.247 to 2.47 acres) High 4ha (9.88 acres) or more graphy Cover Scale Absent [Present very small amounts or if more common
Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1) 6d. Microtopography. Score all present using 0 to 3 scale. Coarse woody debra >15cm (6in) Standing dead >25cm (6in) dbir.	Mudifat end 0 1 2 3 3 Microtopo 0 1	and/or disturbance tolerant native spp absent or virtually absent, and high spp divestity and offer, but not always the presence of rare, threatened, or endangered spp of Open Water Class Quality Absent <0.1 ha (0.247 a cres) Low 0.1 h <1ha (0.247 a cres) Low 0.1 h <1ha (0.247 b c.247 acres) High 4ha (9.88 acres) or more graphy Cover Scale Absent Present very small amounts or if more common of marginal quality Present in moderate amounts, but not of highest
Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1) 6d. Microlopography. Scans all prepent using 0 to 3 scale. Vegetated hummuckafususuks Coarse woodly debris >15cm (6in) Standing dead >25cm (10in) dbh. Amphibtan breeding pools	Mudifat and 0 1 2 3 Microtopo	and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and offer, but not always the presence of rare, threatened, or endangered spp of the presence of rare, threatened, or endangered spp of the presence of rare, threatened, or endangered spp of the presence of the present of the present of the present in moderate amounts or if more common of marginal quality.
Extensive >75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1) Nearly absent <5% cover (0) Absent (1) 6d. Microtopography. Score all present using 0 to 3 scale. Coarse woody debra >15cm (6in) Standing dead >25cm (6in) dbir.	Mudifat end 0 1 2 3 3 Microtopo 0 1	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 of Open Water Class Quality Absent <0, this (0.247 acres) Low 0.1 to +this (0.247 to 2.47 acres) Moderate 1 to <4hs (2.47 to 9.88 acres) High 4ha (9.88 acres) or more grasphy Cover Scale Absent Present very smell amounts or if more common or manipal quality

End of Quantitative Rating. Complete Categorization Worksheets.

7

8

Project/Site: AEP Biers Run-Hopetown-Delano				
		City/County	Ross County	
pplicant/Owner: AEP				State: OH Sampling Point: wbao-10101:
vestigator(s): BAO, BE		Sec		, Range: unknown
andform (hillslope, terrace, etc.):				elief (concave, convex, none): Concave
ope (%): Lat: 39.411115		Long:	-8	83.052507 Datum: NAD83 UTM16N
bil Map Unit Name: KcC2				NWI classification:
re climatic / hydrologic conditions on the site typical for this time of				(If no, explain in Remarks.)
re Vegetation Y, Soil Y, or Hydrology Y				rmal Circumstances" present? Yes X No
re Vegetation N, Soil N, or Hydrology N				ed, explain any answers in Remarks.)
SUMMARY OF FINDINGS Attach site map show				
ydrophytic Vegetation Present? Yes X	No		Sampled Are	
ydric Soil Present? Yes X /etland Hydrology Present? Yes X	No	within	a Wetland?	Yes X No
	140			
temarks: EM wetland; small depression dominated by cattails, surrounded	by dry/wet trees	and field/past	ure. Berm on	one side.
EGETATION Use scientific names of plants.				
	Absolute	Dominant	Indicator	
ree Stratum (Plot size: 30' radius)	% Cover	Species?	Status	Dominance Test worksheet:
Populus deltoides		Yes	FAC	Number of Descious Consis
2. Acer saccharinum 3. Salix nigra	<u>5</u>	Yes Yes	FACW	Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)
. Sanx riigid		168	UBL	THALAIG OBE, FACEV, OF FACE 0 (A)
·				Total Number of Dominant
	20	= Total Cover		Species Across All Strata: 6 (B)
				·
apling/Shrub Stratum (Plot size: 15' radius)				Percent of Dominant Species
Populus deltoides	5	Yes	FAC	That Are OBL, FACW, or FAC: 100% (A/B
. Salix nigra	2	Yes	OBL	
				Prevalence Index worksheet:
				Prevalence Index worksheet:
).				
	7	= Total Cover		Total % Cover of: Multiply by:
erb Stratum (Plot size: 5' radius)				OBL species 107 x1 = 107
I. Typha sp.	90	Yes	OBL	FACW species 15 x2 = 30
2. Symphyotrichum lateriflorum		No No	FACW OBL	FAC species 10 x3 = 30
8. Persicaria sagittata		INO	UBL	FACU species
i.				Column Totals: 132 (A) 167 (B
i.				(-
:				Prevalence Index = B/A = 1.27
3.				
l				
				Hydrophytic Vegetation Indicators:
				15 15 16 11 1 1 1 1 1
				1-Rapid Test for Hydrophytic Vegetation
				X 2-Dominance Test is >50%
				X 2-Dominance Test is >50% X 3-Prevalence Index is ≤3.01
				X 2-Dominance Test is >50% X 3-Prevalence Index is ≤3.0 ¹ 4-Morphological Adaptations ¹ (Provide supporting
				X 2-Dominance Test is >50% X 3-Prevalence Index is 33.0 4-Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)
				X 2-Dominance Test is >50% X 3-Prevalence Index is <3.0° 4-Morphological Adaptions' (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation' (Explain) ¹Indicators of hydric soil and wetland hydrology must
				X 2-Dominance Test is >50% X 3-Prevalence Index is 33.0 4-Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)
	105	= Total Cover		X 2-Dominance Test is >50% X 3-Prevalence Index is <3.0° 4-Morphological Adaptions' (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation' (Explain) ¹Indicators of hydric soil and wetland hydrology must
	105	= Total Cover		X 2-Dominance Test is >50% X 3-Prevalence Index is <3.0° 4-Morphological Adaptions' (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation' (Explain) ¹Indicators of hydric soil and wetland hydrology must
0. 1. 2. 3. 3. 4. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	105	= Total Cover		X 2-Dominance Test is >50% X 3-Prevalence Index is <0 of a 4-Morphological Adaptions (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation (Explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation
1				Z 2-Dominance Test is >50% X 3-Prevalence Index is \$3.0^1 4-Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic
1		= Total Cover		X 2-Dominance Test is >50% X 3-Prevalence Index is <0 of a 4-Morphological Adaptions (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation (Explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation

	iption: (Describe to t	he depth need	ed to document		onfirm the abso	ence of ind	licators.)	
Depth _	Matrix			Redox Features	T1	. 2		
nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-14"	5GY 4/2	100				Sill	ty Clay	
Type: C=Co	ncentration, D=Deplet	ion. RM=Redu	ed Matrix, CS=C	overed or Coated S	and Grains	2l ocation:	PL=Pore Lining,	M=Matrix.
ydric Soil In		,						ic Hydric Soils ³ :
Histosol			Sandy	Gleyed Matrix (S4)				Redox (A16)
	pipedon (A2)			Redox (S5)		_		iese Masses (F12)
Black Hi				d Matrix (S6)		_	Dark Surface	
	n Sulfide (A4)			Mucky Mineral (F1))	_		Dark Surface (TF12)
_ , .	Layers (A5)			Gleyed Matrix (F2)		_		in in Remarks)
2 cm Mu	, , ,			ed Matrix (F3)		_	_ , , ,	*
_	Below Dark Surface	(A11)		Dark Surface (F6)				
	ark Surface (A12)	. ,		ed Dark Surface (F7	7)	3Ir	ndicators of hydro	ophytic vegetation and
_	lucky Mineral (S1)			Depressions (F8)	,	-		ogy must be present,
	icky Peat or Peat (S3)			,,				ed or problematic.
	ayer (if observed):							· · · · · · · · · · · · · · · · · · ·
Type:	., (
Depth (in	rhes):					Hydric Soil	Present?	Yes X No
	ngy							
YDROLO	OGY rology Indicators:							
Primary Indica	rology Indicators: ators (minimum of one	is required: che				s		ors (minimum of two required)
IYDROLO Vetland Hydr Primary Indica x Surface	rology Indicators: ators (minimum of one Water (A1)	is required: che	Water-	Stained Leaves (B9	9)	Sı	Surface Soil	Cracks (B6)
IYDROLC Vetland Hydr Primary Indica x Surface High Wa	rology Indicators: ators (minimum of one Water (A1) ater Table (A2)	is required: che	Water- Aquation	Stained Leaves (B9 Fauna (B13)			Surface Soil x Drainage Pa	Cracks (B6) tterns (B10)
IYDROLO Vetland Hydr Primary Indica x Surface	rology Indicators: ators (minimum of one Water (A1) ater Table (A2)	is required: cho	Water- Aquation True A	Stained Leaves (B9 c Fauna (B13) quatic Plants (B14)			Surface Soil x Drainage Pa	Cracks (B6)
Vetland Hydr Primary Indica X Surface High Wa X Saturatio Water M	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) larks (B1)	is required: che	Water- Aquation True A x Hydrog	Stained Leaves (B9 c Fauna (B13) quatic Plants (B14) en Sulfide Odor (C'	1)		Surface Soil X Drainage Pa Dry-Season Crayfish Bur	Cracks (B6) tterns (B10) Water Table (C2) rows (C8)
IYDROLO Vetland Hydr Primary Indica x Surface High Wa x Saturatic Water M x Sedimer	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2)	is required: che	Water- Aquation True A X Hydrog Oxidize	Stained Leaves (B9 Fauna (B13) quatic Plants (B14) en Sulfide Odor (C' ed Rhizospheres on	1) Living Roots (Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V	Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9)
Vetland Hydr Primary Indica x Surface High Wa x Saturatic Water M x Sedimer x Drift Dep	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) larks (B1) tt Deposits (B2) posits (B3)	is required: chr	Water- Aquation True A X Hydrog Oxidize Preser	Stained Leaves (B9 c Fauna (B13) quatic Plants (B14) en Sulfide Odor (C' ed Rhizospheres on ice of Reduced Iron	1) Living Roots ((C3)	Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S	Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1)
IYDROLC Vetland Hydr Primary Indica x Surface High Wa x Saturati Water M water M x Sedimer x Drift Dep Algal Ma	rology Indicators: ators (minimum of one Water (A1) titer Table (A2) on (A3) larks (B1) ht Deposits (B2) posits (B3) at or Crust (B4)	is required: che	Water- Aquati True A X Hydrog Oxidize Preser Recen	Stained Leaves (B9 Fauna (B13) quatic Plants (B14) en Sulfide Odor (Cod ad Rhizospheres on ace of Reduced Iron Iron Reduction in T	1) Living Roots ((C3)	Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic	Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2)
IYDROLC Vetland Hydro Primary Indica X Surface High Wa X Saturatic Water M X Sedimer X Drift Dep Algal Ma Iron Dep	rology Indicators: ators (minimum of one Water (A1) tetr Table (A2) on (A3) larks (B1) tt Deposits (B2) sosits (B3) at or Crust (B4) sosits (B5)	·	Water- Aquati True A X Hydrog Oxidize Preser Recen Thin M	Stained Leaves (B9 Fauna (B13) quatic Plants (B14) en Sulfide Odor (Code Rhizospheres on ice of Reduced Iron It Iron Reduction in T uck Surface (C7)	1) Living Roots ((C3)	Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S	Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2)
IYDROLC Vetland Hydr Primary Indica x Surface High Wa x Saturatic Water M x Sedimer x Drift Dep Inundatic	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) larks (B1) to Deposits (B2) posits (B3) to r Crust (B4) osits (B5) on Visible on Aerial Im	agery (B7)	Water- Aquatic True A X Hydrog Oxidize Preser Recen Thin M Gauge	Stained Leaves (B9 c Fauna (B13) quatic Plants (B14) en Sulfide Odor (C' ed Rhizospheres on one of Reduced Iron It Iron Reduction in T uck Surface (C7) or Well Data (D9)	1) Living Roots ((C4) Filled Soils (C6)	C3)	Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic	Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2)
IYDROLC Vetland Hydr Primary Indica x Surface High Wa x Saturatic Water M x Sedimer x Drift Dep Inundatic	rology Indicators: ators (minimum of one Water (A1) tetr Table (A2) on (A3) larks (B1) tt Deposits (B2) sosits (B3) at or Crust (B4) sosits (B5)	agery (B7)	Water- Aquatic True A X Hydrog Oxidize Preser Recen Thin M Gauge	Stained Leaves (B9 Fauna (B13) quatic Plants (B14) en Sulfide Odor (Code Rhizospheres on ice of Reduced Iron It Iron Reduction in T uck Surface (C7)	1) Living Roots ((C4) Filled Soils (C6)	C3)	Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic	Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2)
IYDROLC Vetland Hydr Primary Indica x Surface High Wa x Saturatic Water M x Sedimer x Drift Dep Inundatic	rology Indicators: ators (minimum of one Water (A1) ter Table (A2) on (A3) larks (B1) to Deposits (B2) ossits (B3) at or Crust (B4) ossits (B5) on Visible on Aerial Im Vegetated Concave (S	agery (B7)	Water- Aquatic True A X Hydrog Oxidize Preser Recen Thin M Gauge	Stained Leaves (B9 c Fauna (B13) quatic Plants (B14) en Sulfide Odor (C' ed Rhizospheres on one of Reduced Iron It Iron Reduction in T uck Surface (C7) or Well Data (D9)	1) Living Roots ((C4) Filled Soils (C6)	C3)	Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic	Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2)
IYDROLC Vetland Hydr Primary Indica x Surface High Wa x Saturatic Water M x Sedimer x Drift Dep Iron Dep Inundatic Sparsely	rology Indicators: ators (minimum of one Water (A1) ter Table (A2) on (A3) arks (B1) to Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Im / Vegetated Concave S	agery (B7)	Water- Aquatic True A X Hydrog Oxidize Preser Recen Thin M Gauge	Stained Leaves (B9 c Fauna (B13) quatic Plants (B14) len Sulfide Odor (C' ed Rhizospheres on ce of Reduced Iron l Iron Reduction in T uck Surface (CT) or Well Data (D9) Explain in Remarks	1) Living Roots ((C4) Filled Soils (C6)	C3)	Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic	Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2)
IYDROLC Vetland Hydr Primary Indice High Wa X Saturatic Water M X Sedimer X Drift Dep Algal Ma Iron Dep Inundatic Sparsely	rology Indicators: ators (minimum of one Water (A1) teter Table (A2) on (A3) atriks (B1) nt Deposits (B2) vosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial Im v Vegetated Concave (attions: r Present?	agery (B7) Surface (B8)	Water- Aquati True A X Hydrog Oxidize Preser Recent Thin M Gauge Other (Stained Leaves (B9 F auna (B13) quatic Plants (B14) en Sulfide Odor (C' dd Rhizospheres on ce of Reduced Iron Iron Reduction in T uck Surface (C7) or Well Data (D9) Explain in Remarks https://dx.doi.org/10.1001/	1) Living Roots ((C4) Filled Soils (C6)	C3)	Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic	Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2)
IYDROLC Vetland Hydr Primary Indices X Surface High Wa X Saturatic Water M X Sedimer X Drift Dep Iron Dep Inundatic Sparsely Sparsely Surface Wate	rology Indicators: ators (minimum of one Water (A1) ter Table (A2) on (A3) larks (B1) to the County (B2) sosits (B3) at or Crust (B4) sosits (B5) on Visible on Aerial Im Vegetated Concave S ations: r Present? Present?	agery (B7) Surface (B8) Yes_x_No_	Water- Aquati True A X Hydrog Oxidize Preser Recen Thin M Gauge Other (Depth (in	Stained Leaves (B9 F auna (B13) quatic Plants (B14) en Sulfide Odor (C' dd Rhizospheres on ce of Reduced Iron Iron Reduction in T uck Surface (C7) or Well Data (D9) Explain in Remarks https://dx.doi.org/10.1001/	1) Living Roots ((C4) Filled Soils (C6)		Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic X FAC-Neutral	Cracks (B6) tterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2)
IYDROLC Vetland Hydr Primary Indica X Surface High Wa X Saturatic Water M X Sedimer Algal Ma Iron Depe Inundatic Sparsely Sedifec Water Water Table F	rology Indicators: ators (minimum of one Water (A1) teter Table (A2) on (A3) arks (B1) to Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Im / Vegetated Concave s ations: r Present? psent?	agery (B7) Surface (B8) Yes <u>x</u> No Yes No	Water- Aquati True A X Hydrog Oxidize Preser Recen Thin M Gauge Other (Depth (in	Stained Leaves (B9 Fauna (B13) quatic Plants (B14) en Sulfide Odor (C* dd Rhizospheres on ee of Reduced Iron Tuck Surface (C7) or Well Data (D9) Explain in Remarks hiches): 4*	1) Living Roots ((C4) Filled Soils (C6)		Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic X FAC-Neutral	Cracks (B6) Itterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)
IYDROLC Vetland Hydr Primary Indicas X Surface High Wa X Saturation Water M X Sedimer X Drift Dep Inundatic Sparsely Sparsely Field Observ. Surface Water Water Table F Saturation Pre includes capin	rology Indicators: ators (minimum of one Water (A1) teter Table (A2) on (A3) arks (B1) to Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Im / Vegetated Concave s ations: r Present? psent?	agery (B7) Surface (B8) Yes x No Yes No Yes No Yes x No	Water- Aquati True A X Hydrog Oxidize Preser Recen Thin M Gauge Other (Depth (ii Depth (ii	Stained Leaves (B9 Fauna (B13) quatic Plants (B14) en Sulfide Odor (C' dd Rhizospheres on cee of Reduced Iron Iron Reduction in Tuck Surface (C7) or Well Data (D9) Explain in Remarks hiches): 4* hiches): Surface	1) Living Roots ((C4) Filled Soils (C6) Wetland H	C3)	Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic X FAC-Neutral	Cracks (B6) Itterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)
IYDROLC Vetland Hydr Primary Indicas X Surface High Wa X Saturation Water M X Sedimer X Drift Dep Inundatic Sparsely Sparsely Field Observ. Surface Water Water Table F Saturation Pre includes capin	rology Indicators: ators (minimum of one Water (A1) atter Table (A2) on (A3) later's (B1) at Deposits (B2) oosits (B3) at tor Crust (B4) oosits (B5) on Visible on Aerial Im Vegetated Concave S attions: r Present? Present?	agery (B7) Surface (B8) Yes x No Yes No Yes No Yes x No	Water- Aquati True A X Hydrog Oxidize Preser Recen Thin M Gauge Other (Depth (ii Depth (ii	Stained Leaves (B9 Fauna (B13) quatic Plants (B14) en Sulfide Odor (C' dd Rhizospheres on cee of Reduced Iron Iron Reduction in Tuck Surface (C7) or Well Data (D9) Explain in Remarks hiches): 4* hiches): Surface	1) Living Roots ((C4) Filled Soils (C6) Wetland H	C3)	Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic X FAC-Neutral	Cracks (B6) Itterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)
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IYDROLC Wetland Hydro Primary Indica X Surface High Wa X Saturatic Water M X Sedimer X Drift Dep Iron Dep Iron Dep Iron Dep Iron Dep Iron Deservice Sparsely Iron Dep Iron Deservice Sparsely Iron Dep Iron Deservice Sparsely Iron Dep Iron Dep Iron Deservice Sparsely Iron Dep Iron Deservice Remarks:	rology Indicators: ators (minimum of one Water (A1) ter Table (A2) on (A3) total (A2) on (A3) total (B1) tot Deposits (B2) ossits (B3) at or Crust (B4) ossits (B5) on Visible on Aerial Im Vegetated Concave stations: r Present? Present? esent? selliary fringe) orded Data (stream ga	agery (B7) Surface (B8) Yes x No Yes No Yes No Yes x No	Water- Aquati True A X Hydrog Oxidize Preser Recen Thin M Gauge Other (Depth (ii Depth (ii	Stained Leaves (B9 Fauna (B13) quatic Plants (B14) en Sulfide Odor (C' dd Rhizospheres on cee of Reduced Iron Iron Reduction in Tuck Surface (C7) or Well Data (D9) Explain in Remarks hiches): 4* hiches): Surface	1) Living Roots ((C4) Filled Soils (C6) Wetland H	C3)	Surface Soil X Drainage Pa Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic X FAC-Neutral	Cracks (B6) Itterns (B10) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) Test (D5)

ORAM v. 5.0 Field Form Quantitative Rating

Wetland 14 M. 1040-101013-01

Site: HEP BHID	Rater(s): BNO, BC	Date: 10/10/13
Traux 6 plat: ALLONOMI Selectione size class >50 acre 25 to <55; 10 to <25; 3 to <10; 0.3 to <30;	Netland Area (size). ss and assign score. (\$(>20.2ha) (6 pts) acres (10.1 to <20.2ha) (5 pts) acres (10.7 to <20.2ha) (4 pts) acres (12.10 <4ha) (3 pts) acres (0.12 to <1.2ha) (2pts) 3 acres (0.04 to <0.12ha) (1 pt)	
Wetric 2. I Wetric 2. I Wide a subcodel Za, Calculate every WiDE, B MEDIUM NARROV VERY N. 2b. Intensity of sur	us (0.04na) (0 pts) Jpland buffers and surroundir age buffer width. Select only one and assign score. Do uffers average 50m (164ft) or more around wetland peri Buffers average 25m to <50m (26 to <164ft) around w V. Buffers average 10m to <25m (32ft to <42ft) around ARROW. Buffers average 10m (o <25m (32ft to <42ft) around ununding fand use. Select one or double check and ave DW. 2nd growth or older forest; prairie, savannah, wildlid d field (>10 years), shrub land, young second growth for tTELY HIGH. Residential, fenced pesture, park, conser	o not double check. Imeler (7) vetland perimeter (4) wetland perimeter (1) perimeter (0) range. le area, etc. (7) rest. (5) rystlon tillage, new fallow field. (3)
Metric 3. I Sources of Wa High ph Other gre Precipital Seasons Sources of Wa A High ph Other gre Precipital Seasons Sources Parential Sources Precipital Sources Parential Parential Port (2016) Parential Parential Port (2016) Parent	ter. Score all that apply: groundwater (5) undwater (3) ion (1) //intermittent surface water (3) surface water (ake or stream) (5) d	Connectivity. Score all that apply. 100 year floodplain (1) Between stream/lake and other human use (1) Part of wetlandfupland (e.g. forest), complex. Part of parain or upland corrider (1) Joration inundation/saturation. Score one or dib ich Semi- to permanently inundated/saturated (4) Regularly inundated (2) Seasonally inundated (2) Seasonally saturated in upper 30cm (12in) (1)
.√ ≥ Recovere Recovere		point source (nonstormwater) filling/grading road bed/RR track dredging other
AB. Substrate disturbed in the substrate disturb	Habitat Alteration and Develop thance. Score one or double check and average. one apparent (4) d (3) na (2) na (2) ment. Solect only one and assign score. (7) d (6) ly good (4) sir (2) m. Score one or double check and average. one apparent (9) Check all disturbances observed.	pment.
29.5 whose in a cope set revised 1 February 2001 jim		shrub/spling removal herbaceous/aquatic bed removal sedimentation dredding farming nutrient enrichment

Wetland 14

	Form Quantitative Rating	[Date:	dale D	0.0	Date: 19/10/12
Site: At P	BHD	Rate	(S): DA	O.BE	Date: 19/10/12
29:	Metric 5. Sp	ecial Wetlar	nds.		
0 01	Same and the same				
mair 10 pts. subsets	Bog (10) Fen (10) Old growth for Matturs foresti Lake Erie coa Lake Erie roa Lake Plain Sa Reilict Wet Pri	rest (10) sd wetland (5) stal/tribulary wetland- stal/tribulary wetland- ind Prairies (Oak Ope airies (10)	restricted hydrologs) (10) eatened or end	ology (5) langered species (10)	
		gratory songoire/wate elland. See Question			
1					crotopography.
-1 283	Michie O. Tie	int commun	nties, in	reraberatori, mi	crotopography,
max 20 pts subtota	6a. Wetland Vegetation	Communities.	Vegetation	Community Cover Scale	
	Score all present using (to 3 scale:	0		1ha (0,2471 acres) contiguous are
	Aqualic bed Emergent Shrub		1	vegetation and is of m significant part but is o	
	/ Forest Mudflats Open water		2		rises significant part of welland's oderate quality or comprises a sm lity
	Other 6b, horizontal (plan view	/) Interspersion.	3	Present and comprises : vegetation and is of his	significant part, or more, of wetland
	Select only one.		To the same		
	High (5)	1.240		Description of Vegetation (
	Moderately hig Moderate (3)		low	Low spp diversity and/or disturbance tolerant na	predominance of nonnative or tive species
	Moderately lov Low (1) None (8) 6c. Coverage of invasive to Table 1 ORAM long for	e plants, Refer	mod	although nonnative and can also be present, as	component of the vegetation, Nor disturbance tolerant native spi of species diversity moderate to enerally w/o presence of rare red spp
	or deduct points for cove Extensive >75' Moderate 25-7 Sparse 5-25%	% cover (-5) 5% cover (-3)	high	A predominance of native and/or disturbance tole absent, and high spp d	e species, with nonnative spp rant native spp absent or virtually lversity and often, but not always,
	Nearly absent			the presence of rare; th	reatened, or endangered spp
	Absent (1)		Mudflat and	d Open Water Class Qualit	у.
	6d. Microtopography.	call to	0	Absent <0.1ha (0.247 ac	res).
	Score all present using 0		1	Low 0.1 to <1ha (0.247 to	
		mucks/tussucks debris >15cm (6in)	2	Moderate 1 to <4ha (2.4	
	Slanding dead	>25cm (10in) dbh	3	High 4ha (9.88 acres) or	more
	/ Amphibian bree	eding pools		raphy Cover Scale	
			0	Absent Present very small amou	ols or II more common
					na or ir more administra
T-L			2	of marginal quality Present in moderate amo- quality or in small amou	unts, but not of highest

oject/Site: AEP Biers Run-Hopetown-Delano City/County: Ross			
			State: OH Sampling Point: wbao-100713
	Sect		
			relief (concave, convex, none): Concave
1	Long:		-83.012816 Datum: NAD83 UTM16N
			NWI classification:
			(If no, explain in Remarks.)
			ormal Circumstances" present? Yes X No
			ded, explain any answers in Remarks.)
	within	a wetland	Yes X No
INO	ř		
ing into wetland			
Absolute	Dominant	Indicator	
% Cover	Species?	Status	Dominance Test worksheet:
5	Yes	OBL	Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)
			That are OBL, FACW, of FAC: 7 (A)
			Total Number of Dominant
20	= Total Cover		Species Across All Strata: 7 (B)
			Percent of Dominant Species
5	Yes	OBL	That Are OBL, FACW, or FAC:(A/E
15	Yes	OBL	
			Prevalence Index worksheet:
20	- T-t-1 C		Total % Cover of: Multiply by:
20	= Total Cover		Total % Cover of: Multiply by: OBL species 72 x1 = 72
10	No	OBI	FACW species 60 x2 = 120
25	Yes	FACW	FAC species 14 x3 = 42
5	No	FAC	FACU species x4 =
10	No	OBL	UPL species x5 =
15	Yes	OBL	Column Totals: 146 (A) 234 (I
2	No	FAC	
2	No	FAC	Prevalence Index = B/A = 1.60
20	Yes	FACW	
			Hydrophytic Vegetation Indicators:
			X 1-Rapid Test for Hydrophytic Vegetation
	140	OBL	X 2-Dominance Test is >50%
			X 3-Prevalence Index is ≤3.01
			4-Morphological Adaptations ¹ (Provide supporting
			data in Remarks or on a separate sheet)
			uata ili Kelilaiks oi oli a separate sileeti
			Problematic Hydrophytic Vegetation ¹ (Explain)
			Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must
			Problematic Hydrophytic Vegetation ¹ (Explain)
106	= Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must
106	= Total Cover		Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
106	= Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must
106	= Total Cover		Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation
	= Total Cover		Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation
	N naturally prot	Long: Long:	Local Local

hepth Matrix Redox Features inches) Color (moist) % Color (moist) % Type¹ 0.14* 10YR 3/1 100 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ydric Soll Indicators: Histosol (A1) Sandy Gleyed Matrix (S4) Histic Epipedon (A2) Sandy Redox (S5) Black Histic (A3) Stripped Matrix (S6) Hydrogen Sulfide (A4) X Loamy Mucky Mineral (F1) Stratified Layers (A5) Loamy Gleyed Matrix (F2) 2 cm Muck (A10) x Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F6) Sandy Mucky Mineral (S1) Redox Depressions (F8) strictive Layer (if observed): Type: Depth (inches):	Coast I Iron-Mi Dark St Very SF Other (3Indicators of wetland h	Remarks saturated loamy mucky mine saturated loamy mucky mine lining, M=Matrix. ematic Hydric Soils 3: Prairie Redox (A16) anganese Masses (F12) urface (S7) lallow Dark Surface (TF12) Explain in Remarks) I hydrophytic vegetation and ydrology must be present, listurbed or problematic.
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Stripped Matrix (S6) Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Medox Sos Stratified Layers (A5) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Som Mucky Peat or Peat (S3) estrictive Layer (if observed): Type: Depth (inches):	*Location: PL=Pore Li Indicators for Probl Coast I Iron-Mi Dark St Very St Other (*Indicators of wetland h unless of	saturated loamy mucky mine sining, M=Matrix. ematic Hydric Solls ³ : Prairie Redox (A16) anganese Masses (F12) urface (S7) nallow Dark Surface (TF12) Explain in Remarks) if hydrophytic vegetation and ydrology must be present, listurbed or problematic.
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ydric Soil Indicators: Histosol (A1) Sandy Redox (S5) Black Histic (A3) Stripped Matrix (S6) Hydrogen Sulfide (A4) X Loamy Mucky Mineral (F1) Stratified Layers (A5) Loamy Gleyed Matrix (F2) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Som Mucky Peat or Peat (S3) Sestrictive Layer (if observed): Type: Depth (inches):	²Location: PL=Pore Li Indicators for Probi Coast I Iron-Mi Dark St Very St Other (3 Indicators of wetland h unless of	ining, M=Matrix. lematic Hydric Soils ³ : Prairie Redox (A16) anganese Masses (F12) urface (S7) Large (S7) Explain in Remarks) I hydrophytic vegetation and ydrology must be present, listurbed or problematic.
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Arice Soil Indicators: Histosoi (A1) Histic Epipedon (A2) Sandy Gleyed Matrix (S4) Histic Epipedon (A2) Sandy Redox (S5) Stripped Matrix (S6) Stripped Matrix (S6) Loamy Mucky Mineral (F1) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F3) Depleted Below Dark Surface (A11) Thick Dark Surface (A11) Sandy Mucky Mineral (S1) Som Mucky Peat or Peat (S3) Strictive Layer (if observed): Type: Depth (inches):	Indicators for Probl Coast I I ron-Mi Dark St Very Sh Other (ematic Hydric Solis ³ : Prairie Redox (A16) anganese Masses (F12) arface (S7) allow Dark Surface (TF12) Explain in Remarks) I hydrophytic vegetation and ydrology must be present, listurbed or problematic.
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Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (F1) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3) Sestrictive Layer (if observed): Type: Depth (inches):	Very Sh Other (³ Indicators of wetland h unless o	nallow Dark Surface (TF12) Explain in Remarks) I hydrophylic vegetation and ydrology must be present, listurbed or problematic.
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Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) 5 cm Mucky Peat or Peat (S3) Estrictive Layer (if observed): Type: Depth (inches):	wetland h unless o	ydrology must be present, disturbed or problematic.
Sandy Mucky Mineral (S1) Redox Depressions (F8) 5 cm Mucky Peat or Peat (S3) sestrictive Layer (if observed): Type: Depth (inches):	wetland h unless o	ydrology must be present, disturbed or problematic.
5 cm Mucky Peat or Peat (S3) estrictive Layer (if observed): Type: Depth (inches): emarks:	unless o	disturbed or problematic.
estrictive Layer (if observed): Type: Depth (Inches):		
Type: Depth (inches):emarks:	Hydric Soil Present?	Yes X No
Depth (inches):	Hydric Soil Present?	Yes X No
emarks:	Hydric Soil Present?	Yes X No
YDROLOGY /etland Hydrology Indicators:		
Primary Indicators (minimum of one is required: check all that apply)	Secondary Ir	ndicators (minimum of two required)
x Surface Water (A1) Water-Stained Leaves (B9)		e Soil Cracks (B6)
x High Water Table (A2) Aquatic Fauna (B13)	x Draina	ge Patterns (B10)
x Saturation (A3) True Aquatic Plants (B14)		ason Water Table (C2)
Water Marks (B1) x Hydrogen Sulfide Odor (C1)		h Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Root		tion Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4)		d or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (orphic Position (D2)
Iron Deposits (B5) x Thin Muck Surface (C7)		eutral Test (D5)
Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9)	_	,
Sparsely Vegetated Concave Surface (B8) x Other (Explain in Remarks)		
ield Observations: Surface Water Present? Yes x No Depth (inches): 1"		
Surface Water Present? Yes x No Depth (inches): 1" Vater Table Present? Yes x No Depth (inches): Surface		
	d Hydrology Present?	Yes X No
includes capillary fringe)	r riyurology Fresentr	162 × NO
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if ava	vilable:	
resultie Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), il ava	mable.	
Remarks:		
roundwater seep		

W4+ and 15

ORAM v. 5,0 Field Fr	orm Quantitative F	Rating			W-BAD-100715-02
Site: AFP	BHD	1	Rater(s): Kno	716	Date:\0/7/13
72	Metric 1.	Wetland Ar	ea (size).		
may fi pis susolotal	>50 a 25 to 10 to 3 to < 0.3 to	class and assign score cres (>20,2ha) (6 pts) <50 acres (10.1 to <20, <25 acres (4 to <10,1h 10 acres (1.2 to <4ha) <3 acres (0.12 to <1.2) <0.3 acres (0.04 to <0,	2ha) (5 pts) i) (4 pts) 3 pts) na) (2pts)		
10		Upland buf	fers and sur	rounding	g land use.
T substate 4 pts. substate	WIDE MEDI NARI VERY 2b. Intensity of VERY 3 KLOW MODI	verage buffer width. So. Buffers average 50m UM. Buffers average 2 GOW. Buffers average NARROW Buffers average NARROW Buffers average NARROW Buffers average NARROW Buffers	(164ft) or more arount 5m to <50m (82 to <16 10m to <25m (32ft to erage <10m (≼32ft) ar Select one or double e older forest, praine, sav shrub land; young seo tential, fenced pasture	I welland perim 4ft) around wet 82ft) around we bund wetland per theck and avers annah, wildlife and growth fore- park, conserve	eter (7) land perimeter (4) etland perimeter (1) etland perimeter (1) etland perimeter (1) ge arties, etc. (7) st. (5)
22 3	-	Hydrology.	n pasiore, row croppin	g, rimmigr cons	and and the
max 30 pts. subtities	High Vother Precis Seas: Perer 3c. Maximum v >0.7 (Water, Score all that a old groundwater (5) groundwater (3) oltation (1) only the surface water (lake after depth. Select only 27 Bin) (3) 0.7m (15.7 to 27.Bin) (1 (<15.7in) (1) is to natural hydrologic,	e water (3) or stream) (5) one and assign score 2)	3d, Du	nnectivity. Score all that apply. 100 year floodplain (1) Between stream/lake and other human use (1) Part of wetland/upland (e.g. forest), complex (1) Part of inparian or upland comidor (1) ration inundation/saturation. Score one or did check Semi- to permanently inundated/saturated (4) Regularly inundated/saturated (3) Seasonally inundated (2) Seasonally saturated in upper 30cm (12in) (1)
	None Reco	or none apparent (12) vered (7) vering (3) ht or no recovery (1)	Check all disturbance ditch tile dike weir stormwater inpu	s abserved	point source (nonstormwater) filling/grading road bed/RR track dredging other
125 43.5 maa 30 pira a Sériotas	4a. Substrale c None Reco Reco Reco Reco Reco Reco Reco Very Mode	rately good (4)	eration and	Develop	
	Poor	to fair (2)	white church and average	ng .	
1	None Reco	or none apparent (9) vored (6) vering (3) nl or no recovery (1)	Check all disturbance mowing grazing clearcutting selective cutting	s observed	shrub/sapling removal herbaceous/aquatic bed removal sedimentation dredoing
43.5			woody debris re toxic pollutants		farming nutrient enrichment

ORAM V.	5.0 Field	Form Quanti	tative F	Rating
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Rater(s): NAV	Date: \	1/31/12
17		7

Site: AEP BHP Rate	r(s):	Date: \\\ \(\Date \) \ \(\Data \)
Substitute first page 43.5 Metric 5. Special Wetlan Metric 5. Specia	nds.	
Fen (10) Old growth forest (10) Mature foreisted wetland (5) Lake Erie coastal/tributary wetland Lake Erie coastal/tributary wetland Lake Plain Sand Prairies (Oak Ope Relict Wet Prairies (10) Known occurrence state/federal th Significant migratory songbird/wate Gategory 1 Wetland: See Question	restricted hydro enings) (10) reatened or end er fowl habitat on n 1 Qualitative F	angered species (10) rusage (10)
may 20 pts. subtream 6a, Wetland Vegetation Communities.		Community Cover Scale
Score all present using 0 to 3 scale.	vegetation	Absent or comprises <0.1ha (0.2471 acres) contiguous area
Aquatic bed Z Emergent	1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a
Shrub	-	significant part but is of low quality
Muditats Open water	2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
6b. horizontal (plan view) Interspersion.	3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality
Select only one.	-	- Samuel and a Samuel
High (5)	Narrative D	Description of Vegetation Quality
Moderately high(4) Moderate (3)	low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
Moderately low (2) Low (1) None (0) 5c: Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add	mod	Native spp are dominant component of the vegetation, attrough nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally who presence of rare threatened or endangered spp.
or deduct points for poverage Extensive > 75% cover (-5) Moderate 25-75% cover (-3) Sparse 5-25% cover (-1)	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
Nearly absent <5% cover (0)	and the same	A CONTRACTOR OF THE STATE OF TH
Absent (1) 6d. Microtopography.		Open Water Class Quality
Score all present using 0 to 3 scale:	0	Absent <0.1ha (0.247 acres)
Vegetated hummucks/tussucks	2	Low 0.1 to <1ha (0.247 to 2.47 acres) Moderate 1 to <4ha (2.47 to 9.88 acres)
7 Coarse woody debris >15cm (6in)	3	High 4ha (9.88 acres) or more
Standing dead >25cm (10in) dbh Amphiblian breeding pools	A STATE OF THE PARTY OF THE PAR	rraphy Cover Scale
	0	Absent
	1	Present very small amounts or if more common of marginal quality
117	2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
ne	3	Present in moderate or greater amounts and of highest quality

(a) 2 51.5

End of Quantitative Rating. Complete Categorization Worksheets.

last revised 1 February 2001 jim

APPENDIX 07-4

USFWS AND ODNR CORRESPONDENCE

United States Department of the Interior



FISH AND WILDLIFE SERVICE

Ecological Services 4625 Morse Road, Suite 104 Columbus, Ohio 43230 (614) 416-8993 / FAX (614) 416-8994 June 4, 2013

URS Corporation Attn: Aaron Geckle 525 Vine Street, Suite 1800 Cincinnati, OH 45202

TAILS#03E15000-2012-TA-1462

Reference: Biers Run-Hopetown-Delano 138kV Transmission Line Project, Ross County Ohio

Dear Mr. Geckle:

We have received your recent correspondence regarding potential impacts to federally listed species in the vicinity of the above referenced project. There are no Federal wilderness areas, wildlife refuges or designated critical habitat within the vicinity of the project area.

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

If you have additional questions or require further assistance with your project proposal, please contact me at the following number (614) 416-8993, x12. In addition, you can find more information on natural resources in Ohio, and a county list of federally threatened and endangered species in Ohio, by visiting our homepage at: http://www.fws.gov/midwest/ohio.

Sincerely,

Mary Knapp, Ph.D. Field Supervisor

Mary Knapp

Geckle, Aaron

From: Tebbe, Sarah < Sarah. Tebbe@dnr.state.oh.us>

Sent: Monday, July 01, 2013 4:52 PM

To: Geckle, Aaron **Cc:** Kessler, John

Subject: 13-280 Comments Biers Run- Hopetown-Delano 138kV Transmission Line



ODNR COMMENTS TO: URS CORP. – AARON GECKARRON.GECKLE@URS.COM

PROJECT: BIERS RUN – HOPETOWN – DELANO 138 KV TRANSMISSION LINE

LOCATION: FRANKFORT TOWNSHIP, ROSS COUNTY, OHIO

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

FISH AND WILDLIFE Division of Wildlife (DOW) has the following comments.

The project is within the range of the Indiana bat (*Myotis sodalis*), a state and federally endangered species. The following species of trees have relatively high value as potential Indiana bat roost trees: Shagbark hickory (*Carya ovata*), Shellbark hickory (*Carya laciniosa*), Bitternut hickory (*Carya cordiformis*), Black ash (*Fraxinus nigra*), Green ash (*Fraxinus pennsylvanica*), White ash (*Fraxinus americana*), Shingle oak (*Quercus imbricaria*), Northern red oak (*Quercus rubra*), Slippery elm (*Ulmus rubra*), American elm (*Ulmus americana*), Eastern cottonwood (Populus deltoides), Silver maple (*Acer saccharinum*), Sassafras (*Sassafras albidum*), Post oak (*Quercus stellata*), and White oak (*Quercus alba*). Indiana bat habitat consists of suitable trees that include dead and dying trees with exfoliating bark, crevices, or cavities in upland areas or riparian corridors and living trees with exfoliating bark, cavities, or hollow areas formed from broken branches or tops. If suitable trees occur within the project area, these trees should be conserved. If suitable habitat occurs on the project area and trees must be cut, cutting must occur between October 1 and March 31. If suitable trees must be cut during the summer months, a net survey must be conducted between June 15 and July 31, prior to cutting. Net surveys shall incorporate either two net sites per square kilometer of project area with each net site containing a minimum of two nets used for two consecutive nights, or one net site per kilometer of stream within the project limits with each net site containing a minimum of two nets used for two consecutive nights. If no tree removal is proposed, the project is not likely to impact this species.

The project is within the range of the shortnose gar (*Lepisosteus platostomus*), a state endangered fish, and the blacknose shiner (*Notropis heterolepis*), a state endangered fish. The DOW recommends no in-water work in perennial streams at least April 15 to June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed, the project is not likely to impact these species.

The project is within the range of the Uhler's sundragon (*Helocordulia uhleri*), a state endangered dragonfly. Wetland impacts must be avoided in order to avoid potential impacts to this species.

The project is within the range of the black bear (*Ursus americanus*), a state endangered species. Due to the mobility of this species, the project is not likely to impact this species.

The ODNR Natural Heritage Database has no records for rare or endangered species at this project site. We are unaware of any unique ecological sites, geologic features, animal assemblages, scenic rivers, state wildlife areas, nature preserves, parks or forests, national wildlife refuges, parks or forests or other protected natural areas within the project area. Our inventory program has not completely surveyed Ohio and relies on information supplied by many individuals and organizations. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area.

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

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

1/7/2014 3:29:50 PM

in

Case No(s). 13-0429-EL-BTX

Summary: Application (Part 6 of 6) Biers Run-Hopetown-Delano Transmission Line Project electronically filed by Mr. Yazen Alami on behalf of AEP Ohio Transmission Company