

Appendix B

Preliminary Desktop Wetland Delineation Summary Table

	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Ohio DNR NWI Mapped Wetland	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	No	No	ON	No	No	No	No	No	No	No	No	No	No	No
Mapped Ohio River/Stream	Yes	Yes	Yes	ON	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	ON	Yes	Yes	No	Yes	No	No	ON	No	ON	No	Yes	Yes	Yes	ON	ON	No	No	No
Wetland Area Acres	0.039	0.276	1.477	0.321	0.799	1.452	0.648	0.668	0.119	0.849	1.084	1.741	0.710	0.241	1.099	0.491	0.855	4.011	6.152	0.455	0.167	0.611	0.417	0.140	4.659	14.264	0.709	14.836	0.438	14.109	0.642	2.616
Wetland Area Sq. Ft.	1718	12039	64340	13990	34802	63241	28234	29116	5173	36972	47224	75836	30938	10503	47860	21390	37248	174721	267963	19814	7269	26613	18148	6113	202966	621335	30867	646263	19067	614585	27956	113934
NWI Mapped Wetland	No	No	No	Yes	No	No	Yes	No	No	No	No	No	No	Yes	No	No	Yes	No	Yes	No	ON	No	Yes	Yes	No	No	No	Yes	No	Yes	Yes	Yes
Mapped NHD Waterbody	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Mapped NHD Watercourse	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	ON	No	No	No	No
Wetland Type	Ditch	Ditch	Ditched Creek	Excavated Pond	Ditch	Ditch	Excavated Pond	Ditch	Ditch	Ditch	Ditched Creek	Ditched Creek	Ditch	Excavated Pond	Ditched Creek	Ditched Creek	Excavated Pond	Ditched Creek	Wooded Wetland	Ditch	Ditch	Ditch	Excavated Pond	Excavated Pond	Creek	Creek	Ditch	Wooded Wetland				
Wetland ID	1	2	3	4	5	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32

Northwest Ohio Wind Project

Appendix B

Ohio DNR NWI Mapped Wetland	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No
Mapped Ohio River/Stream	No	Yes	No	ON	Yes	ON	No	No	Yes	No	No	No	No	No	Yes	No	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wetland Area Acres	22.976	9.464	0.653	0.811	0.530	0.551	0.195	0.341	1.578	0.039	0.009	0.243	0.167	0.389	0.350	0.063	1.204	0.464	0.050	0.564	0.232	0.130	0.076	0.343	0.545	8.882	0.835	1.942	3.237	1.605	0.099	2.166
Wetland Area Sq. Ft.	1000826	412264	28446	35339	23066	24019	8474	14840	68735	1685	372	10596	7261	16957	15241	2726	52433	20233	2176	24547	10090	5649	3294	14947	23749	386919	36382	84573	141013	69930	4321	94360
NWI Mapped Wetland	Yes	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No													
Mapped NHD Waterbody	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Mapped NHD Watercourse	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes						
Wetland Type	Wooded Wetland	Creek	Ditch	Ditch	Ditch	Ditch	Ditch	Ditch	Creek	Ditch	Wetland	Excavated Pond	Ditch	Ditched Creek	Ditched Creek	Ditch	Ditched Creek	Ditched Creek	Ditched Creek	Ditch												
Wetland ID	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64

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Ohio DNR NWI Mapped Wetland	No	No	No	No	No	No	No	No	No	No	No	No	Yes	No	No	Yes	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No
Mapped Ohio River/Stream	No	Yes	Yes	No	No	No	No	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No	No	No	No	No	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
Wetland Area Acres	0.275	0.454	2.665	0.614	1.306	0.483	4.250	2.087	2.288	0.183	0.874	2.089	11.759	3.380	6.754	12.694	0.171	17.036	0.504	0.701	0.324	13.951	0.283	0.272	0.346	0.281	0.293	0:030	0.692	1.135	5.886	1.996
Wetland Area Sq. Ft.	11982	19767	116086	26750	56882	21047	185119	90606	99664	7990	38073	96606	512228	147245	294221	552952	7467	742072	21961	30538	14116	607712	12318	11855	15068	12231	12749	1298	30148	49450	256404	86952
NWI Mapped Wetland	Yes	No	No	No	No	Yes	No	No	No	Yes	No	No	No	Yes	No	No	Yes	No	No	No	Yes	No	Yes	Yes	Yes	No	No	No	No	No	No	No
Mapped NHD Waterbody	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No
Mapped NHD Watercourse	No	Yes	Yes	Yes	Yes	No	No	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No	No	No	No	No	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
Wetland Type	Excavated Pond	Ditch	Ditch	Ditch	Ditch	Excavated Pond	Wooded Wetland	Wooded Wetland	Ditched Creek	Excavated Pond	Ditch	Ditched Creek	Ditched Creek	Wooded Wetland	Ditched Creek	Ditched Creek	Excavated Pond	Wooded Wetland	Ditch	Ditch	Excavated Pond	Creek	Excavated Pond	Excavated Pond	Excavated Pond	Ditch	Ditch	Ditch	Ditched Creek	Ditched Creek	Ditched Creek	Wooded Wetland
Wetland ID	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	63	94	95	96

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Ohio DNR NWI Mapped Wetland	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Mapped Ohio River/Stream	No	Yes	Yes	Yes	No	ON	No	No	Yes	Yes	Yes	Yes	No	No	No	No	Yes	No	No	No	ON	No	No	No	No	Yes	Yes	Yes	No	No	Yes	Yes
Wetland Area Acres	6.739	0.224	0.241	0.168	12.793	16.299	5.118	0.771	0.516	0.368	1.075	0.925	7.010	6.260	0.625	2.154	4.750	11.113	5.546	3.447	2.134	7.133	6.239	2.046	5.605	4.808	0.275	2.689	0.123	0.113	0.148	0.023
Wetland Area Sq. Ft.	293530	9752	10486	7313	557282	709963	222924	33587	22491	16014	46834	40305	305334	272690	27211	93830	206889	484097	241562	150138	92942	310699	271775	89114	244134	209418	11973	117151	5376	4906	6448	1017
NWI Mapped Wetland	No	No	No	No	Yes	No	No	Yes	No	No	No	No	No	No	Yes	Yes	No	Yes	Yes	No	No	No	Yes	Yes	No	No	No	No	No	No	No	No
Mapped NHD Waterbody	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Mapped NHD Watercourse	No	Yes	Yes	Yes	No	No	No	No	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes							
Wetland Type	Wooded Wetland	Ditch	Ditch	Ditch	Wooded Wetland	Wooded Wetland	Wooded Wetland	Excavated Pond	Ditched Creek	Ditched Creek	Ditched Creek	Ditched Creek	Wooded Wetland	Wooded Wetland	Excavated Pond	Wooded Wetland	Ditched Creek	Wooded Wetland	Creek	Ditch	Ditched Creek	Ditch	Ditch	Ditch	Ditch							
Wetland ID	97	98	66	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128

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Ohio DNR NWI Mapped Wetland	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No
Mapped Ohio River/Stream	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes	No	Yes	No	No	No	No	No	ON	Yes	Yes	Yes
Wetland Area Acres	0.267	0.155	0.628	3.267	0.131	0.119	0.355	2.480	0.165	1.006	1.571	1.557	0.456	0.784	0.127	0.220	0.993	8.035	5.068	17.751	0.227	7.730	2.029	7.565	0.666	0.560	0.374	5.010	0.318	2.065	2.864	1.404
Wetland Area Sq. Ft.	11635	6769	27377	142302	5699	5181	15479	108041	7206	43833	68422	67829	19852	34171	5537	9564	43244	349993	220769	773253	9904	336699	88392	329531	28994	24379	16305	218214	13868	89943	124752	61155
NWI Mapped Wetland	Yes	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	No	Yes	No	Yes	No	No	No
Mapped NHD Waterbody	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Mapped NHD Watercourse	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes	No	Yes	No	No	Yes	No	No	No	Yes	Yes	Yes
Wetland Type	Excavated Pond	Ditch	Ditch	Excavated Pond	Ditch	Ditch	Ditch	Ditched Creek	Ditch	Excavated Pond	Excavated Pond	Wooded Wetland	Wooded Wetland	Creek	Ditched Creek	Wooded Wetland	Creek	Wooded Wetland	Wooded Wetland	Ditch	Excavated Pond	Wooded Wetland	Excavated Pond	Ditched Creek	Ditched Creek	Ditch						
Wetland ID	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160

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Ohio DNR NWI	Mapped Wetland	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	Yes	No	No
Mapped Ohio	River/Stream	ON	Yes	No	ON	No	Yes	No	Yes	ON	No	Yes	No	Yes	Yes	No	ON	No	Yes	No	No	ON	ON	No	No	No	No	Yes	Yes	No	No	No	No
Wetland	Area Acres	14.514	4.017	9.922	0.147	0.221	0.333	0.660	0.790	0.310	0.350	1.460	3.477	0.121	0.601	5.026	11.506	2.388	6.676	0.889	2.021	7.003	3.130	0.291	0.493	4.347	2.308	3.329	7.721	0.088	0.324	1.300	0.768
Wetland Area	Sq. Ft.	632226	174982	432189	6408	9606	14500	28755	34430	13495	15260	63585	151461	5257	26180	218936	501192	104004	290795	38727	88041	305044	136364	12669	21483	189342	100558	145010	336315	3837	14105	56636	33438
NWI Mapped	Wetland	Yes	No	No	Yes	Yes	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes	Yes
Mapped NHD	Waterbody	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Mapped NHD	Watercourse	No	Yes	No	No	No	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	No	Yes	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No	No
Wetland Tvne		Wooded Wetland	Creek	Wooded Wetland	Excavated Pond	Excavated Pond	Ditch	Ditch	Ditch	Ditch	Ditch	Ditch	Excavated Pond	Ditch	Ditched Creek	Wooded Wetland	Wooded Wetland	Wooded Wetland	Creek	Wooded Wetland	Wooded Wetland	Wooded Wetland	Wooded Wetland	Excavated Pond	Excavated Pond	Wetland	Wetland	Creek	Creek	Excavated Pond	Excavated Pond	Wooded Wetland	Excavated Pond
Wetland	Q	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192

Ohio DNR NWI Manned Wetland		No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Mapped Ohio River/Stream		No	No	No	No	Yes	ON	No	No	Yes	No	Yes	Yes	No	No	Yes	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	ON	No	Yes	No	Yes	Yes
Wetland Area Arree		4.725	1.013	5.721	8.452	1.498	0.372	0.171	0.345	0.224	0.074	1.103	0.816	0.533	0.176	0.281	0.233	0.166	0.748	1.390	0.745	2.271	0.104	0.515	1.003	0.676	2.175	0.183	1.789	3.035	0.183	0.705	0.285
Wetland Area	оч. г	205841	44148	249207	368155	65272	16218	7428	15010	9751	3220	48045	35560	23221	7668	12229	10135	7229	32583	60547	32437	98933	4512	22419	43670	29442	94755	7958	77947	132197	7956	30694	12406
NWI Mapped	Wetialiu	Yes	Yes	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No										
Mapped NHD Waterbody	waterboury	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Mapped NHD		No	No	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Yes	No	Yes	Yes								
Wetland Type		Excavated Pond	Excavated Pond	Wooded Wetland	Wooded Wetland	Ditch	Excavated Pond	Ditch	Wooded Wetland	Ditch	Ditch	Ditch	Ditched Creek	Ditch	Ditch	Ditch	Wetland	Wooded Wetland	Ditch	Wooded Wetland	Ditch	Ditch	Ditch	Ditch									
Wetland	2	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224

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Ohio DNR NWI Mapped Wetland	No	No	No	No	No	No																										
Mapped Ohio River/Stream	Yes	Yes	Yes	ON	Yes	No	No	No	Yes	No	ON	No	oN	ON	ON	No	No	ON	No	No	ON	No	No	No	No	No	ON	ON	ON	No	No	No
Wetland Area Acres	0.479	0.575	0.469	0.322	0.019	0.075	0.226	0.063	0.180	0.654	0.604	0.106	0.053	0.014	0.003	0.005	0.341	0.042	0.004	0.212	0.034	0.231	0.178	0.094	0.158	0.031	1.942	0.080	0.657	0.058	0.018	0.114
Wetland Area Sq. Ft.	20850	25051	20412	14035	832	3286	9864	2751	7822	28484	26332	4627	2315	609	113	232	14853	1818	196	9236	1489	10067	7751	4078	6888	1355	84604	3485	28619	2517	794	4987
NWI Mapped Wetland	No	No	No	No	No	No																										
Mapped NHD Waterbody	No	No	No	No	No	No																										
Mapped NHD Watercourse	Yes	Yes	Yes	No	Yes	No	No	No	Yes	Yes	Yes	No	No	ON	No	No	No	No	No	No	ON	No	No	No	No	No	No	No	No	No	No	No
Wetland Type	Ditch	Wooded Wetland	Ditch	Excavated Pond	Ditch	Ditch	Excavated Pond																									
Wetland ID	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256

Appendix C

Northcentral and Northeast Region Datasheets

Project/Site: NW OHIO WIND		City/County:	PAULDING	CO	Sampling Date:
Applicant/Owner: WESTWOOD				_{State:} OH	Sampling Point: A-01 UPLAND
Investigator(s); MATTHEW VOLLBRECHT 2	115	Section. Tow	nship, Range;	Section 5 ar	d 8, T1N R2E
Landform (billslope terrace etc.). Flat			cal relief (con	ave convex no	ne). Excavated Ditch
Slope (%): 0-5% Lat: 696794.8473		Long: 4548	331.493		Datum: UTM NAD 83 Z13N
Soil Map Lipit Name: LC-Latty Silty Clay				NW/L clos	Not Mapped
An align the thread and a set of the site to be aligned as the site to	for this time of the		Nie		is Demodes
Are climatic / hydrologic conditions on the site typical	for this time of y	ear? Yes <u>v</u>	NO	_ (If no, explain	in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly	y disturbed?	Are "Norn	nal Circumstance	es" present? Yes 🗹 No
Are Vegetation, Soil, or Hydrology	naturally pr	roblematic?	(If needed	l, explain any an	swers in Remarks.)
SUMMARY OF FINDINGS – Attach site	map showing	g sampling	point locat	tions, transe	cts, important features, etc.
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes Wetland Hydrology Present? Yes	No ✓ No ✓	Is the within	Sampled Area a Wetland?	a Yes	No_√
Remarks: (Explain alternative procedures here or i	n a separate repo	ort.)			
HYDROLOGY					
Wetland Hydrology Indicators:				Secondary In	dicators (minimum of two required)
Primary Indicators (minimum of one is required; che	eck all that apply)			Surface	Soil Cracks (B6)
Surface Water (A1)	Water-Stained	l Leaves (B9)		Drainage	e Patterns (B10)
High Water Table (A2)	_ Aquatic Fauna	a (B13)		Moss Tri	m Lines (B16)
Saturation (A3)	Marl Deposits	(B15)		Dry-Sea	son Water Table (C2)
Water Marks (B1)	_ Hydrogen Sulf	fide Odor (C1)		Crayfish	Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhize	ospheres on Li	ving Roots (C3	 Saturation 	on Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of R	educed Iron (C	4)	Stunted	or Stressed Plants (D1)
Algal Mat or Crust (B4)	_ Recent Iron R	eduction in Tille	ed Soils (C6)	Geomor	phic Position (D2)
Iron Deposits (B5)	_ Thin Muck Su	rface (C7)		Shallow	Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain	in Remarks)		Microtop	ographic Relief (D4)

Inundation Visible on A	erial imagery (B7)	_ Other (Explain in Remarks)	Microtopographic Relief (D4))
Sparsely Vegetated Co	oncave Surface (B8)		FAC-Neutral Test (D5)	
Field Observations:				
Surface Water Present?	Yes No _✓	Depth (inches):	_	
Water Table Present?	Yes No _✓	Depth (inches):	_	
Saturation Present?	Yes No _✓	Depth (inches):	Wetland Hydrology Present? Yes	No∕
Describe Recorded Data (s	tream gauge, monitoring	g well, aerial photos, previous ins	pections), if available:	
Remarks:				

Sampling Point: AA-1 UPL/

Trop Strotum (Dist size, 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Thee Stratum</u> (Plot size: <u>30</u>)	% Cover	<u>Species</u> ?	Status	Number of Dominant Species
1	·			That Are OBL, FACW, or FAC: 0 (A)
2	·			Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6.				Drevelance in dev werkelsest.
				Total % Cover of: Multiply by:
		ftatal anus		$\frac{101 \text{ multiply by.}}{1 \text{ optimized on } 0}$
50% of total cover: <u> </u>	20% 0	i total cove	r: •	EACW species 0 $x_{2} = 0$
Sapling/Shrub Stratum (Plot size:)				FAC species 0 $x_3 = 0$
1	·			FACIL species 0 $x 4 = 0$
2				$\frac{1}{100} \times 5 = 500$
3				Column Totals: 100 (A) 500 (B)
4				(A) <u></u> (B)
5				Prevalence Index = $B/A = 5$
о				Hydrophytic Vegetation Indicators:
0	0			Rapid Test for Hydrophytic Vegetation
Total Cove	r: <u> </u>		_	Dominance Test is >50%
50% of total cover: <u>0</u>	20% of	f total cover	0	$\frac{1}{2} = \frac{1}{2} $
Herb Stratum (Plot size: 5)				Morphological Adaptations ¹ (Provide supporting
1. Bromus inermis	100	Yes	UPL	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
A				¹ Indicators of hydric soil and wetland hydrology must
	·			be present, unless disturbed or problematic.
5	·			Definitions of Vegetation Strata:
6	·			Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in, DBH
9				and greater than 3.28 ft (1 m) tall.
10.				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Tatal Causa	100			Woody vines – All woody vines greater than 3.28 ft in
50			20	height.
50% of total cover: <u>50</u>	20% o	f total cove	r: <u>20</u>	
Woody Vine Stratum (Plot size: <u>30</u>)	cover: <u>30</u> 20% of total cover: <u>20</u>))			
1	$\begin{array}{c} & & \\$			
2	$\frac{50}{20\% \text{ of total cover:}} 20\% \text{ of total cover:} 20$ $\frac{100 \text{ grit}}{100 \text{ grit}}$			
3	$\frac{50}{20\% \text{ of total cover:}} 20\% \text{ of total cover:} \frac{20}{20\% \text{ of total cover:}} Hydrophytic Cover: \frac{0}{20\% \text{ of total cover:}} 0 \frac{10 \text{ or } 10 \text{ or } 10}{10 \text{ or } 10} \text{ or } 10\%$		Hydrophytic	
4.				Vegetation
Total Cove	r. 0			Present? Yes <u>No V</u>
	200% as	f total any a	0	
	20%0	i lotal cover		
Remarks: (Include photo numbers here or on a separate s	heet.)			

0-16 10YR4/3 100 16-23 10YR3/2 100 16-23 10YR3/2 100 100 100 100 100 100 100 100	Reduced Matrix, C Polyvalue Belo MLRA 149B Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depres:	CS=Covered or Coa CS=Covered or Coa CS=Covered or Coa Iow Surface (S8) (LI B) rface (S9) (LRR R, I / Mineral (F1) (LRR d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8)		Silty Clay
16-23 10YR3/2 100 16-23 10YR3/2 100 100 100 100 100 100 100 100 100 100 100 100 100 1100 <td>Reduced Matrix, C Polyvalue Belo MLRA 149B Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depress</td> <td>CS=Covered or Coa CS=Covered or Coa Iow Surface (S8) (LI B) rface (S9) (LRR R, I / Mineral (F1) (LRR d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8)</td> <td></td> <td>Silty Clay Silty Clay</td>	Reduced Matrix, C Polyvalue Belo MLRA 149B Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depress	CS=Covered or Coa CS=Covered or Coa Iow Surface (S8) (LI B) rface (S9) (LRR R, I / Mineral (F1) (LRR d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8)		Silty Clay
Type: C=Concentration, D=Depletion, RM: Type: C=Concentration, D=Depletion, RM: Hydric Soil Indicators:	Reduced Matrix, C Polyvalue Belo MLRA 149B Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depres:	CS=Covered or Coa CS=Covered or Coa CS=Covered or Coa low Surface (S8) (LI B) rface (S9) (LRR R, 1 / Mineral (F1) (LRR d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8)		Srains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (LRR K, L, MLRA 149B Coast Prairie Redox (A16) (LRR K, L, R) E am Muclar Bost or Poot (C2) (LRR K, L, R)
Type: C=Concentration, D=Depletion, RM: Iydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Dtripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149)	Reduced Matrix, C Polyvalue Belo MLRA 149B Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depres:	CS=Covered or Coa CS=Covered or Coa low Surface (S8) (LI B) rface (S9) (LRR R, I / Mineral (F1) (LRR d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8)		
Type: C=Concentration, D=Depletion, RM: ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Dtripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149)	Reduced Matrix, C Polyvalue Belo MLRA 149B Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depress	CS=Covered or Coa CS=Covered or Coa CS=Covered or Coa low Surface (S8) (LI B) rface (S9) (LRR R, I / Mineral (F1) (LRR d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8)	R R, ILRA 149B	
Type: C=Concentration, D=Depletion, RM: ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Dtipped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149)	Reduced Matrix, C Polyvalue Belo MLRA 149B Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depress	CS=Covered or Coa CS=Covered or Coa low Surface (S8) (LI B) rface (S9) (LRR R, I / Mineral (F1) (LRR d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8)	Eed Sand Gr RR R, MLRA 149B	Srains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (LRR K, L, MLRA 149B Coast Prairie Redox (A16) (LRR K, L, R) Coast Prairie Redox (A16) (LRR K, L, R)
Fype: C=Concentration, D=Depletion, RM: Iydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149) ndicators of hydrophytic vegetation and we	Reduced Matrix, C Polyvalue Belo MLRA 149B Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depres:	CS=Covered or Coa CS=Covered or Coa low Surface (S8) (LI B) rface (S9) (LRR R, I / Mineral (F1) (LRR d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8)		Grains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (LRR K, L, MLRA 149B Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Muck (Pact or Poot (C2) (LRR K, L, R)
Type: C=Concentration, D=Depletion, RM: ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149) ndicators of hydrophytic vegetation and we	Reduced Matrix, C Polyvalue Belo MLRA 149B Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depress	CS=Covered or Coa CS=Covered or Coa low Surface (S8) (Ll B) rface (S9) (LRR R, I / Mineral (F1) (LRR d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8)	R R, ILRA 1498	Srains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (LRR K, L, MLRA 149B Coast Prairie Redox (A16) (LRR K, L, R) E) Communication (C2) (LRB K, L, R)
Type: C=Concentration, D=Depletion, RM: ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Redox (S5) Stripped Matrix (S4) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149)	Reduced Matrix, C Polyvalue Belo MLRA 149B Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depress	CS=Covered or Coa CS=Covered or Coa low Surface (S8) (LI B) rface (S9) (LRR R, I / Mineral (F1) (LRR d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8)	 Red Sand Gr RR R, MLRA 149B K, L)	Grains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (LRR K, L, MLRA 149B Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Muclar Boot or Boot (C2) (LRR K, L, R)
Fype: C=Concentration, D=Depletion, RM: ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149)	Reduced Matrix, C Polyvalue Belo MLRA 149B Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depress	CS=Covered or Coa low Surface (S8) (Ll B) rface (S9) (LRR R, I / Mineral (F1) (LRR d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8)	 	Grains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (LRR K, L, MLRA 149B Coast Prairie Redox (A16) (LRR K, L, R)
Type: C=Concentration, D=Depletion, RM: ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149) ndicators of hydrophytic vegetation and we	Reduced Matrix, C Polyvalue Belo MLRA 149B Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depres:	CS=Covered or Coa low Surface (S8) (Ll B) rface (S9) (LRR R, I / Mineral (F1) (LRR d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8)	RR R, //LRA 1498	Grains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (LRR K, L, MLRA 1498 Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Post or Post (C2) (LRR K, L, R)
Type: C=Concentration, D=Depletion, RM: ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149) ndicators of hydrophytic vegetation and we	Reduced Matrix, C Polyvalue Belo MLRA 149B Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depress	CS=Covered or Coa low Surface (S8) (LI B) rface (S9) (LRR R, I / Mineral (F1) (LRR d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8)	 RR R, ILRA 149B K, L)	Grains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (LRR K, L, MLRA 149B Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Muclar Boot or Boot (C2) (LRR K, L, R)
Type: C=Concentration, D=Depletion, RM: ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149)	Reduced Matrix, C Polyvalue Belo MLRA 149B Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depress	CS=Covered or Coa low Surface (S8) (Ll B) rface (S9) (LRR R, l / Mineral (F1) (LRR d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8)		Grains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (LRR K, L, MLRA 149B Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Muclar Boot or Boot (C2) (LRR K, L, R)
Type: C=Concentration, D=Depletion, RM: ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149)	Reduced Matrix, C Polyvalue Belo MLRA 149B Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depres:	CS=Covered or Coa low Surface (S8) (Ll B) rface (S9) (LRR R, I / Mineral (F1) (LRR d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8)	RR R, //LRA 1498 //LRA 1498	Grains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (LRR K, L, MLRA 149B Coast Prairie Redox (A16) (LRR K, L, R)
Type: C=Concentration, D=Depletion, RM: ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Dark Surface (S7) (LRR R, MLRA 149) ndicators of hydrophytic vegetation and we	Reduced Matrix, C Polyvalue Belo MLRA 149B Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depress	CS=Covered or Coa low Surface (S8) (Ll B) rface (S9) (LRR R, I / Mineral (F1) (LRR d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8)	RR R, MLRA 1498 K, L)	Grains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (LRR K, L, MLRA 149B Coast Prairie Redox (A16) (LRR K, L, R)
Type: C=Concentration, D=Depletion, RM: ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149)	Reduced Matrix, C Polyvalue Belo MLRA 149B Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depress	CS=Covered or Coa low Surface (S8) (Ll B) rface (S9) (LRR R, 1 / Mineral (F1) (LRR d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8)	 ted Sand Gr RR R, MLRA 1498 K, L)	Grains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (LRR K, L, MLRA 149B Coast Prairie Redox (A16) (LRR K, L, R)
ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149) ndicators of hydrophytic vegetation and we	Polyvalue Belo MLRA 149B Thin Dark Surf Loamy Mucky Depleted Matri Redox Dark Su Depleted Dark Redox Depres	low Surface (S8) (Ll B) rface (S9) (LRR R, l / Mineral (F1) (LRR d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8)	RR R, ILRA 1498 K, L)	Indicators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (LRR K, L, MLRA 149B Coast Prairie Redox (A16) (LRR K, L, R)
 Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149) 	 Polyvalue Belo MLRA 149B Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depression 	low Surface (S8) (L B) rface (S9) (LRR R, I / Mineral (F1) (LRR d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8)	RR R, //LRA 1498 K, L)	2 cm Muck (A10) (LRR K, L, MLRA 149B Coast Prairie Redox (A16) (LRR K, L, R)
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149) ndicators of hydrophytic vegetation and we	MLRA 1498 Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depress	B) rface (S9) (LRR R, / Mineral (F1) (LRR d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8)	/ILRA 149B) K, L)	Coast Prairie Redox (A16) (LRR K, L, R)
 Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149) 	 Thin Dark Surf. Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depress 	rface (S9) (LRR R , I / Mineral (F1) (LRR d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8)	/ILRA 149B) K, L)	P) E om Mucky Doot or Doot (S2) (I PP K I
 Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149) 	Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depres	/ Mineral (F1) (LRR d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8)	K, L)	\mathbf{b} 5 cm whicky real of real (55) (LKK K, L,
 Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149) ndicators of hydrophytic vegetation and weight of the second seco	Loarny Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depress	rix (F3) Surface (F6) k Surface (F7) ssions (F8)		Dark Surface (S7) (LRR K, L)
 Depicted Delow Dark Gundee (ATT) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149) 	Redox Dark Su Depleted Dark Redox Depres	Surface (F6) k Surface (F7) ssions (F8)		Polyvalue Below Sufface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L)
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149)	Depleted Dark Redox Depres	k Surface (F7) ssions (F8)		Iron-Manganese Masses (F12) (LRR K, L
 Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149) Indicators of hydrophytic vegetation and weight and set of the set	Redox Depres	ssions (F8)		Piedmont Floodplain Soils (F19) (MLRA 1
 Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149) Indicators of hydrophytic vegetation and we 				Mesic Spodic (TA6) (MLRA 144A, 145, 14
Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149) Indicators of hydrophytic vegetation and we				Red Parent Material (F21)
Indicators of hydrophytic vegetation and we				Very Shallow Dark Surface (TF12)
Indicators of hydrophytic vegetation and we				
	land hydrology mu	ust be present, unle	ss disturbed	d or problematic.
Restrictive Layer (if observed):				
Туре:				
Depth (inches):				Hydric Soil Present? Yes No _✓
emarks:				

Project/Site: NW OHIO WIND	City/County: PAULDI	NG CO	Sampling Date: 4/16/2013 6:53:03 PM
Applicant/Owper: WESTWOOD		State: OH	Sampling Point: A-01 WETLAND
Investigator(a): MATTHEW VOLLBRECHT 2115	Saction Township Don	Sec 5 and 8	
	Section, Township, Ran	ge	
Landform (hillslope, terrace, etc.):		concave, convex, no	
Slope (%): 0-5% Lat: 09795.0753	Long: 4346327.775		Datum: UTWINAD 832 ISIN
Soil Map Unit Name: LC-Latty silty clay	/	NWI clas	ssification: Not Mapped
Are climatic / hydrologic conditions on the site typical for this time of ye	∋ar?Yes <u>✓</u> No	(If no, explain	in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	/ disturbed? Are "N	Normal Circumstanc	es" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If nee	eded, explain any ar	swers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point lo	cations, transe	ects, important features, etc.
Hydrophytic Vegetation Present? Yes ✓ No Hydric Soil Present? Yes ✓ No Wetland Hydrology Present? Yes ✓ No Remarks: (Explain alternative procedures here or in a separate report	Is the Sampled within a Wetland If yes, optional W	Area d? Yes /etland Site ID:	✓ No
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Ir	ndicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface	Soil Cracks (B6)
✓ Surface Water (A1) Water-Stained	Leaves (B9)	Drainage	e Patterns (B10)
✓ High Water Table (A2) Aquatic Fauna	(B13)	Moss Tr	im Lines (B16)
✓ Saturation (A3)	(B15)	Dry-Sea	son Water Table (C2)
Water Marks (B1) Hydrogen Sulf	ide Odor (C1)	Crayfish	Burrows (C8)
Sediment Deposits (B2) Oxidized Rhize	ospheres on Living Roots	(C3) Saturatio	on Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of R	educed Iron (C4)	Stunted	or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Re	eduction in Tilled Soils (C	6) <u> </u>	phic Position (D2)
Iron Deposits (B5) Thin Muck Sur	Tace (C7)	Shallow	Aquitard (D3)
Sparsely Vegetated Concave Surface (B8)	III Remarks)		utral Test (D5)
Field Observations:			
Surface Water Present? Yes ✓ No. Depth (inches	s)· 1.0		
Water Table Present? Yes ✓ No Depth (inches	s): 0.0		
Saturation Present? Yes ✓ No Depth (inches	s): 0.0 Wet	land Hydrology Pro	esent? Yes <u>√</u> No
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections)	, if available:	
Remarks:			

Sampling Point: A-01 WET

Trac Stratum (Dist size, 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>00</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 1 (A)
2	·			Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: 100 (A/B)
6				
	0			Prevalence Index worksheet:
l otal Cove	r: <u> </u>		0	Total % Cover of: Multiply by:
50% of total cover: 0	20% o	of total cove	r: <u>0</u>	OBL species 05 $x_1 = 05$
Sapling/Shrub Stratum (Plot size: 30)				FACW species 0 $x 2 = 0$
1				FAC species 0 $x 3 = 0$
2				FACU species 0 $x 4 = 0$
3.				UPL species 0 $x = 0$
A	·			Column Totals: <u>03</u> (A) <u>05</u> (B)
-	·			Prevalence Index = $B/A = 1$
5	·		·	
6	·			Hydrophytic Vegetation Indicators:
Total Cove	r: <u>0</u>			Rapid Test for Hydrophytic Vegetation
50% of total cover: 0	20% of	f total cover	. 0	\checkmark Dominance Test is >50%
Herb Stratum (Plot size: 5				✓ Prevalence Index is ≤3.0'
1 Schoenoplectus fluviatilis	65	Yes	OBL	Morphological Adaptations' (Provide supporting
				Problematic Hydrophytic Vegetation ¹ (Explain)
2	·			
3				¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				
7				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
·				at breast height (bbh), regardless of height.
o				Sapling/shrub – Woody plants less than 3 in. DBH
9				
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cover	65			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: 32.5	20% o	f total cove	_{r:} 13	height.
Woody Vine Stratum (Plot cize: 30				
(Flot size)				
1	·			
2				
3				Hydrophytic
4				Vegetation Present? Yes V
Total Cove	_{r:} 0			
50% of total covor: 0	20% 0	f total cover	0	
50 % 01 total cover	20700		•	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Profile Des	cription: (Describe	to the dep	oth needed to docur	ment the indicator	or confirm	n the absence of	indicators.)
(inches)	Color (moist)	%	Color (moist)	<u>% Type¹</u>	Loc ²	Texture	Remarks
0-18	10YR3/1	100				Mucky sil	
18-22	10YR5/1	100				Silty clay	
						·	
						·	
		_			_		
						·	
				·		·	
	·					·	
					_		
¹ Type: C=C	 Concentration D=Der	letion RM	=Reduced Matrix CS	S=Covered or Coat	ed Sand G	irains ² Locat	ion: PI =Pore Lining M=Matrix
Hydric Soil	Indicators:	Journey Furt				Indicators fo	or Problematic Hydric Soils ³ :
Histoso	l (A1)		Polyvalue Below	w Surface (S8) (LR	RR,	2 cm Mu	ck (A10) (LRR K, L, MLRA 149B)
Histic E	pipedon (A2)		MLRA 149B			Coast Pr	airie Redox (A16) (LRR K, L, R)
Black H	listic (A3) en Sulfide (A4)		Thin Dark Surfa	ace (S9) (LRR R, N Mineral (E1) (LRR I	ILRA 149E K I)	3) 5 cm Muo Dark Sur	cky Peat or Peat (S3) (LRR K, L, R)
Stratifie	ed Layers (A5)		Loamy Gleyed	Matrix (F2)	(, Ε)	Polyvalue	e Below Surface (S8) (LRR K, L)
✓ Deplete	ed Below Dark Surfac	ce (A11)	Depleted Matrix	k (F3)		Thin Darl	k Surface (S9) (LRR K, L)
Thick D	Park Surface (A12)		Redox Dark Su	Irface (F6)		Iron-Man	iganese Masses (F12) (LRR K, L, R)
Sandy I	Mucky Mineral (S1) Gleved Matrix (S4)		Depleted Dark	Surface (F7)		Piedmon Mesic Sr	t Floodplain Soils (F19) (MLRA 149B)
Sandy I	Redox (S5)					Red Pare	ent Material (F21)
Strippe	d Matrix (S6)					Very Sha	allow Dark Surface (TF12)
Dark Su	urface (S7) (LRR R, I	MLRA 149	B)			Other (E:	xplain in Remarks)
³ Indicators of	of hydrophytic vegeta	ution and we	etland hydrology mus	st he present unles	s disturber	d or problematic	
Restrictive	Layer (if observed)	:	stand nyarology mac				
Type:							
Depth (ir	nches):					Hydric Soil Pr	resent? Yes <u>√</u> No
Remarks:	,						

Project/Site: NW OHIO WI	ND		Citv/Countv:	PAULDING	СО	Sampling Date	e: 4/16/2013 6:55:26 PM
Applicant/Owner: WESTWO	DOD				_{State:} OH	Sampling Point:	AA-01 UPLAND
Investigator(s) MATTHEW	VOLLBRECI	HT 2115	Section Tow	nshin Range	Sec 20, T1N	R3E	
Landform (hillslope terrace et	C). Flat			nonip, i tango		مر. Flat	
Elene (0) : 0-5%	706329.8338		4543	85.339		Dotume UTN	/ NAD 83 Z13N
	ty Silty Clay		Long.		NNA // 1		
Soil Map Unit Name: LO Lat			/		NVVI class	sification: TOUTIN	apped
Are climatic / hydrologic condit	ions on the site ty	pical for this time of y	ear?Yes 🔽	No	_ (If no, explain i	n Remarks.)	
Are Vegetation, Soil	, or Hydrolo	gy significantly	y disturbed?	Are "Norm	al Circumstance	s" present? Yes	✓ No
Are Vegetation, Soil	, or Hydrolo	gy naturally pr	roblematic?	(If needed	, explain any ans	swers in Remarks.))
SUMMARY OF FINDING	S – Attach	site map showing	g sampling	point locat	ions, transeo	cts, important	features, etc.
Hydrophytic Vegetation Prese	ent? Yes	No _✓	Is the	Sampled Area	1	No. (
Hydric Soil Present?	Yes	No	- Withir	a wetland?	res	NO <u>_ </u>	-
Wetland Hydrology Present?	Yes	No _∕	If yes,	optional Wetla	nd Site ID:		
Remarks: (Explain alternative	e procedures her	e or in a separate repo	ort.)				
					0		
Wetland Hydrology Indicate	ors:				Secondary Inc	dicators (minimum	of two required)
Primary Indicators (minimum	of one is required	a; cneck all that apply)			Surface s		
Ligh Water Table (A2)		Water-Stained	Leaves (B9) Drainage Patterns (B10)				
Saturation (A3)		Marl Deposits	(B13) Moss Trim Lines (B16) B15) Dry-Season Water Table (C2)			2)	
Water Marks (B1)		Hydrogen Sulf	(B13) fide Odor (C1)		Cravfish I	Burrows (C8)	·Z)
Sediment Deposits (B2)		Oxidized Rhiz	ospheres on Li	ving Roots (C3) Saturation	n Visible on Aerial	Imagery (C9)
Drift Deposits (B3)		Presence of R	educed Iron (C	(4)	Stunted c	or Stressed Plants	(D1)
Algal Mat or Crust (B4)		Recent Iron R	eduction in Till	ed Soils (C6)	Geomorp	hic Position (D2)	
Iron Deposits (B5)		Thin Muck Su	rface (C7)		Shallow A	Aquitard (D3)	
Inundation Visible on Aer	rial Imagery (B7)	Other (Explain	n in Remarks)		Microtopo	ographic Relief (D4	1)
Sparsely Vegetated Con	cave Surface (B8	3)			FAC-Neu	tral Test (D5)	
Field Observations:	Mar Ni		-) -				
Surface water Present?	Yes No	Depth (inches	s):				
Seturation Present?	Yes No	Depth (inches	s):			cont? Voc	
(includes capillary fringe)		Depth (inches	s):		i nyarology Pre	sent? res	NO
Describe Recorded Data (stre	eam gauge, moni	toring well, aerial phot	tos, previous in	spections), if a	vailable:		
Remarks:							

Sampling Point: AA-01 UP

Trop Stratum (Plat aiza: 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
	<u>% Cover</u>	<u>Species</u> ?	Status	Number of Dominant Species
1	·			That Are OBL, FACW, or FAC: 0 (A)
2	·			Total Number of Dominant
3				Species Across All Strata: [] (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6				Provolence Index workshoot
Total Cove	r. 0			Total % Cover of: Multiply by:
	200/ 0	f total age	0	$\frac{1}{10000000000000000000000000000000000$
50% of total cover: <u>50%</u>	20% 0	lotal cove		EACW species 0 $x_2 = 0$
Sapling/Shrub Stratum (Plot size:)				FAC species 0 $x_3 = 0$
1	·			FACIL species 0 $x 4 = 0$
2	·			$\frac{1100}{100} \times 5 = 500$
3				Column Totals: 100 (A) 500 (B)
4				
5.				Prevalence Index = $B/A = 5$
6				Hydrophytic Vegetation Indicators:
Tatal Cause	0			Rapid Test for Hydrophytic Vegetation
Total Cove	r: <u>-</u>		0	Dominance Test is >50%
50% of total cover: 0	20% of	f total cover		Prevalence Index is $\leq 3.0^1$
Herb Stratum (Plot size: 5)				Morphological Adaptations ¹ (Provide supporting
1. Bromus inermis	100	Yes	UPL	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				1
4.				Indicators of hydric soil and wetland hydrology must
5	·			
	·			Definitions of Vegetation Strata:
o	·			Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7	·			at breast height (DBH), regardless of height.
8			·	Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cover	100			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: 50	20% 0	f total cove	r 20	height.
Weader Visa Stratum (Plat size: 30	20/00			
(Plot size. <u> </u>				
1	·			
2				
3				Hydrophytic
4				Vegetation Present? Yes No
Total Cove	r: 0			
50% of total cover: 0	20% 0	f total cove	<u>.</u> 0	
Kemarks: (Include photo numbers here or on a separate s	ineet.)			

Profile Desc	ription: (Describe	to the dept	h needed to docur	nent the indicator	or confirm	the absence of inc	licators.)
Depth (inches)	Matrix Color (moist)		Redo Color (moist)	<u>%</u> Type ¹	Loc ²	Texture	Remarks
0-26	10YR3/4	100				Silty Clay	
		·					
		·					
		·					
	oncentration D-Der	letion RM-	Reduced Matrix CS	S=Covered or Cost	ed Sand Gr	ains ² l ocation:	PL=Pore Liping M=Matrix
Hydric Soil	Indicators:					Indicators for Pi	roblematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Belov	w Surface (S8) (LR	R R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Ep	pipedon (A2)		MLRA 149B)		Coast Prairie	e Redox (A16) (LRR K, L, R)
Black Hi	stic (A3)		Thin Dark Surfa	ace (S9) (LRR R, M	LRA 149B)) 5 cm Mucky	Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Mucky N Loamy Gloved	Mineral (F1) (LRR I Matrix (F2)	K, L)	Dark Surface	e (S7) (LRR K, L)
Stratilied	d Below Dark Surfac	e (A11)	Depleted Matrix	(F3)		Thin Dark Su	urface (S9) (LRR K. L)
Thick Da	ark Surface (A12)		Redox Dark Su	rface (F6)		Iron-Mangan	ese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)		Depleted Dark	Surface (F7)		Piedmont Flo	oodplain Soils (F19) (MLRA 149B)
Sandy G	Bleyed Matrix (S4)		Redox Depress	sions (F8)		Mesic Spodi	c (TA6) (MLRA 144A, 145, 149B)
Sandy R	(edox (S5)					Red Parent I	Vlaterial (F21)
Dark Su	rface (S7) (LRR R. I	MLRA 149B)			Other (Expla	in in Remarks)
			/				
³ Indicators of	f hydrophytic vegeta	tion and we	tland hydrology mus	st be present, unles	s disturbed	or problematic.	
Restrictive I	Layer (if observed):	:					
Type:							
Depth (inc	ches):					Hydric Soil Prese	ent? Yes No <u>√</u>
Remarks:							

I

Project/Site: NW OHIO WIND	City/County: PAULDING CO Sampling Date: 4/15/2013 6:30:38 PM				
Applicant/Owner: WESTWOOD	State: OH Sampling Point: AA-01 WET				
Investigator(s): MATTHEW VOLLBRECHT 2115	Section, Township, Range: Sec 20 T1N R3E				
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): Concave road ditch				
Slope (%): <u>5-10%</u> Lat: 706329.8585	Long: 4545383.836 Datum: UTM NAD 83Z13N				
Soil Map Unit Name: LC-Latty silty clay	NWI classification: Not Mapped				
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes 🖌 No (If no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Normal Circumstances" present? Yes 🖌 No				
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.				
Hydrophytic Vegetation Present? Ves V	Is the Sampled Area				
Hydric Soil Present? Yes ✓ No	within a Wetland? Yes _ ✓ No				
Wetland Hydrology Present? Yes ✓ No	If yes, optional Wetland Site ID:Wetland AA-01				
Remarks: (Explain alternative procedures here or in a separate repo	ort.)				
Wetland located in bed of road ditch. Overall wetland	vegetation was dominated by River Bulrush				
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1) Water-Stainer	Leaves (B9) Drainage Patterns (B10)				
✓ High Water Table (A2)	a (B13) Moss Trim Lines (B16)				
✓ Saturation (A3) Marl Deposits	(B15) Dry-Season Water Table (C2)				
Water Marks (B1)	fide Odor (C1) Cravfish Burrows (C8)				
Sediment Deposits (B2) Oxidized Rhiz	ospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3) Presence of R	Reduced Iron (C4) Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	eduction in Tilled Soils (C6) Geomorphic Position (D2)				
I ron Deposits (B5) Thin Muck Su	rface (C7) Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7) Other (Explain	n in Remarks) Microtopographic Relief (D4)				
Sparsely Vegetated Concave Surface (B8)	✓ FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present? Yes No Depth (inches	s):				
Water Table Present? Yes <u>✓</u> No Depth (inches	s): <u>5.0</u>				
Saturation Present? Yes <u>✓</u> No Depth (inches	s): <u>6.0</u> Wetland Hydrology Present? Yes <u>√</u> No				
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial prior	.os, previous inspections), il avaliable.				
Remarks:					
water in wetland below sample point at time of delineat	ion				

Sampling Point: AA-01 WE

Tree Stratum (Plot size: 30	Absolute %	Dominant	Indicator	Dominance Test worksheet:
(FIOLSIZE)	78 COver	<u>Species</u> :	Status	Number of Dominant Species
				That Are OBL, FACW, or FAC: $\underline{\sim}$ (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
Total Cover:	0			Total % Cover of: Multiply by:
50% of total cover: 0	20% o	f total cove	r <u>: 0</u>	OBL species <u>10</u> x 1 = <u>10</u>
Sapling/Shrub Stratum (Plot size: <u>30</u>)				FACW species 30 x 2 = 60
1				FAC species 0 $x 3 = 0$
2				FACU species $0 \times 4 = 0$
3.				UPL species 0 $x_5 = 0$
4				Column Totals: <u>40</u> (A) <u>70</u> (B)
5				Prevalence Index = $B/A = 1.75$
3				Hydronbytic Vegetation Indicators:
0	0			Rapid Test for Hydrophytic Vegetation
Total Cover:	<u> </u>			$\overline{\checkmark}$ Dominance Test is >50%
50% of total cover: 0	20% of	total cover	<u>. 0</u>	\checkmark Prevalence Index is $\leq 3.0^1$
Herb Stratum (Plot size: 5				Morphological Adaptations ¹ (Provide supporting
1. Phalaris arundinacea	30	Yes	FACW	data in Remarks or on a separate sheet)
2. Carex atherodes	10	Yes	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
3				¹ Indiastors of hydria soil and watland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				
7.				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8.				
9				and greater than 3.28 ft (1 m) tall.
10				
				of size, and woody plants less than 3.28 ft tall.
11	40			Weady vince All weady vince greater than 2.29 ft in
l otal Cover:	40		0	height.
50% of total cover: <u>20</u>	20% of	f total cover	.0	
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2				
3				Hydrophytic
4				Vegetation Present? Yes ✓ No
Total Cover:	0			
50% of total cover: 0	20% of	total cover	<u>. 0</u>	
Remarks: (Include photo numbers here or on a separate sh	neet)			

nohoo) Colar (maint)	07		dox Featur	es Turre f	10-2	Toyturo	Domorko
$\frac{10}{10} = \frac{10}{10} $	%		%	Iype		<u> </u>	Remarks
	100					<u> </u>	
0-18 <u>10YR5/1</u>	90	10YR5/8	10	<u> </u>	_ <u>M</u>	Silt Clay	
						·	
						·	
ype: C=Concentration, D=D	epletion, RM	A=Reduced Matrix, 0	CS=Covere	ed or Coa	ited Sand G	Grains. ² Locatio	n: PL=Pore Lining, M=Matrix. Problematic Hydric Soils ³ :
 Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R 	ace (A11) , MLRA 14	Polyvalue Be MLRA 149 Thin Dark Su Loamy Mucky Loamy Gleye Depleted Mat Redox Dark S Depleted Dar Redox Depre B)	ow Surfac B) rface (S9) v Mineral (F d Matrix (F rix (F3) Surface (F6 k Surface (ssions (F8	e (S8) (L (LRR R, 1 =1) (LRR ;2) ;5) ;F7))	RR R, MLRA 149E K, L)	 2 cm Muck Coast Prain 5 cm Muck Dark Surfa Polyvalue I Thin Dark S Iron-Manga Piedmont F Mesic Spot Red Paren Very Shalld Other (Exp 	(A10) (LRR K, L, MLRA 149B) rie Redox (A16) (LRR K, L, R) y Peat or Peat (S3) (LRR K, L, R) ce (S7) (LRR K, L) Below Surface (S8) (LRR K, L) Surface (S9) (LRR K, L) anese Masses (F12) (LRR K, L, R Floodplain Soils (F19) (MLRA 149 dic (TA6) (MLRA 144A, 145, 149E t Material (F21) ow Dark Surface (TF12) lain in Remarks)
idicators of hydrophytic vege estrictive Layer (if observed	tation and v d):	vetland hydrology m	ust be pres	sent, unle	ss disturbe	d or problematic.	
Depth (inches):						Hydric Soil Pre	sent? Yes <u>√</u> No

Proiect/Site: NW OHIO WIND	Citv/County:	PAULDING	CO	Sampling Date: 4/16/2013 6:55:26 PM
Applicant/Owner: WESTWOOD			_{State} . OH	Sampling Point: AA-02 Upland
Investigator(s): MATTHEW VOLLBRECHT 2115	Section. Tow	nship, Range:	Sec 20 T1N	R3E
Landform (hillslope, terrace, etc.): Flat	Lo	ocal relief (conc	ave, convex, no	_{ne):} Flat
Slope (%): 0-5% Lat: 706741.6484	Long: 4545	5022.903		Datum: UTM NAD 83Z13N
Sold Map Unit Name: Sb-Saranac silty clay loam. or	casionally flooded			sification: Not Mapped
Are climatic / hydrologic conditions on the site typical for this	s time of year? Yes	NO	_ (if no, explain	In Remarks.)
Are Vegetation, Soil, or Hydrologys	ignificantly disturbed?	Are "Norm	al Circumstance	es" present? Yes <u>V</u> No
Are Vegetation, Soil, or Hydrology n	aturally problematic?	(If needed	, explain any an	swers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing sampling	point locat	ions, transe	cts, important features, etc.
Hydrophytic Vegetation Present? Yes N	o √ Is the	Sampled Area	1	
Hydric Soil Present? Yes N	o ✓ withir	n a Wetland?	Yes _	No_ <u>√</u>
Wetland Hydrology Present? Yes N	o <mark>✓ I</mark> f yes,	optional Wetla	nd Site ID:	
Remarks: (Explain alternative procedures here or in a sep	arate report.)	•		
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary In	dicators (minimum of two required)
Primary Indicators (minimum of one is required; check all t	hat apply)		Surface	Soil Cracks (B6)
Surface Water (A1) Wate	er-Stained Leaves (B9)		Drainage	e Patterns (B10)
High Water Table (A2) Aqua	atic Fauna (B13)	(B13) Moss Trim Lines (B16)		
Saturation (A3) Marl	Deposits (B15)	(B15) Dry-Season Water Table (C2)		
Water Marks (B1) Hyde	rogen Sulfide Odor (C1)	de Odor (C1) Crayfish Burrows (C8)		
Sediment Deposits (B2) Oxid	lized Rhizospheres on L	iving Roots (C3) <u> </u>	on Visible on Aerial Imagery (C9)
Drift Deposits (B3) Pres	sence of Reduced Iron (C	24)	Stunted	or Stressed Plants (D1)
Algal Mat or Crust (B4)	ent Iron Reduction in Till	ed Soils (C6)	Geomor	phic Position (D2)
Iron Deposits (B5)	Muck Surface (C7)		Shallow	Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other	er (Explain in Remarks)			utral Tast (D5)
Field Observations:		-	FAC-Net	
Surface Water Present? Yes No V Der	oth (inches):			
Water Table Present? Ves No ✓ Der	oth (inches):	—		
Saturation Present? Ves No ✓ Der	oth (inches):			asent? Ves No √
(includes capillary fringe)	5th (inches).		i nyarology i n	
Describe Recorded Data (stream gauge, monitoring well, a	aerial photos, previous ir	spections), if a	vailable:	
Pomarka:				
Remarks.				

Sampling Point: AA-02 UPL

Trop Stratum (Plat aiza: 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
	<u>% Cover</u>	<u>Species</u> ?	Status	Number of Dominant Species
1	·			That Are OBL, FACW, or FAC: 0 (A)
2	·			Total Number of Dominant
3				Species Across All Strata: [] (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6				Provolence Index workshoot
Total Cove	r. 0			Total % Cover of: Multiply by:
	200/ 0	f total age	0	$\frac{1}{10000000000000000000000000000000000$
50% of total cover: <u>50%</u>	20% 0	lotal cove		EACW species 0 $x_2 = 0$
Sapling/Shrub Stratum (Plot size:)				FAC species 0 $x_3 = 0$
1	·			FACIL species 0 $x 4 = 0$
2	·			$\frac{1100}{100} \times 5 = 500$
3				Column Totals: 100 (A) 500 (B)
4				
5.				Prevalence Index = $B/A = 5$
6				Hydrophytic Vegetation Indicators:
Tatal Cause	0			Rapid Test for Hydrophytic Vegetation
Total Cove	r: <u>-</u>		0	Dominance Test is >50%
50% of total cover: 0	20% of	f total cover		Prevalence Index is $\leq 3.0^1$
Herb Stratum (Plot size: 5)				Morphological Adaptations ¹ (Provide supporting
1. Bromus inermis	100	Yes	UPL	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				1
4.				Indicators of hydric soil and wetland hydrology must
5	·			
	·			Definitions of Vegetation Strata:
o	·			Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7	·			at breast height (DBH), regardless of height.
8			·	Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cover	100			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: 50	20% 0	f total cove	r 20	height.
Weader Visa Stratum (Plat size: 30	20/00			
(Plot size. <u>co</u>)				
1	·			
2				
3				Hydrophytic
4				Vegetation Present? Yes No
Total Cove	r: 0			
50% of total cover: 0	20% 0	f total cove	<u>.</u> 0	
Kemarks: (Include photo numbers here or on a separate s	ineet.)			

Depth	Matrix		Redo	x Features	<u> </u>	
(inches)	Color (moist)	%	Color (moist)	<u>% Type' Loc²</u>	Texture	Remarks
0-22	10YR5/3	100			Silty loam	
22-28	10YR3/4	100			Silt Clay	
	·			·		
	·			·		
	·					
	·					
	·					
	·			·		
¹ Type: C=C	Concentration, D=D	epletion, RM=	Reduced Matrix, CS	=Covered or Coated Sand	Grains. ² Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:	,			Indicators for Pr	oblematic Hydric Soils ³ :
Histoso	l (A1)		Polyvalue Below	v Surface (S8) (LRR R,	2 cm Muck (A	10) (LRR K, L, MLRA 149B)
Histic E	pipedon (A2)		MLRA 149B)		Coast Prairie	Redox (A16) (LRR K, L, R)
Hvdrog	en Sulfide (A4)		Loamy Mucky N	/ineral (F1) (LRR K, MERA 14	Dark Surface	(S7) (LRR K. L)
Stratifie	d Layers (A5)		Loamy Gleyed I	Matrix (F2)	Polyvalue Be	low Surface (S8) (LRR K, L)
Deplete	ed Below Dark Surfa	ace (A11)	Depleted Matrix	(F3)	Thin Dark Su	rface (S9) (LRR K, L)
Thick D	ark Surface (A12)		Redox Dark Su	face (F6) Surface (F7)	Iron-Mangan	ese Masses (F12) (LRR K, L, R) adalain Sails (F10) (MI BA 149B)
Sandy i	Gleved Matrix (S4)		Depieted Dark 3	ions (F8)	Mesic Spodic	(TA6) (MLRA 144A, 145, 149B)
Sandy I	Redox (S5)				Red Parent N	(aterial (F21)
Strippe	d Matrix (S6)				Very Shallow	Dark Surface (TF12)
Dark Si	urface (S7) (LRR R	, MLRA 149E	3)		Other (Explai	n in Remarks)
³ Indicators of	of hydrophytic yeae	tation and we	etland hydrology mus	t be present, unless disturb	ped or problematic.	
Restrictive	Layer (if observed	d):		· · · · · · · · · · · · · · · · · · ·		
Type:						
Depth (ir	nches):				Hydric Soil Prese	nt? Yes No _∕
Remarks:						
1						

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Project/Site: NW OHIO WIND	City/County: _F	City/County: PAULDING CO			/15/2013 6:20:18 PM
Applicant/Owner: WESTWOOD			_{State:} OH	Sampling Point: BB	-01UPLAND
Investigator(s): MATTHEW VOLLBRECHT 2115	Section, Towns	ship, Range:	Sec 21, T1N	R3E	
Landform (hillslope, terrace, etc.): Flat	Loc	al relief (conca	ave, convex, non	_{e):} Flat	
Slope (%): 0-5% Lat: 708930.3353	Long: 45444	015.412		Datum: UTM N	AD 83 Z13N
Soil Map Unit Name: Latty silty clay			NWI class	ification: Not Mapp	bed
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes 🖌	No	(If no, explain ir	n Remarks.)	
Are Vegetation, Soil, or Hydrology signific	antly disturbed?	Are "Norma	al Circumstances	s" present? Yes 🖌	No
Are Vegetation, Soil, or Hydrology natural	ly problematic?	(If needed,	explain any ans	wers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map show	ving sampling p	ooint locati	ons, transec	ts, important fea	atures, etc.
Hydrophytic Vegetation Present? Yes No 🗸	Is the S	ampled Area			

Hydrophytic Vegetation Present? Hydric Soil Present?	Yes Yes	No✓ No✓	within a Wetland? Yes No _√
Wetland Hydrology Present?	Yes	No	If yes, optional Wetland Site ID: Upland Point For BB-01
Remarks: (Explain alternative proced	lures here or in a	a separate report.)	

HYDROLOGY

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

Sampling Point: BB-01 UP

Tree Stratum (Plot size: 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
	78 COver	<u>Species</u> :	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
Total Cover:	0			Total % Cover of: Multiply by:
50% of total cover: 0	20% o	f total cove	r: <u>0</u>	OBL species <u>0</u> x 1 = <u>0</u>
Sapling/Shrub Stratum (Plot size: <u>30</u>)				FACW species 5 x 2 = 10
1				FAC species 0 $x 3 = 0$
2				FACU species 45 $x 4 = 180$
3.				UPL species 40 $x_5 = 200$
4				Column Totals: <u>90</u> (A) <u>390</u> (B)
5				Prevalence Index = $B/A = 4.33$
3				Hydrophytic Vegetation Indicators:
0	0			Rapid Test for Hydrophytic Vegetation
Total Cover:	<u> </u>			Dominance Test is >50%
50% of total cover: 0	20% of	total cover	<u>0</u>	Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: 5)	. –			Morphological Adaptations ¹ (Provide supporting
1. Dactylis glomerata	45	Yes	FACU	data in Remarks or on a separate sheet)
2. Bromus inermis	40	Yes	UPL	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Phalaris arundinacea	5	No	FACW	¹ Indiastors of hydric soil and watland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata
6.				Definitions of Vegetation of ata.
7				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
8				
0				Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall
3				
				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11	00			
Total Cover:	30		4.0	height.
50% of total cover: <u>45</u>	20% of	f total cove	r: <u>18</u>	
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2				
3				Hydrophytic
4				Vegetation Present? Ves No V
Total Cover:	0			
50% of total cover: 0	20% of	total cove	r: 0	
Remarks: (include photo numbers here or on a separate sr	ieet.)			

Depth	Matrix		Redo	x Features		_
(inches)	Color (moist)	%	Color (moist)	<u>% Type¹ Loc²</u>	Texture	Remarks
0-21	10YR5/4	100			Silty Loar	
21-28	10YR3/2	100			Silt Clay	
				·		
	·			·		
				·		
				·		
	·			·		
				·		
¹ Type: C=C	Concentration D=D	enletion RM=	Reduced Matrix CS		Grains ² Location:	PI =Pore Lining M=Matrix
Hydric Soil	Indicators:				Indicators for Pro	oblematic Hydric Soils ³ :
Histoso	l (A1)		Polyvalue Below	w Surface (S8) (LRR R,	2 cm Muck (A	10) (LRR K, L, MLRA 149B)
Histic E	pipedon (A2)		MLRA 149B))	Coast Prairie	Redox (A16) (LRR K, L, R)
Black H	listic (A3)		Thin Dark Surfa	ice (S9) (LRR R, MLRA 14)	9B) 5 cm Mucky F	Peat or Peat (S3) (LRR K, L, R)
Stratifie	ed Lavers (A5)		Loamy Gleved I	Matrix (F2)	Polyvalue Be	low Surface (S8) (LRR K, L)
Deplete	ed Below Dark Surfa	ace (A11)	Depleted Matrix	(F3)	Thin Dark Su	rface (S9) (LRR K, L)
Thick D	ark Surface (A12)		Redox Dark Su	rface (F6)	Iron-Mangane	ese Masses (F12) (LRR K, L, R)
Sandy I	Mucky Mineral (S1)		Depleted Dark S	Surface (F7)	Piedmont Flo	odplain Soils (F19) (MLRA 149B)
Sandy I	Redox (S5)		Redux Depress	1011S (FO)	Red Parent N	(TAO) (MERA 144A, 145, 149b) Iaterial (F21)
Strippe	d Matrix (S6)				Very Shallow	Dark Surface (TF12)
Dark Su	urface (S7) (LRR R	, MLRA 149E	3)		Other (Explai	n in Remarks)
³ Indiaatoro d	of budrophytic year	tation and wa	tland hydrology mus	t ha pragant uplage disturb	ad ar problematic	
Restrictive	Laver (if observed	d):	aland hydrology mus	a be present, unless disturb		
Type:						
Depth (ir	iches).				Hydric Soil Prese	nt? Yes No_√
Remarks:					,	
Remarks.						

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Project/Site: NW OHIO WIND	City/County: PA	ULDING CO	Sampling Date: 4/15/2013 6:30:00 PM
Applicant/Owner: WESTWOOD	en <i>y, eeuny</i> :	_{State} . OH	Sampling Point: BB-01 WET
Investigator(s): MATTHEW VOLLBRECHT 2115	Section, Townshir	Bange: Sec 21 T1N	R3E
Landform (billslope, terrace, etc.). Flat	Local I	elief (concave, convex, no	one): Slope of ditch bank
Slope (%): 5-8% Lat: 708933.0282	Long: 4544015	5.272	Datum: UTM NAD 83 Z13N
Soil Map Linit Name: LC-Latty silty clay	Long		sification: Not mapped
Are elimetia / hudrelegia conditions on the site tunical for this time			
Are climatic / hydrologic conditions on the site typical for this time			
Are Vegetation, Soil, or Hydrology signific	antly disturbed?	Are "Normal Circumstance	es" present? Yes V No
Are Vegetation, Soil, or Hydrology natural	lly problematic?	(If needed, explain any an	swers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ving sampling po	int locations, transe	ects, important features, etc.
Hydrophytic Vegetation Present? Ves V	Is the Sam	pled Area	
Hydric Soil Present? Yes ✓ No	within a W	/etland? Yes	✓ No
Wetland Hydrology Present? Yes ✓ No	If ves, optio	onal Wetland Site ID: We	etland BB-01
Remarks: (Explain alternative procedures here or in a separate	report.)		
Wetland located in the bed of a roadside ditch			
Wetland Hydrology Indicators:		Secondary Ir	odicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that ar		Surface	Soil Crocks (R6)
Curface Mater (A1)	ined Leovee (BO)		Detterne (B10)
\checkmark High Water Table (A2)	auna (B12)	Diamage Moss Tri	im Lines (B16)
\checkmark Saturation (A3) Marl Deno	osite (B15)	Noss 11	son Water Table (C2)
Water Marks (B1)	Sulfide Odor (C1)	Dry eca Cravfish	Burrows (C8)
Sediment Deposits (B2) Oxidized I	Rhizospheres on Living	Roots (C3) Saturation	on Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence	of Reduced Iron (C4)	Stunted	or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Irc	on Reduction in Tilled S	oils (C6) Geomor	phic Position (D2)
Iron Deposits (B5)	Surface (C7)	Shallow	Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Ex	plain in Remarks)	Microtop	oographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		✓ FAC-Ne	utral Test (D5)
Field Observations:			
Surface Water Present? Yes No ✓ Depth (in	ches):		
Water Table Present? Yes ✓ No Depth (in	ches): <u>6.0</u>		
Saturation Present? Yes ✓ No Depth (in	ches): <u>7.0</u>	Wetland Hydrology Pro	esent? Yes <u>√</u> No
(includes capillary fringe)	nhotos previous inspec	tions) if available:	
beschbe Recorded Data (Stream gauge, monitoring well, achar	photos, previous inspec		
Remarks:			
Lower portions of the ditch are under water			
			1

Sampling Point: BB-01 WE

Trop Stratum (Plat size: 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
	% Cover	<u>Species</u> ?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: [B]
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Brouglanco Index workshoot
Total Cove	r: 0			Total % Cover of: Multiply by:
	20%	of total covo	r: 0	$\begin{array}{c c c c c c c c c c c c c c c c c c c $
Sopling/Shrub Stratum (Diet size: 30	20 % 0		I. <u> </u>	FACW species 75 $x_2 = 150$
<u>Saping/Shrub Stratum</u> (Flot size. <u></u>)				FAC species 0 $x_3 = 0$
1				FACU species 0 $x = 0$
2	·			UPL species 0 $x_5 = 0$
3				Column Totals: 75 (A) 150 (B)
4				
5				Prevalence Index = B/A = 2
6.				Hydrophytic Vegetation Indicators:
Total Covo	r. 0			Rapid Test for Hydrophytic Vegetation
			0	✓ Dominance Test is >50%
50% of total cover: 0	20% of	f total cover		✓ Prevalence Index is $\leq 3.0^1$
Herb Stratum (Plot size: 5)	75	Vee		Morphological Adaptations ¹ (Provide supporting
1. Phalans arundinacea	75	res	FACW	data in Remarks or on a separate sheet)
2	·			Problematic Hydrophytic Vegetation (Explain)
3				¹ Indiastore of hydric soil and watland hydrology must
4				be present, unless disturbed or problematic.
5.				Definitions of Vagatation Strata
6				Deminions of vegetation Strata.
7				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
	·			at breast height (DBH), regardless of height.
ő	·			Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tail.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tail.
Total Cover	<u>.</u> 75			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: 37.5	20% o	f total cove	_{r:} 15	neight.
Woody Vine Stratum (Plot size: 30)				
1.				
2				
2	·			
3	·			Hydrophytic Vegetation
4				Present? Yes Ves No
Total Cove	r: <u>U</u>			
50% of total cover: <u>0</u>	20% o	f total cover	r <u>: 0</u>	
Remarks: (Include photo numbers here or on a separate s	sheet.)			1

Depth	Matrix		Redox Features		_	· · · · · · · · · · · · · · · · · · ·
(inches)	Color (moist)	%	Color (moist) %	Type ¹ Loc ²	<u>Texture</u>	Remarks
0-22	10YR2/1	100			Muck	
		·				
		·				
		- <u> </u>				
		·				
¹ Type: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, CS=Covered	or Coated Sand	Grains. ² Loca	ation: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:				Indicators f	or Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Below Surface	(S8) (LRR R,	2 cm M	uck (A10) (LRR K, L, MLRA 149B)
Black Hi	istic (A3)		Thin Dark Surface (S9) (L	RR R. MLRA 149	3B) 5 cm M	ucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR K, L)	Dark Su	urface (S7) (LRR K, L)
Stratified	d Layers (A5)		Loamy Gleyed Matrix (F2))	Polyval	ue Below Surface (S8) (LRR K, L)
Deplete	d Below Dark Surfac	e (A11)	Depleted Matrix (F3)		Thin Da	ark Surface (S9) (LRR K, L)
Thick Da	ark Surface (A12)		Redox Dark Surface (F6) Depleted Dark Surface (F6)	7)	Iron-Ma	Inganese Masses (F12) (LRR K, L, R)
Sandy G	Gleved Matrix (S4)		Redox Depressions (F8)	")	Mesic S	Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy F	Redox (S5)		· · · · · · · · · · · · · · · · ·		Red Pa	rent Material (F21)
Stripped	Matrix (S6)				Very Sh	nallow Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, I	MLRA 149B)		Other (I	Explain in Remarks)
³ Indicators o	f hydrophytic yeaeta	tion and we	tland hydrology must be prese	nt unless disturb	ed or problematic	
Restrictive	Laver (if observed):		liand hydrology must be prese			
Type:						
Depth (in	ches).				Hvdric Soil I	Present? Yes ✓ No
Deptil (III	ciles).					
Remarks.						

Project/Site: NW OHIO WIND	City/County: PAULDING	G CO	Sampling Date:
Applicant/Owner: WESTWOOD		State: OH	Sampling Point: BB-02 UPLAND
Investigator(s): MATTHEW VOLLBRECHT 2115	Section, Township, Range	Sec 21, T1N R	3E
Landform (hillslope, terrace, etc.): Flat	Local relief (cor	ncave, convex, none)	Flat
Slope (%): 0-5% Lat: 707931.3598	Long: 4544860.634		Datum: UTM NAD 83Z13N
Soil Map Unit Name: Wb-Wabasha silty clay loam, frequent	y flooded	NWI classifie	cation: Not Mapped
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🖌 No	(If no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Nor	mal Circumstances"	present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally pro	oblematic? (If neede	d, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	J sampling point loca	ations, transects	s, important features, etc.

Hydrophytic Vegetation Present?	Yes No <u>✓</u>	Is the Sampled Area
Hydric Soil Present?	Yes No <u>✓</u>	within a Wetland? Yes No _ ✓
Wetland Hydrology Present?	Yes No <u>✓</u>	If yes, optional Wetland Site ID: Upland sample point BB-02
Remarks: (Explain alternative proced	Jures here or in a separate report.)	

HYDROLOGY

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

Sampling Point: BB-02 UP

Tree Stratum (Plot size: 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
	78 COver	<u>Species</u> :	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
Total Cover:	0			Total % Cover of: Multiply by:
50% of total cover: 0	20% o	f total cove	r: <u>0</u>	OBL species <u>0</u> x 1 = <u>0</u>
Sapling/Shrub Stratum (Plot size: <u>30</u>)				FACW species 5 x 2 = 10
1				FAC species 0 $x 3 = 0$
2				FACU species 45 $x 4 = 180$
3.				UPL species 40 $x_5 = 200$
4				Column Totals: <u>90</u> (A) <u>390</u> (B)
5				Prevalence Index = $B/A = 4.33$
3				Hydrophytic Vegetation Indicators:
0	0			Rapid Test for Hydrophytic Vegetation
Total Cover:	<u> </u>			Dominance Test is >50%
50% of total cover: 0	20% of	total cover	<u>0</u>	Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: 5)	. –			Morphological Adaptations ¹ (Provide supporting
1. Dactylis glomerata	45	Yes	FACU	data in Remarks or on a separate sheet)
2. Bromus inermis	40	Yes	UPL	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Phalaris arundinacea	5	No	FACW	¹ Indiastors of hydric soil and watland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata
6.				Definitions of Vegetation of ata.
7				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
8				
0				Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall
3				
				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11	00			
Total Cover:	30		4.0	height.
50% of total cover: <u>45</u>	20% of	f total cove	r: <u>18</u>	
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2				
3				Hydrophytic
4				Vegetation Present? Ves No V
Total Cover:	0			
50% of total cover: 0	20% of	total cove	r: 0	
Remarks: (include photo numbers here or on a separate sr	ieet.)			

Depth <u>Matrix</u>		Redox Features			_		
(inches)	Color (moist)	%	Color (moist)	<u>%</u> Type ¹	Loc ²	Texture	Remarks
0-28	10YR3/4	100				Silty Loar	
				·			
				·			
					·		
				·			
				·			
				·			
				·			
				·			
¹ Type: C=C	oncentration, D=De	pletion, RM=	Reduced Matrix, CS	S=Covered or Coat	ed Sand G	rains. ² Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:					Indicators for Pro	blematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Belov	w Surface (S8) (LF	RR,	2 cm Muck (A	10) (LRR K, L, MLRA 149B)
Histic El	pipedon (A2)		MLRA 149B)			Coast Prairie I	Redox (A16) (LRR K, L, R)
Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B)) 5 cm Mucky P	(S3) (LRR K, L, R)
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L)						Polyvalue Bel	(S7) (LKK K, L) ow Surface (S8) (I RR K L)
Oraline	d Below Dark Surfa	ce (A11)	Depleted Matrix	(F3)		Thin Dark Sur	face (S9) (LRR K. L)
Thick Da	ark Surface (A12)		Redox Dark Su	rface (F6)		Iron-Mangane	se Masses (F12) (LRR K, L, R)
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7)					Piedmont Floo	odplain Soils (F19) (MLRA 149B	
Sandy Gleyed Matrix (S4) Redox Depressions (F8)						Mesic Spodic	(TA6) (MLRA 144A, 145, 149B)
Sandy F	Redox (S5)					Red Parent M	aterial (F21)
Stripped Matrix (S6)						Very Shallow	Dark Surface (TF12)
Dark Su	irface (S7) (LRR R,	MLRA 149E	5)			Other (Explain	n in Remarks)
³ Indicators o	f hydrophytic veget	ation and we	tland hydrology mus	t he present unles	s disturbed	l or problematic	
Restrictive	Laver (if observed)):	and nyarology maa				
Type:		-					
					Hydric Soil Preser	nt? Yes No √	
Depth (in	cnes):						
Remarks:							

I

Project/Site: NW OHIO WIND	City/County: PAULDING CO Sampling Date: 4/15/2013 6:30:00 PM							
Applicant/Owner: WESTWOOD	State: OH Sampling Point: BB-02 Wetland							
Investigator(s): MATTHEW VOLLBRECHT 2115	Section Township Range: Sec 21, T1N R3E							
Landform (billslope, terrace, etc.). Flat	Local relief (concave, convex, none). Concave/Bank of Creek							
Slope (%): 5-10% Lat. 707926.0621	Long: 4544853.487 UTM NAD 83Z13N							
Silver Usik Nerrey, Wb-Wabasha silty clay loam freque								
Soli Map Unit Name: <u>We Wabacina enty etay teari, neque</u>								
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes <u>V</u> No (If no, explain in Remarks.)							
Are Vegetation, Soil, or Hydrology significar	tly disturbed? Are "Normal Circumstances" present? Yes <u>✓</u> No							
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any answers in Remarks.)							
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.								
Hydrophytic Vegetation Present? Yes V	Is the Sampled Area							
Hydric Soil Present? Yes ✓ No	within a Wetland? Yes _ ✓ _ No							
Wetland Hydrology Present? Yes ✓ No	If ves. optional Wetland Site ID: Wetland Sample point BB-02							
Remarks: (Explain alternative procedures here or in a separate re	port.)							
Wetland fringe of creek dominated by Reed canary of	rass							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)							
Primary Indicators (minimum of one is required: check all that appl	(v) Surface Soil Cracks (B6)							
Surface Water (A1) Water Stain	od Logyop (B0)							
✓ High Water Table (A2)	na (B13) Moss Trim Lines (B16)							
	te (P15) Dry Season Water Table (C2)							
Water Marks (B1)	Ddor (C1) Cravfish Burrows (C8)							
Sediment Deposite (P2)	oberes on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)							
Drift Deposits (B3)	pheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)							
Algal Mat or Crust (B4)	Juced Iron (C4) Stunied of Stressed Plants (D1)							
Iron Denosits (B5)	ce (C7) Shallow Aquitard (D3)							
Inundation Visible on Aerial Imagery (B7)	ain in Remarks) Microtopographic Relief (D4)							
Sparsely Vegetated Concave Surface (B8)	\checkmark EAC-Neutral Test (D5)							
Field Observations:								
Surface Water Present? Ves No 🗸 Depth (inch								
Weter Table Present? Yes Vos V	<u> </u>							
Water Table Present? Yes No Depth (inch Caturation Dresent2 Yes Vas Depth (inch	es). 12.0 Wetland Underland Present2. Yes, (
(includes capillary fringe)	es): 12.0 wetland Hydrology Present? fes <u>•</u> No							
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if available:							
Remarks:								
Water in creek below elevation of sample point								
vrater in creek below elevation of sample point								
Sampling Point: BB-02WE1

Tree Stratum (Plat size, 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 00)	<u>% Cover</u>	<u>Species</u> ?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 1 (A)
2	·			Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: 100 (A/B)
6				
Tetal Cava	0			Prevalence Index worksheet:
	I		0	<u>I otal % Cover of:</u> <u>Multiply by:</u>
50% of total cover: 0	20% c	of total cove	r: <u> </u>	OBL species 0 $x_1 = 0$
Sapling/Shrub Stratum (Plot size: 30)				FACW species $\frac{73}{2}$ $x_2 = \frac{130}{2}$
1				FAC species 0 $x_3 = 0$
2				FACO species 0 $x 4 = 0$
3				$\begin{array}{c} \text{OPL species} \underline{0} \\ \text{Column Tatalog} \overline{75} \\ \text{Column Tatalog} \\ \text{Column Tatalog \\ \text{Column Tatalog } \\ Column Tatalog \\ \text{Column Tatalog$
4.				$\begin{bmatrix} \text{Column rotals.} & \underline{10} & \underline{(A)} & \underline{100} & \underline{(B)} \end{bmatrix}$
5	·			Prevalence Index = $B/A = 2$
· · · · · · · · · · · · · · · · · · ·	·			Hydronhytic Vegetation Indicators:
o	0			Papid Test for Hydrophytic Vegetation
Total Cove	r: <u>0</u>			\checkmark Dominance Test is >50%
50% of total cover: 0	20% 0	f total cover	. <u>.</u> 0	\checkmark Prevalence Index is <3.0 ¹
Herb Stratum (Plot size: 5)				Morphological Adaptations ¹ (Provide supporting
1. Phalaris arundinacea	75	Yes	FACW	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
	·			¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7	·			at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11.				of size, and woody plants less than 3.28 ft tall.
Total Covor	. 75			Woody vines – All woody vines greater than 3.28 ft in
		() - (-)	15	height.
50% of total cover: <u>57.5</u>	20% 0	of total cove	r: <u>10</u>	
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2				
3				Hydrophytic
4				Vegetation
Total Cove	r: 0			Present? Yes V NO
	20% 0	f total covo	0	
	20%0			
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Depth	Matrix		Re	dox Feature	es		-	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR4/1	100					Silty Clay	
18-22	10YR6/1	80	10YR5/8	20	C	<u>M</u>	Clay	
	·						·	
¹ Type: C=C	Concentration, D=De	epletion, RN	/-Reduced Matrix,	CS=Covere	d or Coa	ted Sand G	Grains. ² Location:	PL=Pore Lining, M=Matrix.
Histoso Histic E Black H Hydrog Stratifie ✓ Deplete Thick D Sandy f Sandy f Sandy f Sandy f Dark St	I (A1) pipedon (A2) listic (A3) en Sulfide (A4) d Layers (A5) ed Below Dark Surfa ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R	ace (A11) , MLRA 149	Polyvalue Be MLRA 149 Thin Dark Su Loamy Mucky Depleted Mat Redox Dark S Depleted Dar Redox Depre	low Surface PB) Irface (S9) (y Mineral (F ed Matrix (F3) Surface (F6 k Surface (F8) essions (F8)	⊜ (S8) (LI LRR R, I ⊡1) (LRR 2)) F7)	RR R, MLRA 1491 K, L)	A coast Prairie 2 cm Muck (A Coast Prairie 5 cm Mucky F Dark Surface Polyvalue Bel Thin Dark Sur Iron-Mangane Piedmont Flor Mesic Spodic Red Parent M Very Shallow Other (Explain	10) (LRR K, L, MLRA 149B) Redox (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R) (S7) (LRR K, L) ow Surface (S8) (LRR K, L) face (S9) (LRR K, L) ese Masses (F12) (LRR K, L, R) odplain Soils (F19) (MLRA 149B (TA6) (MLRA 144A, 145, 149B) laterial (F21) Dark Surface (TF12) in in Remarks)
³ Indicators of Restrictive	of hydrophytic vege Layer (if observed	tation and v	vetland hydrology m	lust be pres	ent, unle	ss disturbe	d or problematic.	
Type: Depth (ir	iches):						Hydric Soil Prese	nt? Yes_✓ No
Remarks:	,							

Project/Site: NW OHIO WIND	City/County: P	City/County: PAULDING CO			4/15/2013 6:20:18 PM	
Applicant/Owner: WESTWOOD			State: OH	_ Sampling Point: C	-01 UPLAND	
Investigator(s): MATTHEW VOLLBRECHT 2115	Section, Towns	Section, Township, Range: Sec 8, T1N R				
Landform (hillslope, terrace, etc.): Flat	Loca	Local relief (concave, convex, none): Flat				
Slope (%): _0-5% Lat: _696879.4477	Long: 45474	60.303		Datum: UTM I	NAD 83 Z13N	
Soil Map Unit Name: Lc-Latty silty clay			NWI clas	sification: Not Map	oped	
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes 🗸	_ No	_ (If no, explain i	in Remarks.)		
Are Vegetation, Soil, or Hydrology signific	antly disturbed?	Are "Norm	nal Circumstance	s" present? Yes 💆	/ No	
Are Vegetation, Soil, or Hydrology natura	lly problematic?	ematic? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No 🗸	Is the S	ampled Area	a			

Hydrophytic Vegetation Present?	Yes	No	within a Wetland? Yes No \checkmark
Hydric Soil Present?	Yes	No	
Wetland Hydrology Present?	Yes	No	If yes, optional Wetland Site ID: Upland Point for C-01
Remarks: (Explain alternative proced	lures here or in	a separate report.)	

HYDROLOGY

	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
	 Drainage Patterns (B0) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) bils (C6) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Surface Water Present? Yes No ✓ Depth (inches): Water Table Present? Yes No ✓ Depth (inches): Saturation Present? Yes No ✓ Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective	Wetland Hydrology Present? Yes No _√ tions), if available:

Sampling Point: C-01 UPL

	Absolute	Dominan	t Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>50</u>)	<u>% Cover</u>	<u>Species?</u>	Status	Number of Dominant Species
1	·		·	That Are OBL, FACW, or FAC: (A)
2	·		·	Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: 0 (A/B)
6				
	0			Prevalence Index worksheet:
l otal Cove	r: <u> </u>		0	Total % Cover of: Multiply by:
50% of total cover: 0	20% c	of total cove	er: 0	OBL species 0 $x_1 = 0$
Sapling/Shrub Stratum (Plot size: 30)				FACW species 5 $x = 10$
1	·		·	FAC species 0 $x^3 = 0$
2				FACU species 45 $x 4 = 160$
3.				UPL species 40 $x 5 = 200$
4				Column Totals: <u>90</u> (A) <u>590</u> (B)
	·		·	Prevalence Index = $B/A = 4.33$
5	·		·	
6			·	Hydrophytic Vegetation Indicators:
Total Cove	r: <u>0</u>			Rapid Test for Hydrophytic Vegetation
50% of total cover: 0	20% o	f total cove	r: <u>0</u>	Dominance Test is >50%
Herb Stratum (Plot size: 5)				$- Prevalence index is \leq 3.0$
1. Dactylis glomerata	45	Yes	FACU	data in Remarks or on a separate sheet)
2 Bromus inermis	40	Yes	UPL	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Phalaris arundinacea	5	No	FACW	
3. <u>Thatano aranamaoda</u>	<u> </u>	110	17.017	¹ Indicators of hydric soil and wetland hydrology must
4	·		·	be present, unless disturbed or problematic.
5	·		·	Definitions of Vegetation Strata:
6				Tree Woody plants 2 in (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8.				Septime / abruh Weady plants loss than 2 in DDL
9				and greater than 3.28 ft (1 m) tall.
10	·			
				ferb – All nerbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				
Total Cover	90			Woody vines – All woody vines greater than 3.28 ft in height.
50% of total cover: <u>45</u>	20% o	of total cove	er: <u>18</u>	
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2.				
3				Underschutig
0	·			Vegetation
4	0		·	Present? Yes No 🖌
I otal Cove	r: 0		0	
50% of total cover: 0	20% o	f total cove	r: <u>0</u>	
Remarks: (Include photo numbers here or on a separate s	heet.)			
	,			

Depth	Matrix	to the dept	Redo	x Features	S				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Rei	marks
0-28	10YR5/3	100					Silt Clay		
				·					
				·					
	oncentration D-Der	letion RM-	Reduced Matrix C		l or Coate	d Sand G	rains ² Loca	tion: PI -Pore Li	ining M-Matrix
Hydric Soil	Indicators:						Indicators fo	or Problematic I	Hvdric Soils ³ :
Histosol	(A1)		Polyvalue Belov	N Surface	(S8) (I PI	D	2 cm Mu		
Histic Fr	pipedon (A2)	-	I Olyvalde Delo		(50) (ER	х іх ,	Coast Pi	airie Redox (A16	6) (I RR K. I. R)
Black Hi	istic (A3)		Thin Dark Surfa	, ace (S9) (L	.RR R. M	LRA 149B	$\frac{1}{5}$ cm Mu	ckv Peat or Pea	t (S3) (LRR K. L. R)
Hydroge	en Sulfide (A4)	•	Loamy Mucky	Vineral (F1) (LRR K	(, L)	Dark Su	face (S7) (LRR	K, L)
Stratified	d Layers (A5)	-	Loamy Gleyed	Matrix (F2)	. ,	Polyvalu	e Below Surface	e (S8) (LRR K, L)
Deplete	d Below Dark Surfac	ce (A11)	Depleted Matrix	(F3)			Thin Dar	k Surface (S9) (LRR K, L)
Thick Da	ark Surface (A12)		Redox Dark Su	rface (F6)			Iron-Mar	nganese Masses	(F12) (LRR K, L, R)
Sandy N	/lucky Mineral (S1)	-	Depleted Dark	Surface (F	7)		Piedmor	nt Floodplain Soil	ls (F19) (MLRA 149B)
Sandy G	Gleyed Matrix (S4)	-	Redox Depress	ions (F8)			Mesic S	oodic (TA6) (MLI	RA 144A, 145, 149B)
Sandy F	Redox (S5)						Red Par	ent Material (F21	1)
Stripped	Matrix (S6)						Very Sha	allow Dark Surfa	ce (TF12)
Dark Su	rface (S7) (LRR R,	MLRA 149B)				Other (E	xplain in Remark	(S)
³ Indiantora a	f hydrophytic ycerte	tion and wat	land hydrology mys	the proce	nt unloc	diaturbas	d ar problematic		
Indicators o	r nyaropnytic vegeta	ition and wei	liand hydrology mus	st be prese	ent, uniess	s disturbed	a or problematic.		
Restrictive	Layer (if observed)	:							
Type:									
Depth (in	ches):						Hydric Soil P	resent? Yes	No_✓
Remarks:							•		
	pland along dita		a ta hava haan	alawad i	n tha na	ot but p	ot recently		
0	pland along ditc	n, appears	s to have been	plowed I	n ine pa	asi dui n	orrecently		

Project/Site: NW OHIO WIND	Citv/County:	PAULDING	G CO	Sampling Date: 4/15/2013 6:30:00 PM
Applicant/Owner: WESTWOOD			State: OH	Sampling Point: C-01 WETLAND
Investigator(s). MATTHEW VOLLBRECHT 2115	Section Town	shin Range:	Sec 8 T1N R	2E
Landform (billslope terrace etc.): Flat		cal relief (con		ne). Side slope of creek
Slope (%): 5-10% Let: 696879.9731	4547	457.706		Dotum: UTM NAD 83 Z13N
Sible (%). <u>Clatty silty clay</u>	_ Long:			DatumDet Mapped
			INVVI clas	
Are climatic / hydrologic conditions on the site typical for this time of	year?Yes <u> </u>	No	_ (If no, explain	in Remarks.)
Are Vegetation, Soil, or Hydrology significant	ly disturbed?	Are "Norr	mal Circumstance	es" present? Yes <u>✓</u> No
Are Vegetation, Soil, or Hydrology naturally p	problematic?	(If needed	d, explain any an	swers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showir	ng sampling	point loca	tions, transe	cts, important features, etc.
Hydrophytic Vegetation Present? Yes ✓ No	Is the	Sampled Are	a	
Hydric Soil Present? Yes ✓ No	- within	a Wetland?	Yes	✓ No
Wetland Hydrology Present? Yes ✓ No	If yes, o	optional Wetla	and Site ID: We	tland sample point C-01
Remarks: (Explain alternative procedures here or in a separate rep	port.)			
Wetlands located in bed and along bank of a channeli	zed creek			
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary In	dicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	()		Surface \$	Soil Cracks (B6)
Surface Water (A1) Water-Staine	d Leaves (B9)		Drainage	e Patterns (B10)
✓ High Water Table (A2) Aquatic Faun	a (B13)		Moss Tri	m Lines (B16)
Saturation (A3) Marl Deposits	s (B15)		Dry-Seas	son Water Table (C2)
Water Marks (B1) Hydrogen Su	Ifide Odor (C1)		Crayfish	Burrows (C8)
Sealment Deposits (B2) Oxidized Rhi:	zospheres on Liv	Ing Roots (C	3) <u>Saturatio</u>	on Visible on Aerial Imagery (C9)
Dhit Deposits (B3) Presence of I	Reduced Iron (C4	+) d Saile (C6)		bis Position (D2)
Iron Deposite (B5)		u 30115 (CO)	Geomorp	Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain	n in Remarks)		Microtop	ographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	in in Romanoy		✓ FAC-Nei	utral Test (D5)
Field Observations:				
Surface Water Present? Yes No ✓ Depth (inche	es):			
Water Table Present? Yes ✓ No Depth (inche	es): 9.0	-		
Saturation Present? Yes ✓ No Depth (inche	es): 10.0	- Wetlan	d Hydrology Pre	esent? Yes √ No
(includes capillary fringe)		_		
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous ins	pections), if a	available:	
Pomorko				
Kemarks.				

Sampling Point: C-01 WET

Tree Stratum (Plot size: 30	Absolute % Cover	Dominant	Indicator	Dominance Test worksheet:
1	<u>_/8 COVEL</u>	<u>Species</u>	Status	Number of Dominant Species
2	·			That are OBL, FACW, or FAC: (A)
2				Total Number of Dominant Species Across All Strata: 1 (B)
3				
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
0				
0	0			Prevalence Index worksheet:
	r:		0	<u>Total % Cover of:</u> <u>Multiply by:</u>
50% of total cover: $\underline{\circ}$	20% c	of total cove	r: <u> </u>	$\begin{array}{c c} \text{OBL species} & \underline{0} & \underline{0} \\ \text{FACW species} & 75 & \underline{150} \end{array}$
Sapling/Shrub Stratum (Plot size:)				FAC species 0 $x_3 = 0$
1				FACU species 0 x 4 = 0
2				UPL species 0 x 5 = 0
3				Column Totals: <u>75</u> (A) <u>150</u> (B)
4				Prevalence Index - B/A - 2
5				
6				Hydrophytic Vegetation Indicators:
Total Cove	r: <u>0</u>			\checkmark Dominance Test is >50%
50% of total cover: <u>0</u>	20% o	f total cove	r: <u>0</u>	\checkmark Prevalence Index is $\leq 3.0^1$
Herb Stratum (Plot size: 5)			F A 014/	Morphological Adaptations ¹ (Provide supporting
1. Phalaris arundinacea	/5	Yes	FACW	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation' (Explain)
3				¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cover	. <u>.</u> 75			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: <u>37.5</u>	20% c	of total cove	r: <u>15</u>	neight.
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2				
3				Hydrophytic
4				Vegetation Present? Ves V No
Total Cove	r: 0			
50% of total cover: <u>0</u>	20% o	f total cove	r: <u>0</u>	
Remarks: (Include photo numbers here or on a separate s	sheet.)			
	,			

Depth	Matrix	<	Re	dox Feature	es ,	0	
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc ²	Texture Remarks
0-19	10YR2/1	100					Muck
19-22	10YR6/1	90	10YR5/8	10	С	M	Clay
							<u> </u>
			,			_	
I							
					_		
¹ Type: C=C	oncentration D-C	epletion R		CS=Covers			Grains ² Location: PL=Pore Lining M-Matrix
Hydric Soil	Indicators:			00-00/010			Indicators for Problematic Hydric Soils ³ :
Histosol	l (A1)		Polyvalue Be	low Surface	∍ (S8) (LF	RR R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
✓ Histic E	pipedon (A2)		MLRA 149) B)			Coast Prairie Redox (A16) (LRR K, L, R)
Black H	istic (A3)		Thin Dark Su	rface (S9) (//LRA 149	9B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroge Stratifie	d Lavers (A5)		Loamy Gleve	ed Matrix (F	2)	r , L)	Polyvalue Below Surface (S8) (LRR K, L)
Deplete	d Below Dark Sur	face (A11)	Depleted Ma	trix (F3)	_/		Thin Dark Surface (S9) (LRR K, L)
Thick D	ark Surface (A12)		Redox Dark	Surface (F6)		Iron-Manganese Masses (F12) (LRR K, L, R
Sandy M	Mucky Mineral (S1)	Depleted Dat	rk Surface (F7)		Piedmont Floodplain Soils (F19) (MLRA 149
Sandy C	Bedox (S5)		Redox Depre	SSIONS (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149E Red Parent Material (E21)
Stripped	d Matrix (S6)						Very Shallow Dark Surface (TF12)
Dark Su	urface (S7) (LRR F	R, MLRA 14	9B)				Other (Explain in Remarks)
3							
Pastrictive	t hydrophytic vege	etation and v	vetland hydrology m	lust be pres	ent, unles	ss disturbe	ed or problematic.
Type:		.u).					
Dopth (in	choc):						Hvdric Soil Present? Yes ✓ No
Deptin (in	cries).						
Remarks.							

Project/Site: NW OHIO WIND	City/County: PAULDING	G CO	Sampling Date:		
Applicant/Owner: WESTWOOD		State: OH	Sampling Point: CC-01 UPLAND		
Investigator(s): MATTHEW VOLLBRECHT 2115	Section, Township, Range:	Sec 22, T1N R	3E		
Landform (hillslope, terrace, etc.): Flat	Local relief (con	cave, convex, none)	Flat		
Slope (%): 0-5% Lat: 709350.3329	Long: 4545220.904		Datum: UTM NAD 83Z13N		
Soil Map Unit Name: Sb-Saranac silty clay loam, occasiona	Ily flooded	NWI classific	cation: Not Mapped		
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🖌 No	_ (If no, explain in R	Remarks.)		
Are Vegetation, Soil, or Hydrology significantly	/ disturbed? Are "Norr	nal Circumstances"	present? Yes 🖌 No		
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed	d, explain any answe	ers in Remarks.)		
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No _✓ Yes No _✓ Yes No _✓	Is the Sampled Area within a Wetland? Yes No _ ✓ If yes, optional Wetland Site ID: Upland sample point CC-01
Remarks: (Explain alternative proceed	dures here or in a separate report.)	

HYDROLOGY

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

Sampling Point: CC-01 UP

Ture Olympic (Direct 30	Absolute	Dominan	t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 00)	<u>% Cover</u>	<u>Species?</u>	Status	Number of Dominant Species
1			·	That Are OBL, FACW, or FAC: 0 (A)
2			. <u> </u>	Total Number of Dominant
3			<u> </u>	Species Across All Strata: 2 (B)
4				Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: 0 (A/B)
6				
Tatal Caus	0			Prevalence Index worksheet:
	r:		0	Total % Cover of: Multiply by:
50% of total cover: 0	20% c	of total cove	er: U	$\begin{array}{c} \text{OBL species} \underline{0} \qquad \text{ x 1} = \underline{0} \\ \hline \\ \text{FACW species} 0 \qquad \text{ x 2} = \underline{0} \\ \end{array}$
Sapling/Shrub Stratum (Plot size: 50)				FACTOR species 0 $x_2 = 0$
1				FACt species 65 $x_4 = 260$
2				FACO species 35 $x = 175$
3				Column Totolo: 100 (A) 435 (P)
4.				$\begin{bmatrix} \text{Column rotals.} & \underline{-100} & (A) & \underline{-100} & (B) \end{bmatrix}$
5			· · · · · · · · · · · · · · · · · · ·	Prevalence Index = $B/A = 4.35$
· · · · · · · · · · · · · · · · · · ·				Hydrophytic Vegetation Indicators:
o	0		·	Rapid Test for Hydrophytic Vegetation
Total Cove	r: <u>0</u>			Dominance Test is >50%
50% of total cover: <u>0</u>	20% o	f total cove	r: <u>0</u>	$\frac{1}{2} = \frac{1}{2} $
Herb Stratum (Plot size: 5)				Morphological Adaptations ¹ (Provide supporting
1. Dactylis glomerata	65	Yes	FACU	data in Remarks or on a separate sheet)
2. Bromus inermis	35	Yes	UPL	Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
			·	¹ Indicators of hydric soil and wetland hydrology must
			·	be present, unless disturbed of problematic.
5			·	Definitions of Vegetation Strata:
6	·		·	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7			·	at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11.				of size, and woody plants less than 3.28 ft tall.
Total Cover	. 100		·	Woody vines – All woody vines greater than 3.28 ft in
50				height.
	20% 0			
Woody Vine Stratum (Plot size: <u>50</u>)				
1		·	- <u> </u>	
2				
3				Hydrophytic
4				Vegetation
Total Cove	r: 0			
50% of total cover: 0	20% 0	f total cove	r: 0	
			··	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth	Matrix		Redo	x Feature	s		_
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	TextureRemarks
0-29	10YR5/3	100					Silty Clay
				·			
				·			
				·			
				·			
					·		<u> </u>
<u> </u>				·			
1 Type: C-Co	ncentration D-Der	letion RM-F	Reduced Matrix CS		d or Coate	d Sand G	Prains ² Location: PL-Pore Lining M-Matrix
Hydric Soil I	Indicators:			-0010100			Indicators for Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvaluo Bolov	v Surfaco	(SQ) /I DI		2 cm Muck (A10) (I PR K I MI PA 140R)
Histic Er	(AI) vinedon (A2)	-			(30) (LK	Λ Λ ,	Coast Brairie Redoy (A16) (IRR K I R)
Black Hi	stic (A3)		Thin Dark Surfa	/ 			B) 5 cm Mucky Peat or Peat (S3) (IPP K I P)
	SiiC(AS)	-		linoral (E		LKA 1490 ()	Dark Surface (S7) (LPP K 1)
Hyuroge		-		/IIIIerai (F Motrix (E2		., ∟)	Dark Surface (S7) (LRR R, L)
Stratilieu	a Layers (AD)		_ Loany Gleyeu	(E2)	.)		Thin Dark Surface (S0) (LRR R, L)
Depieted	a Below Dark Sullau	e (ATT) _	_ Depleted Matrix	rface (EG)			Thin Dark Surface (S9) (LRR R, L)
Sondy M	Ark Surface (ATZ)	-	_ Redux Dark Su	Surface (FO)	7)		IIOII-Manganese Masses (F12) (LRR R, L, R) Diadmont Elegandelain Spils (E10) (MI DA 1400)
Sandy G	loved Matrix (S1)	-	_ Depleted Dark	ione (EQ)	1)		Mosic Spedic (TA6) (MI DA 144A, 145, 149B)
Sandy B		-	_ Redux Depress	10115 (FO)			Bod Poront Motorial (F21)
Sanuy R	Motrix (SG)						Red Falent Material (F21)
	Wallix (50)						Very Shallow Dark Surface (TFT2)
Dark Sui		VILKA 149D)					
³ Indiantara of	f hydrophytic ycacto	tion and wat	and hydrology mus	t ha proof		diaturbas	ad ar problematic
Restrictive I	aver (if ebserved)	tion and wet	and hydrology mus	a be prese	ent, unies:		
-	Layer (II Observed)	•					
Type:							
Depth (inc	ches):						Hydric Soil Present? Yes No _✓
Remarks:							

Project/Site: NW OHIO WIND	City/County: PAOLDING CO Sampling Date: 4/10/2013 6.47.34 PM
Applicant/Owner: WESTWOOD	State: OH Sampling Point: CC-01 WEI
Investigator(s): MATTHEW VOLLBRECHT 2115	Section, Township, Range: Sec 22, T1N R3E
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): Side slope of creek
Slope (%): 5-10% Lat: 709353.4220	Long: 4545219.231 Datum: UTM NAD 83Z13N
Soil Map Unit Name: Sb-Saranac silty clay loam, occasiona	Illy flooded NWI classification: Not Mapped
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes 🖌 No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Normal Circumstances" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site man showin	a sampling point locations, transacts, important features, etc.
Hydrophytic Vegetation Present? Yes <u>✓</u> No	Is the Sampled Area
Hydric Soil Present? Yes <u>✓</u> No	within a Wetland? Yes _ ✓ No
Wetland Hydrology Present? Yes <u>√</u> No	If yes, optional Wetland Site ID: Wetland Point CC-01
Remarks: (Explain alternative procedures here or in a separate repo	ort.)
Wetlands located along bank of larger perennial stream	n
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained	Leaves (B9) Drainage Patterns (B10)
✓ High Water Table (A2) Aquatic Fauna	(B13) Moss Trim Lines (B16)
✓ Saturation (A3) Marl Deposits	(B15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulf	ide Odor (C1) Crayfish Burrows (C8)
✓ Sediment Deposits (B2) Oxidized Rhize	ospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
✓ Drift Deposits (B3) Presence of R	educed Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Re	eduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Sur	face (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain	in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	✓ FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No ✓ Depth (inches	s):
Water Table Present? Yes ✓ No Depth (inches	s). 8.0
Saturation Procent? Vos V	a): 10.0 Wetland Hydrology Present? Yes y No.
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:
Remarks:	

Sampling Point: CC-01 WE

Trop Stratum (Plat aize: 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
	% Cover	<u>Species</u> ?	Status	Number of Dominant Species
1	·			That Are OBL, FACW, or FAC: (A)
2	·			Total Number of Dominant
3	·			Species Across Air Strata. (B)
4	·			Percent of Dominant Species That Are OBL_EACW_ or EAC: 100 (A/B)
5	·			
6	0			Prevalence Index worksheet:
Total Cove	r: <u> </u>			Total % Cover of: Multiply by:
50% of total cover: 0	20% o	f total cove	r: <u>0</u>	OBL species $\frac{40}{0}$ x 1 = $\frac{40}{0}$
Sapling/Shrub Stratum (Plot size: 30)				FACW species 0 $x 2 = 0$
1	·			FAC species 0 $x_3 = 0$
2				FACO species 0 $x 4 = 0$
3				Column Totals: 40 (A) 40 (B)
4				
5				Prevalence Index = B/A = <u>1</u>
6.				Hydrophytic Vegetation Indicators:
Total Cove	r. 0			Rapid Test for Hydrophytic Vegetation
			0	✓ Dominance Test is >50%
50% of total cover: 0	20% of	r total cover		✓ Prevalence Index is $\leq 3.0^1$
<u>Schoenonlectus fluviatilis</u>	40	Yes	OBI	Morphological Adaptations ¹ (Provide supporting
		100	OBL	Problematic Hydrophytic Vegetation ¹ (Evaluation)
2	·			
3	·			¹ Indicators of hydric soil and wetland hydrology must
4	·			be present, unless disturbed or problematic.
5	·			Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cover	40			Woody vines - All woody vines greater than 3.28 ft in
50% of total cover: 20	20% o	f total cove	r:8	height.
Woody Vine Stratum (Plot size: 30)				
1				
·				
2	·			
3	·			Hydrophytic Vegetation
4	0			Present? Yes 🖌 No
I otal Cove	r: 0		0	
50% of total cover: U	20% o	f total cover		
Remarks: (Include photo numbers here or on a separate s	heet.)			

Depth	Matrix		Re	dox Featur	es			_
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-10	10YR3/1	100					Silt	
10-18	10YR4/1	90	10YR5/8	10	<u>C</u>	<u>M</u>	Clay	
			·			·		
	·							
						·		
17						- <u> </u>	2	Die Dasse Linie en M. Matrice
Type: C=C Hvdric Soil	Indicators:	epletion, RN	I=Reduced Matrix,	CS=Cover	ed or Coat	ed Sand C	Jrains. Location:	PL=Pore Lining, M=Matrix.
Histoso Histic E Black H Hydrog Stratifie ✓ Deplete Thick D Sandy f Sandy f Sandy f Sandy f Dark Su	I (A1) pipedon (A2) listic (A3) en Sulfide (A4) d Layers (A5) ed Below Dark Surfa ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R	ace (A11)) 2. MLRA 14 5	Polyvalue Be MLRA 149 Thin Dark Su Loamy Muck Depleted Mai Redox Dark Redox Depre	elow Surfac DB) urface (S9) y Mineral (1 ed Matrix (F trix (F3) Surface (F6 rk Surface essions (F8	e (S8) (LR (LRR R, M F1) (LRR I 72) 6) (F7))	R R, ILRA 149 (, L)	 2 cm Muck (A Coast Prairie 5 cm Mucky F Dark Surface Polyvalue Bel Thin Dark Sur Iron-Mangane Piedmont Floo Mesic Spodic Red Parent M Very Shallow Other (Explain 	10) (LRR K, L, MLRA 149B) Redox (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R) (S7) (LRR K, L) ow Surface (S8) (LRR K, L) face (S9) (LRR K, L) se Masses (F12) (LRR K, L, R) odplain Soils (F19) (MLRA 149B) (TA6) (MLRA 144A, 145, 149B) aterial (F21) Dark Surface (TF12) n in Remarks)
Restrictive	Layer (if observed	d):	reliand hydrology h		sent, unles			
Type: Depth (in	nches):						Hydric Soil Preser	nt? Yes <u>√</u> No
Remarks:							-	

Project/Site: NW OHIO WIND	City/County: PAULDING	G CO	Sampling Date:
Applicant/Owner: WESTWOOD		State: OH	Sampling Point: F-01 UPLAND
Investigator(s): MATTHEW VOLLBRECHT 2115	Section, Township, Range	Sec 11, T1	N R2E
Landform (hillslope, terrace, etc.): Flat	Local relief (cor	ncave, convex, n	one): Flat
Slope (%): 0-5% Lat: 701778.8675	Long: 4547474.162		Datum: UTM NAD 83Z13N
Soil Map Unit Name: Sb-Saranac silty clay loam, occasiona	ally flooded	NWI cla	ssification: Not Mapped
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🖌 No	(If no, explair	n in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Nor	mal Circumstand	ces" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally pr	roblematic? (If neede	ed, explain any a	nswers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point loca	ations, trans	ects, important features, etc.
Hydrophytic Vegetation Present? Yes No _✓	Is the Sampled Are	ea	
Hydric Soil Present? Yes No	within a Wetland?	Yes _	No_ <u>√</u>
Wetland Hydrology Present? Yes No _✓	If yes, optional Wet	land Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

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

Sampling Point: F-01 UPL

20	Absolute	Dominant	Indicator	Dominance Test worksheet
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata:(B)
4.				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
o				Prevalence Index worksheet:
Total Cover				Total % Cover of:Multiply by:
50% of total cover: 0	20% c	f total cove	r: <u>0</u>	OBL species $\frac{0}{2}$ x 1 = $\frac{0}{2}$
Sapling/Shrub Stratum (Plot size: <u>30</u>)				FACW species 0 $x 2 = 0$
1				FAC species 0 $x_3 = 0$
2.				FACU species 45 $x 4 = 180$
3				UPL species 50 $x = 250$
				Column Totals: <u>95</u> (A) <u>430</u> (B)
4				Prevalence Index $= B/A = 4.53$
5				
6				Hydrophytic Vegetation Indicators:
Total Cover	<u>0</u>			Rapid Test for Hydrophytic Vegetation
50% of total cover: 0	20% 0	f total cover	0	Dominance Test is >50%
Herb Stratum (Plot size: 5			·	Prevalence Index is ≤3.0 ¹
1. Bromus inermis	50	Yes	UPL	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. Dactylis glomerata	45	Yes	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
4.				Indicators of hydric soil and wetland hydrology must
5				
3				Definitions of Vegetation Strata:
b				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cover	95			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: 47.5	20% o	f total cove	_{r:} 19	height.
Woody Vine Stratum (Plot size: 30				
(1 lot 0120)				
2				
3				Hydrophytic
4				Present? Yes No V
Total Cover	. <u>.</u> 0			
50% of total cover: 0	<u> </u>	f total cover	r <u>: 0</u>	
Remarks: (Include photo numbers here or on a separate s	heet.)			
	,			

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth	Matrix		Redo	x Features	S1		
<u>(inches)</u>	Color (moist)	%	Color (moist)		Type'	Loc	Texture Remarks
0-22	10YR5/4	100					Silty Clay
				·			
				·			
				·			
				·			
				·			
1							2
Type: C=Co	oncentration, D=Dep	oletion, RM=	Reduced Matrix, CS	S=Covered	d or Coate	ed Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	indicators:						Indicators for Problematic Hydric Soils":
Histosol	(A1)	-	Polyvalue Belov	w Surface	(S8) (LR	RR,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Ep	pipedon (A2)		MLRA 149B))			Coast Prairie Redox (A16) (LRR K, L, R)
Black Hi	stic (A3)	-	Thin Dark Surfa	ice (S9) (L	RR R, M	LRA 149B	B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	n Sulfide (A4)	-	Loamy Mucky N	/lineral (F1	I) (LRR K	., L)	Dark Surface (S7) (LRR K, L)
Stratified	Layers (A5)	-	Loamy Gleyed	Matrix (F2)		Polyvalue Below Surface (S8) (LRR K, L)
	Below Dark Surfac	ce (A11)	Depleted Matrix	(F3)			Thin Dark Surface (S9) (LRR K, L)
Thick Da	ark Sufface (A12)	-	Redox Dark Su	rface (F6)			Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy IV	IUCKY MINERAI (S1)	-	Depleted Dark :	Surface (F	7)		Pleamont Floodplain Solis (F19) (MLRA 149B)
Sandy G	leyed Matrix (54)	-	Redox Depress	ions (F8)			Mesic Spoalc (TA6) (MILRA 144A, 145, 149B)
Sandy R	edox (S5)						Red Parent Material (F21)
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)
Dark Sui	rface (S7) (LRR R,	MLRA 149B)				Other (Explain in Remarks)
³ lualiantena at			la a di bu dua la avu			مالمنا سام م	d an arabianatia
Indicators of	nyaropnytic vegeta	ation and wet	land hydrology mus	t be prese	ent, uniess	s disturbed	d or problematic.
Restrictive	_ayer (if observed)						
Туре:							
Depth (inc	ches):						Hydric Soil Present? Yes No √
Remarks:							

Project/Site: NW OHIO WIND	City/County: PAL	JLDING CO	Sampling Date: 4/15/2013 8:13:19 PM			
Applicant/Owner: WESTWOOD		_{State} . OH	Sampling Point: F-01 WETLAND			
Investigator(s); MATTHEW VOLLBRECHT 2115	Section. Township	Sec 11, T1	N R2E			
Landform (hillslope, terrace, etc.); Flat	Local r	elief (concave, convex, n	one); Side bank of creek			
Slope (%): 5-8% Lat: 701778.3322	Long: 4547477	.546	Datum: UTM NAD83Z13N			
Soil Map Unit Name: Sb-Saranac silty clay loam. occasion	ally flooded	NIW/L cla	estification: Not Mapped			
Are elimetic / hydrologic conditions on the site typical for this time of						
Are climatic / hydrologic conditions on the site typical for this time of		No (ii no, explain				
Are Vegetation, Soil, or Hydrology significan	tly disturbed?	Are "Normal Circumstand	ces" present? Yes V No			
Are Vegetation, Soil, or Hydrology naturally	problematic?	(If needed, explain any a	nswers in Remarks.)			
SUMMARY OF FINDINGS – Attach site map showing	ng sampling poi	nt locations, trans	ects, important features, etc.			
Hydrophytic Vegetation Present? Yes ✓ No Hydric Soil Present? Yes ✓ No Wetland Hydrology Present? Yes ✓ No Remarks: (Explain alternative procedures here or in a separate resonance)	Is the Sam within a W If yes, optic	pled Area etland? Yes _ nal Wetland Site ID: _W	✓ No etland sample point F-01			
Remarks: (Explain alternative procedures here or in a separate re	port.)					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary I	ndicators (minimum of two required)			
Primary Indicators (minimum of one is required; check all that appl	y)	Surface	e Soil Cracks (B6)			
Surface Water (A1) Water-Staine	ed Leaves (B9)	Drainag	ge Patterns (B10)			
✓ High Water Table (A2) Aquatic Fault	na (B13)	(B13) Moss Trim Lines (B16)				
✓ Saturation (A3) Marl Deposit	s (B15)	(B15) Dry-Season Water Table (C2)				
Water Marks (B1) Hydrogen Su	ulfide Odor (C1)	Crayfisl	n Burrows (C8)			
Sediment Deposits (B2) Oxidized Rhi	Izospheres on Living	Roots (C3) Saturat	ion Visible on Aerial Imagery (C9)			
Drift Deposits (B3) Presence of Algel Met or Crust (P4) Posent Iron	Reduced Iron (C4)		robio Resition (D2)			
Iron Deposits (B5)	urface (C7)	Shallow	Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7) Other (Expla	in in Remarks)	Orianow	pographic Relief (D4)			
Sparsely Vegetated Concave Surface (B8)	in in reenance,	✓ FAC-Ne	eutral Test (D5)			
Field Observations:						
Surface Water Present? Yes No ✓ Depth (inch	es):					
Water Table Present? Yes ✓ No Depth (inch	es): 11.0					
Saturation Present? Yes <u>✓</u> No <u></u> Depth (inch	es): <u>12.0</u>	Wetland Hydrology P	resent? Yes <u>√</u> No			
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspec	tions), if available:				
		<i>,</i> .				
Demortion						
Water located in wetland at lower elevations than the	sample point					

Sampling Point: F-01 WET

Tara Stratum (Distained 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>00</u>)	% Cover	<u>Species</u> ?	Status	Number of Dominant Species
1	·			That Are OBL, FACW, or FAC: 1 (A)
2	·			Total Number of Dominant
3				Species Across All Strata: 1 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6.				
Total Cove				Tetal % Cover of: Multiply by:
			. 0	$\frac{10121\% \text{ Cover of}}{85} \times 1 = 85$
50% of total cover: <u>0</u>	20% 0	or total cove	r: <u> </u>	EACW species 0 $x_2 = 0$
Sapling/Shrub Stratum (Plot size:)				EAC species 0 $x_3 = 0$
1	·			FACIL species 0 $x_4 = 0$
2				$\frac{1}{10} \text{ species } 0 species$
3				Column Totals: 85 (A) 85 (B)
4				
5				Prevalence Index = $B/A = 1$
6				Hydrophytic Vegetation Indicators:
0	0			Rapid Test for Hydrophytic Vegetation
I otal Cove	r: <u> </u>			\checkmark Dominance Test is >50%
50% of total cover: <u>0</u>	20% 0	f total cover		\checkmark Prevalence Index is $\leq 3.0^1$
Herb Stratum (Plot size: 5)				Morphological Adaptations ¹ (Provide supporting
1. Schoenoplectus fluviatilis	85	Yes	OBL	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
A				¹ Indicators of hydric soil and wetland hydrology must
T				be present, unless disturbed of problematic.
5				Definitions of Vegetation Strata:
6	·			Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7	·			at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11.				of size, and woody plants less than 3.28 ft tall.
Total Cover	. 85			Woody vines – All woody vines greater than 3.28 ft in
50% ((((((((((()))))))))))))))		f total agric	17	height.
	20% 0	n lotal cove	. <u></u>	
Woody Vine Stratum (Plot size: 50				
1	·			
2				
3				Hydrophytic
4				Vegetation
Total Cove	_{r:} 0			
50% of total cover: 0	20% 0	f total cove	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

SUL	S	Ο		
-----	---	---	--	--

Depth	Matrix		Rei	dox Feature	S			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-11	10YR2/1	100					Muck	
11-20	10YR5/1	80	10YR5/8	20	С	Μ	Silty Clay	
							- <u> </u>	
						·		
			. <u>.</u>					
						·		
						·		
					_			
						·		
1 								- Lining M. Martin
Type: C=C Hydric Soil	oncentration, D=De	epletion, RIN	I=Reduced Matrix, (CS=Covere	d or Coat	ed Sand G	Indicators for Problemati	<u>Elning, M=Matrix.</u>
Histosol	(A1)		Polvvalue Be	low Surface	e (S8) (LR	R R.	2 cm Muck (A10) (LRI	R K. L. MLRA 149B)
✓ Histic Epi	pipedon (A2)		MLRA 149	B)	()(,	Coast Prairie Redox (A	A16) (LRR K, L, R)
Black H	istic (A3)		Thin Dark Su	rface (S9) (LRR R, M	LRA 1498	B) 5 cm Mucky Peat or P	eat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Mucky	/ Mineral (F	1) (LRR k	K , L)	Dark Surface (S7) (LR	(R K, L)
Stratified	d Layers (A5) d Below Dark Surf:	ace (A11)	Loamy Gleye	a Matrix (F.	2)		Thin Dark Surface (S9	(100 (38) (LRR K, L)
Thick Da	ark Surface (A12)		Redox Dark S	Surface (F6)		Iron-Manganese Mass	ses (F12) (LRR K, L, R)
Sandy N	/lucky Mineral (S1)		Depleted Dar	k Surface (F7)		Piedmont Floodplain S	Soils (F19) (MLRA 149B)
Sandy G	Gleyed Matrix (S4)		Redox Depre	ssions (F8)			Mesic Spodic (TA6) (N	/ILRA 144A, 145, 149B)
Sandy F	Redox (S5)						Red Parent Material (F	-21) rface (TE12)
Dark Su	Inface (S7) (LRR R	, MLRA 149	B)				Other (Explain in Rem	arks)
		,	,					,
³ Indicators o	f hydrophytic vege	tation and w	etland hydrology m	ust be pres	ent, unles	s disturbe	d or problematic.	
Restrictive	Layer (if observed	d):						
Type:							Ukudnia Cail Dragont2 Va	
Depth (in	ches):						Hydric Soll Present? Te	!SNO
Remarks:								
1								

Project/Site: NW OHIO W	IND			Citv/County:	PAULDING	00	Sampling D	ate: 4/16/2013 7:12:57 Pl
Applicant/Owner: WESTW	OOD				s	_{itate:} OH	Sampling Poir	nt: H-01 UPLAND
Investigator(s): MATTHEW	/ VOLLBF	RECHT	2115	Section To	wnshin Range:	Sec 7, T1N F	 R3E	
Landform (hillslong, torraco, o	ta). Flat			_ 0001011, 101	ocal relief (conca			
Clane (0) 0-5%	705278	3566		454	7304 199		Deturns UT	M NAD83713N
	ty silty cl			Long: 101			Datum:	Manned
Soil Map Unit Name:	ty Silty Cic	ау			/	NWI class	sification: <u>NOT</u>	viappeu
Are climatic / hydrologic condi	tions on the	site typica	al for this time of y	rear?Yes <u></u>	No	(If no, explain i	n Remarks.)	
Are Vegetation, Soil	, or Hy	ydrology _	significantly	y disturbed?	Are "Norma	I Circumstance	s" present? Yes	s 🖌 No
Are Vegetation, Soil	, or H	ydrology _	naturally p	roblematic?	(If needed,	explain any ans	swers in Remark	s.)
SUMMARY OF FINDING	GS – Att	ach site	e map showing	g sampling	g point locatio	ons, transeo	cts, importar	nt features, etc.
Hydrophytic Vegetation Pres	ent?	Yes	No ✓	Is the	e Sampled Area			
Hydric Soil Present?		Yes	No ✓	withi	n a Wetland?	Yes	No_√	
Wetland Hydrology Present?	1	Yes	No ✓	If yes	, optional Wetlan	d Site ID: Upla	and sample p	oint H-01
Remarks: (Explain alternativ	e procedure	es here or	in a separate repo	ort.)	· •			
HYDROLOGY								
Wetland Hydrology Indicat	ors:					Secondary Ind	dicators (minimu	m of two required)
Primary Indicators (minimum	of one is re	equired; ch	neck all that apply))		Surface S	Soil Cracks (B6)	
Surface Water (A1)		-	Water-Stained	d Leaves (B9)		Drainage	Patterns (B10)	
High Water Table (A2)		-	Aquatic Fauna	a (B13)		Moss Trir	m Lines (B16)	
Saturation (A3)		-	Marl Deposits	(B15)		Dry-Seas	on Water Table	(C2)
Water Marks (B1)		-	Hydrogen Sulf	fide Odor (C1)		Crayfish I	Burrows (C8)	
Sediment Deposits (B2)		-	Oxidized Rhiz	ospheres on L	Living Roots (C3)	Saturation	n Visible on Aeri	al Imagery (C9)
Drift Deposits (B3)		-	Presence of R	educed Iron (U4)	Stunted c	bio Resition (D2)	.s (D1)
Iron Denosits (B5)		-	Thin Muck Su	rface (C7)	lied 30115 (CO)	Geomorp	Aquitard (D3)	,
Inundation Visible on Ae	rial Imagen	- (B7)	Other (Explain	nin Remarks)		Microtopo	ographic Relief (I	74)
Sparsely Vegetated Cor	icave Surfa	ce (B8)				FAC-Neu	tral Test (D5))
Field Observations:								
Surface Water Present?	Yes	No _∕	Depth (inches	s):				
Water Table Present?	Yes	No _∕	Depth (inches	s):				
Saturation Present?	Yes	No	Depth (inches	s):	Wetland	Hydrology Pre	sent? Yes	No _∕
(Includes capillary fringe)	eam daude	monitorir	ng well aerial phot	tos previous i	nspections) if ava	ailable:		
	oan gaago	,	ig tren, dendi priot					
Remarks:								

Sampling Point: J-01 UPL

True Structure (Distributed as 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 00)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: 0 (A/B)
6	·			
	0			Prevalence Index worksheet:
l otal Cove	r:		0	Total % Cover of: Multiply by:
50% of total cover: 0	20% c	of total cove	r: <u> </u>	OBL species 0 $x = 0$
Sapling/Shrub Stratum (Plot size: 30)				FACW species 0 $x^2 = 0$
1				FAC species 0 $x^3 = 0$
2				FACU species 05 $x 4 = 200$
3.				UPL species 35 $x 5 = 175$
4				$\begin{bmatrix} Column Iotals: \underline{100} \\ (A) \\ \underline{435} \\ (B) \end{bmatrix}$
	·			Prevalence Index = $B/A = 4.35$
5				
6				Hydrophytic Vegetation Indicators:
Total Cove	r: <u>0</u>			Rapid Test for Hydrophytic Vegetation
50% of total cover: _0	20% of	f total cove	r: <u>0</u>	Dominance l'est is >50%
Herb Stratum (Plot size: 5)				$- \frac{\text{Prevalence index is } \le 3.0}{1.00}$
1. Dactylis glomerata	65	Yes	FACU	data in Remarks or on a separate sheet)
2 Bromus inermis	35	Yes	UPL	Problematic Hydrophytic Vegetation ¹ (Explain)
2				
3	·			¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree Woody plants 2 in (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8.				Senting / should be when the loss than 2 in DDU
9		-		and greater than 3.28 ft (1 m) tall.
10				
	·			of size, and woody plants less than 3.28 ft tall.
11	400			
Total Cover	100			Woody vines – All woody vines greater than 3.28 ft in height
50% of total cover: <u>50</u>	20% o	f total cove	r: <u>20</u>	lingiti
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2.				
3	·			Hadeselada
0	·			Vegetation
4	0			Present? Yes No _✓
Total Cove	r: <u>0</u>		•	
50% of total cover: <u>0</u>	20% o	f total cove	r: <u>0</u>	
Remarks: (Include photo numbers here or on a separate s	sheet.)			
	·			

Profile Desc	ription: (Describe	to the dept	h needed to docur	nent the i	ndicator	or confirm	m the absence of indicators.)
Depth	Matrix		Redo	x Features	S		-
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks
0-29	10YR3/4	100					Silty Clay
				·			
				·			
				·			
				·			
				·			
				·			
				·			
				·			
				·			
¹ Type: C=Co	oncentration, D=Dep	pletion, RM=	Reduced Matrix, CS	S=Covered	d or Coate	ed Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicators for Problematic Hydric Soils ³ :
Histosol	(A1)	-	Polyvalue Belov	w Surface	(S8) (LRI	RR,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Ep	pipedon (A2)		MLRA 149B))			Coast Prairie Redox (A16) (LRR K, L, R)
Black His	stic (A3)	-	Thin Dark Surfa	ice (S9) (L	RR R, M	LRA 149B	B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	n Sulfide (A4)	-	Loamy Mucky N	/lineral (F1	1) (LRR K	, L)	Dark Surface (S7) (LRR K, L)
Stratified	I Layers (A5)	-	Loamy Gleyed	Matrix (F2)		Polyvalue Below Surface (S8) (LRR K, L)
Depleted	Below Dark Surfac	ce (A11)	Depleted Matrix	(F3)			Thin Dark Surface (S9) (LRR K, L)
Thick Da	rk Surface (A12)	-	Redox Dark Su	rface (F6)			Iron-Manganese Masses (F12) (LRR K, L, R
Sandy M	lucky Mineral (S1)	-	Depleted Dark	Surface (F	7)		Piedmont Floodplain Soils (F19) (MLRA 149)
Sandy G	leyed Matrix (S4)	-	Redox Depress	ions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B
Sandy R	edox (S5)						Red Parent Material (F21)
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)
Dark Sur	face (S7) (LRR R,	MLRA 149B)				Other (Explain in Remarks)
³ Indicators of	hydrophytic vegeta	ation and wet	land hydrology mus	t be prese	ent, unless	s disturbec	d or problematic.
Restrictive L	ayer (if observed)	:					
Туре:							
Depth (inc	hes).						Hydric Soil Present? Yes No _✓
Doparko:							
Science Science	oils show evider	nce of pas	t tillage				
		•	0				

Project/Site: NW OHIO WIND	City/County: PAULDIN	G CO	Sampling Date: 4/16/2013 6:39:10 PM
Applicant/Owner: WESTWOOD		_{State:} OH	Sampling Point: H-01 WETLAND
Investigator(s): MATTHEW VOLLBRECHT 2115	Section. Township. Range	Sec 7, T1N R	3E
Landform (hillslope, terrace, etc.); Flat	Local relief (cor	ncave. convex. none); Side slope of ditched creel
Slope (%): 5-10% Lat: 705278.6854	Long. 4547306.376		Datum: UTM NAD 83Z13N
Soil Map Unit Name: LC-Latty silty clay	_ Long	NWI classi	fication. Not Mapped
Are climatic / hydrologic conditions on the site typical for this time of i		(If no, explain in	Pomorke)
Are Vegetetion Soil or Hydrology eignificant	vedi : Tes No		" propont? Voc V
Are Vegetation, Soil, or Hydrology significant	reblemetic? All No		
Are vegetation, Soil, or Hydrology haturally p	froblematic? (If neede	ed, explain any ansv	vers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showir	g sampling point loca	ations, transect	ts, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Ar	ea	
Hydric Soil Present? Yes ✓ No	within a Wetland?	Yes _ ✓	No
Wetland Hydrology Present? Yes <u>✓</u> No	_ If yes, optional Wet	land Site ID: Wetl	and sample point H-01
Remarks: (Explain alternative procedures here or in a separate rep	ort.)		
Wetlands located in bed and along bank of small ditch	ed creek		
Wetland Hydrology Indicators:		Secondary Indi	cators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Sc	bil Cracks (B6)
Surface Water (A1) Water-Staine	d Leaves (B9)	Drainage F	Patterns (B10)
✓ High Water Table (A2) Aquatic Faun	a (B13)	Moss Trim	Lines (B16)
Saturation (A3)	(B15)	Dry-Seaso	n Water Table (C2)
Water Marks (B1) Hydrogen Su	fide Odor (C1)	Crayfish B	urrows (C8)
Sediment Deposits (B2) Oxidized Rhi:	cospheres on Living Roots (C	C3) Saturation	Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of I	Reduced Iron (C4)	Stunted or	Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron F	Reduction in Tilled Soils (C6)	Geomorph	ic Position (D2)
Iron Deposits (B5) Thin Muck Su	ırface (C7)	Shallow Ac	quitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain	n in Remarks)	Microtopog	graphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		✓ FAC-Neutr	al Test (D5)
Field Observations:	.c).		
Water Table Present? Ves V No Depth (inche	$(3) \cdot \frac{40}{40}$		
Saturation Present?	(s): 6.0 Wetlar	nd Hydrology Pres	ent? Ves 🗸 No
(includes capillary fringe)		iu nyulology Fles	
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if	available:	
Remarks:			
Water in wetland located at lower elevations that the s	ample point		

Sampling Point: H-01 WET

Trop Strotum (Plat size, 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
	% Cover	<u>Species</u> ?	Status	Number of Dominant Species
1		·		That Are OBL, FACW, or FAC: (A)
2		·		Total Number of Dominant
3		·		Species Across All Strata: [B]
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Drevelance Index werkeheet:
Total Cove	r. 0			Total % Cover of: Multiply by:
	200/ 4	•	0	$\begin{array}{c} \underline{\qquad}\\ \underline{\qquad}\\\underline{\qquad}\\\underline{\qquad}\\\underline{\qquad}\\\underline{\qquad}\\\underline{\qquad}\\\underline{\qquad}\\\underline{\qquad}\\$
50% of total cover: $\underline{\circ}$	20% 0	Di lotai cove	I. <u> </u>	EACW species 0 $x_2 = 0$
Sapling/Shrub Stratum (Plot size: 00)				FAC species 0 $x_3 = 0$
1		·		FACIL species 0 $x_4 = 0$
2				$\frac{1}{100} \text{ species } \frac{0}{100} \text{ species } \frac{1}{100} species$
3				Column Totals: 25 (A) 25 (B)
4				
5				Prevalence Index = $B/A = 1$
6				Hydronhytic Vegetation Indicators:
0	0	·		Rapid Test for Hydrophytic Vegetation
Total Cove	er:	-		\checkmark Dominance Test is >50%
50% of total cover: <u>0</u>	20% o	of total cove	r: <u>0</u>	\checkmark Prevalence Index is $\leq 3.0^1$
Herb Stratum (Plot size: 5)				Morphological Adaptations ¹ (Provide supporting
_{1.} Typha angustifolia	25	Yes	OBL	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
4				¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed of problematic.
5				Definitions of Vegetation Strata:
6		·		Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11.				of size, and woody plants less than 3.28 ft tall.
Total Cove	. 25			Woody vines – All woody vines greater than 3.28 ft in
				height.
	20%0	DI LOLAI COVE		
Woody Vine Stratum (Plot size: <u>50</u>)				
1				
2				
3				Hydrophytic
4				Vegetation
Total Cove	er: 0			
50% of total cover: 0	20% 0	of total cove	r· 0	
			•	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Depth (inches)	Color (moist)	0/	Color (moiet)	uox ⊢eatur	Type1		Texture	Remarks
		100		70				Remarks
J-14	101 KZ/1	100						
14-22	10YR6/1	90	10YR5/8	10	_ <u>C</u>	<u>M</u>	Clay	
			·			·	·	
						·	·	
						·	·	
							·	
					_			
			·			·		
		enletion PM	-Reduced Matrix (ed or Cost	ed Sand G	rains ² Locatio	n: PI-Pore Lining M-Matrix
lydric Soil	Indicators:			CS=Coven		eu Sanu G	Indicators for	Problematic Hydric Soils ³ :
Histoso	l (A1) pipedon (A2)		Polyvalue Be MLRA 149	low Surfac B)	e (S8) (LR	R R,	2 cm Muck Coast Prai	(A10) (LRR K, L, MLRA 149B) rie Redox (A16) (LRR K, L, R)
Black H	istic (A3)		Thin Dark Su	rface (S9)	(LRR R, N	ILRA 1498	B) 5 cm Muck	xy Peat or Peat (S3) (LRR K, L, R)
_ Hydroge Stratific	en Sulfide (A4)		Loamy Mucky	y Mineral (I	F1) (LRR I	(, L)	Dark Surfa	ICE (S7) (LRR K, L)
_ Stratille Deplete	d Below Dark Surfa	ace (A11)	Depleted Mat	trix (F3)	-2)		Thin Dark	Surface (S9) (LRR K. L)
Thick D	ark Surface (A12)		Redox Dark S	Surface (F6	6)		Iron-Manga	anese Masses (F12) (LRR K, L, R)
Sandy M	Mucky Mineral (S1)		Depleted Dar	k Surface	(F7)		Piedmont I	Floodplain Soils (F19) (MLRA 1498
_ Sandy (Gleyed Matrix (S4)		Redox Depre	ssions (F8	5)		Mesic Spo	dic (TA6) (MLRA 144A, 145, 149B
Sandy F	Redox (S5)						Red Paren	It Material (F21)
Stripped Dark Su	Inface (S7) (LRR R	, MLRA 149	9B)				Other (Exp	ow Dark Surrace (1F12) plain in Remarks)
ndicators o	of hydrophytic vege	tation and v	vetland hydrology m	ust be pre	sent, unles	s disturbe	d or problematic.	
estrictive	Layer (if observed	d):						
Depth (in	ches):						Hydric Soil Pre	sent? Yes <u>√</u> No
emarks:								

Project/Site: NW OHIO WIND	City/County: PAULDING CO Sampling Date: 4/16/2013 7:18:34 PM
Applicant/Owner: WESTWOOD	State: OH Sampling Point: I-01 UPLAND
Investigator(s): MATTHEW VOLLBRECHT 2115	Section Township Range: Sec 8, T1N R3E
Landform (hillslope, terrace, etc.). Flat	control, romonip, range
Class (0), 0-5%	Local relief (concave, convex, none) UTM NAD 83713N
Slope (%): C C / C Lat: / CC RCC / C C C	Datum: Datum: Not Manned
Soil Map Unit Name:Auluing clay	NWI classification: _NOT Wapped
Are climatic / hydrologic conditions on the site typical for this time o	year? Yes <u>✓</u> No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology signification	ntly disturbed? Are "Normal Circumstances" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No _✓	Is the Sampled Area
Hydric Soil Present? Yes No _✓	within a Wetland? Yes No _√
Wetland Hydrology Present? Yes No _✓	If yes, optional Wetland Site ID: Upland sample point I-01
Remarks: (Explain alternative procedures here or in a separate re	port.)
Upland sample point along small ditched stream	
L HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	ly) Surface Soil Cracks (B6)
Surface Water (A1) Water-Stain	ed Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fau	ina (B13) Moss Trim Lines (B16)
Saturation (A3)	ts (B15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen S	ulfide Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rh	izospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of	Reduced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron	Reduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck S	Surface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Expl	ain in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _ Depth (incl	les):
Water Table Present? Yes No ✓_ Depth (incl	les):
Saturation Present? Yes No _ Depth (includes capillary fringe)	les): Wetland Hydrology Present? Yes No ✓
Describe Recorded Data (stream gauge, monitoring well, aerial pl	notos, previous inspections), if available:
Remarks:	

Sampling Point: I-01 UPL

Trac Stratum (Dist size, 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
	<u>% Cover</u>	<u>Species</u> ?	Status	Number of Dominant Species
1	·			That Are OBL, FACW, or FAC: 0 (A)
2	·			Total Number of Dominant
3				Species Across All Strata: [B]
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6				Prevalence Index worksheet:
Total Cove	r: 0			Total % Cover of: Multiply by:
50% of total cover: 0	20% 0	of total cove	r 0	$\begin{array}{c} \hline \hline \\ OBL \text{ species } 0 \\ \hline \\ x_1 = 0 \\ \hline \end{array}$
Sapling/Shrub Stratum (Plot size: 30)	20700		··	FACW species 0 $x_2 = 0$
				FAC species 0 $x_3 = 0$
l				FACU species 85 x 4 = 340
2	·			UPL species 15 x 5 = 75
3				Column Totals: 100 (A) 415 (B)
4				· · · · · ·
5				Prevalence Index = $B/A = 4.15$
6				Hydrophytic Vegetation Indicators:
Total Cove	r. 0			Rapid Test for Hydrophytic Vegetation
			0	Dominance Test is >50%
50% of total cover: 0	20% of	t total cover	r: <u> </u>	Prevalence Index is ≤3.0 ¹
<u>Dectulis domorata</u>	85	Voc	EACU	Morphological Adaptations ¹ (Provide supporting
	45	165		data in Remarks or on a separate sheet)
2. Bromus inermis	15	NO	UPL	Problematic Hydrophytic Vegetation (Explain)
3				¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6.				
7				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
°	·			a breast height (bbh), regardless of height.
0				Sapling/shrub – Woody plants less than 3 in. DBH
9	·			
10				Herb – All herbaceous (non-woody) plants, regardless
11	·			
Total Cover	<u>100 100 100 100 100 100 100 100 100 100</u>			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: <u>50</u>	20% o	f total cove	r: <u>20</u>	neight.
Woody Vine Stratum (Plot size: 30)				
1.				
2				
2				
				Vegetation
4				Present? Yes No _✓
Total Cove	r: <u>0</u>		<u> </u>	
50% of total cover: <u>0</u>	20% o	f total cove	r: <u>0</u>	
Remarks: (Include photo numbers here or on a separate s	sheet.)			1

Junctesy Journel (Intersy) Zool (Intersy) Zool (Intersy) Kelling Kelling Kelling 0-18 10YR5/3 100	Lose Lose <thlos< th=""> Lose Lose L</thlos<>	Interlies/ Control titles/ 22 1ype Loc Texture Remarks 0-18 10YR5/3 100
Dr15 101 K3/3 100 Loarny CL 18-22 10YR4/2 100 Clay 18-22 10YR4/2 100 Clay 18-22 10YR4/2 100 Clay 18-23 10YR4/2 100 Clay 18-24 10YR4/2 100 Clay 18-25 10YR4/2 100 Clay 18-26 10YR4/2 100 Clay 18-27 10YR4/2 100 Clay 18-28 10YR4/2 100 Clay 18-29 10 100 100 19 100 100 100 100 100 100 100 19 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100	10 101 R3/3 100 Litality th -22 10YR4/2 100 Clay -23 -24 -25 -27 -24 -27 -27 -27 -27 -27 -27 -27 -28 -28 -28 -28 -29 -27 -27 -27 -29 -28 -28 -20 -29 -29 -20 -20 -20 -20 -20 -20 -20 -20 -20 -20 -20 -20 -20 -20 -20 -20 -20 -20 -20 -20 -20 -20 -20 -20 -20 -20	D116 101 K3/3 100 Clay 18-22 10YR4/2 100 Clay IB-22 IOYRA/2 100 Clay IB-24 Indicators Indicators Indicators Image: Indicators Indicators Indicators Indicators Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histic Fipiedon (A2) MLRA 149B) S cm Muck (A10) (LRR K, L, MLR) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) S cm Mucky Peat or Peat (S3) (LR K, L) Black Histic (A3) Thin Dark Surface (S9) (LRR K, L) Dark Surface (S9) (LR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (S8) (LR K, L) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (LR K, L) Iron-Manganese Masses (F12) (LF M, L) Sandy Redox (S5) Sendy Redox (S5) Sendy Redox (S5) Sendy Redox (S5)
18-22 10YR4/2 100 Clay Image: Second Se	-22 10YR4/2 100 Clay	18-22 10YR4/2 100 Clay Image: Clay Image: Clay Image: Clay Image: Clay </td
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix type: MIRA 149B) Coast Praine Redox (A16) (LRR K, L) Coast Praine Redox (A16) (LRR K, L) Black Histic (A3) Thin Dark Surface (S3) (LRR K, L) Depleted Matrix (F2) Depleted Matrix (F2) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S3) (LRR K, L) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145 Sandy Redox (S5) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B)	pe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix fric Soil Indicators: Indicators for Problematic Hydric Soils? Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 1439B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 1439B) Polyvalue Below Surface (S9) (LRR R, MLRA 1439B) Coast Prairie Redox (A16) (LRR K, L, MLRA 1439B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Polyvalue Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S11) Depleted Dark Surface (F6) Iron-Manganese (S8) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 1443, 145, Sandy Gleyed Matrix (S4) Sandy Redox (S5) Redox Depressions (F8) Redox Surface (T16) (MLRA 1443, 145, Sandy Gleyed Matrix (S4) Medox Depressions (F8) Stripped Matrix (S6) Other (Explain in Remarks) Other (Explain in Remarks) Iron-Manganese (S7) (LRR K, IF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Iron-Manganese (S7) (LR R (S6) Redox Depressions (F8) Redox Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) </td <td>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=N Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=N Mydric Soil Indicators: Indicators for Problematic Hydric So Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLR, Histic Epipedon (A2) Histosol (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LR R, Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S9) (LRR R, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) (LRR R, L) Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) Iron-Manganese Masses (F12) (LF Thick Dark Surface (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (M Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (M Sandy Redox (S5) Stripped Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, A) Stripped Matrix (S6) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)</td>	Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=N Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=N Mydric Soil Indicators: Indicators for Problematic Hydric So Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLR, Histic Epipedon (A2) Histosol (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LR R, Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S9) (LRR R, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) (LRR R, L) Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) Iron-Manganese Masses (F12) (LF Thick Dark Surface (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (M Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (M Sandy Redox (S5) Stripped Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, A) Stripped Matrix (S6) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix (PL=Pore Lining, M=Atrix Matrix (PL=Po	pe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix fife Soil Indicators: Indicators for Problematic Hydric Soils?: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR K, L) Black Histic (A3) Thin Dark Surface (S9) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Thic Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Gleyed Matrix (S6) Redox Depressions (F8) Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ticators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. thydric Soil Present? Yes No	Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=N lydric Soil Indicators: Indicators for Problematic Hydric So Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Muck (A10) (LRR K, L, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S3) (LR R, K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Dark Surface (S9) (LRR K, L) Depleted Below Dark Surface (A12) Redox Dark Surface (F6) Iton-Manganese Masses (F12) (LF Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (L Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Very Shallow Dark Surface (TF12)
Image: Stripped Matrix (S6) Surface (S7) Surface (S7) Coast Prainie Redox Casto (S8) CLRR R, MLRA 149B) Stripped Matrix (S6) Loamy Mucky Mineral (F1) LRR K, L) Dapk Edel Matrix (S6) Surface (F7) Polyvalue Below Surface	pe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Coverd or Coated Sand Grains. ³ Location: PL=Pore Lining, M=Matrix fric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 14) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Polyvalue Below Surface (S9) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 144, 145, Sandy Gleyed Matrix (S4) Sandy Redox (S5) Redox Depressions (F6) Iron-Manganese Masses (F12) (LRR K, L) Stripped Matrix (S4) Redox Depressions (F6) Very Shallow Dark Surface (T71) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (T71) Very Shallow Dark Surface (T71) Stripped Matrix (S6) Very Shallow Dark Surface (T71) Red Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (T712) Dark Surface (T712) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (T712) Mesic Spodic (TA6) (MLRA 144A, 145, T62)	Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=N ydric Soil Indicators: Indicators for Problematic Hydric So Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLR, Coast Prairie Redox (A16) (LRR K, L) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 2 const Prairie Redox (A16) (LRR K, L) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LR R, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) Thin Dark Surface (S9) (LRR R, MLRA 144A, Redox Dark Surface (F7) Sandy Redox (S5) Redox Dark Surface (F7) Piedmont Floodplain Soils (F19) (N Sandy Redox (S5) Redox Dark Surface (F7) Piedmont Floodplain Soils (F19) (N Sandy Redox (S5) Redox Daressions (F8) Red Parent Materiai (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Otheret complematic.
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (F7) Thick Dark Surface (A12) Redox Dark Surface (F7) Thin Dark Surface (S1) (LRR A 1448, 145 Sandy Medox (S5) Beleved Matrix (S4) Depleted Matrix (F2) Polyvalue Below Dark Surface (F7) Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 1448, 145 Sandy Redox (S5) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Estrictive Layer (if observed): Type: Type: Depleted Surface (S7) (LRR R, MLRA 149B)	pe: C-Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix dric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Thic Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Matrix (F2) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Stratified Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Straty Redox Matrix (S4) Redox Depressions (F8) Dark Surface (S7) (LRR R, MLRA 1449B) Other (Explain in Remarks) ficators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. strictive Layer (if Observed): Type: Type: Depleted Dark Surface (S1) (Present? Yes No	Expre: C-Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ³ Location: PL=Pore Lining, M=N ydric Soil Indicators: Indicators for Problematic Hydric So Histosol (A1) Polyvalue Below Surface (S8) (LRR R, L, MLR, L, MLR, L) Histosol (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR K, L) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Type: C-Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ Histosol (A1) Polyvalue Below Surface (S8) (LRR R, LSP) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L) Black Histic (A3) Thin Dark Surface (S9) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S9) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S1) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLR A 1444, 144, 144, 144, 144, 144, 144, 1	pe: C-Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix dric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S9) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F12) (LRR K, Sandy Mucky S0) Sandy Redox (S5) Redox Depressions (F8) Mesic Spocia (TA6) (MLRA 144A, 145, Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Wery Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Coater (TF12) Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. strictive Layer (if observed): Type: Depth (inches):	Type: C-Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ³ Location: PL=Pore Lining, M=N ydric Soil Indicators: Indicators for Problematic Hydric So Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Coast Prairie Redox (A10) (LRR K, L, MLR, Coast Prairie Redox (A10) (LRR K, L) Histosol (A2) MLRA 149B) Coast Prairie Redox (A10) (LRR K, L) Histosol (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A10) (LRR K, L) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (M Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Other (Explain in Remarks)
Type: C-Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, MLRA 14 Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S7) (LRR K, L) Thin Dark Surface (A11) Depleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLR Sandy Redox (S5)) Stripped Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145 Sandy Redox (S5) Uray Shallow Dark Surface (TF12) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Layer (if observed): Type:	pe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix dric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 144 Histosol (A2) MLRA 149B) Coast Praire Redox (A16) (LRR K, L, MLRA 144 Histosol (A3)	Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=N ydric Soil Indicators: Indicators for Problematic Hydric So Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Locast Priarite Redox (A16) (LRR K, L, MLR/L) Histosol (A2) MLRA 149B) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) Stratified Layers (A5) Depleted Matrix (F3) Stratified Layers (A5) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S4) Redox Depressions (F8) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Cype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix ydric Soil Indicators for Problematic Hydric Soils ³ Indicators: Indicators for Problematic Hydric Soils ³ Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histo Epipedon (A2) MLRA 149B) Black Histic (A3)	pe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix dric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L) Strattified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S7) (LRR K, L) Thic Dark Surface (A11) Depleted Dark Surface (F7) Thin Dark Surface (S7) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F12) (MLRA 144A, 145, Sandy Redox (S5) Stripped Matrix (S6) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Uvery Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) Sandy Redox (S5) Surface (S7) (LRR R, MLRA 149B) Uvery Shallow Dark Surface (TF12) Depleted Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Uvery Shallow Dark Surface (TF12) Depleted Surface (S7) (LRR R, MLRA 144B, 145, Sandy Redox (S5) Hydric Soil Present? Yes	Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=N ydric Soil Indicators: Indicators for Problematic Hydric So
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) Indicators for Problematic Hydric Soils ³ Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Depleted Below Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 1449A, 145 Sandy Redox (S5) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) Stripped Matrix (S6) User (if observed): Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Layer (if observed): Type: Derut (inches):	pe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix dric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, L, Black Histic (A3) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, MLRA 144; Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Depleted Bolow Dark Surface (A11) Depleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 144A, 145, Sandy Mucky Mineral (S1) Sandy Redox (S5) Stripped Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, Sandy Redox (S5) Stripped Matrix (S6) Uvery Shallow Dark Surface (TF12) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. strictive Layer (If observed): Type:	Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=N ydric Soil Indicators: Indicators for Problematic Hydric So Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Coast Priarie Redox (A10) (LRR K, L, MLRA Histic Epipedon (A2) MLRA 149B) Coast Priarie Redox (A10) (LRR K, L) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Muck / Peat or Peat (S3) (LR K, L) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stattlified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LF Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F12) (LF Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, Sandy Redox (S5) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Other (Explain in Remarks)
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Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 14 Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR I, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLR Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145 Sandy Redox (S5) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Yes_ No <	pe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix dric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Listic Epipedon (A2) Indicators for Problematic Hydric Soils ³ : Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, F Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 1445, Sandy Redox (S5) Stripped Matrix (S6) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 1444, 145, Red Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No trictive Layer (if observed): Type:	Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=N ydric Soil Indicators: Indicators: Indicators for Problematic Hydric So Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2) 2 cm Muck (A10) (LRR K, L, MLRA Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (N Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Layer (if observed):
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Thick Dark Surface (A12) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, [F12]) Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, [F12]) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Other (Explain in Remarks) trictive Layer (if observed): Type: Hydric Soil Present? Yes No Depth (inches): Hydric Soil Present? Yes No	
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLR Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 144 Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Type: Hydric Soil Present? Yes	Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 145, 250) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Image: Comparison of the second s	Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (N Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed):
Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 144, 144, 144, 144, 144, 144, 14	Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 200, 200, 200, 200, 200, 200, 200, 20	
Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Other (Explain in Remarks) Restrictive Layer (if observed): Type: Denth (inches): Hydric Soil Present? Yes No	Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	
Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No	Stripped Matrix (S6)	Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed):
Dark Sufface (S7) (LKK K, MLKA 149B) Other (Explain in Kentarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No	dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. strictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No _	Dark Sufface (S7) (LKK K, MLKA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed):
Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No	dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. strictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No _	Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed):
Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No	strictive Layer (if observed): Type:	Restrictive Layer (if observed):
Type: Depth (inches): No	Type: Depth (inches): Yes No _	
Depth (inches): Hydric Soil Present? Yes No	Depth (inches): Hydric Soil Present? Yes No _	Туре:
		Depth (inches): Hydric Soil Present? Yes
emarke:	marke:	penarke:

Project/Site: NW OHIO W	IND			City/County:	PAULDING	G CO	Sampling Date: 4/16/2013 6:34:21 PM
Applicant/Owner: WESTWO	JOD					State [.] OH	Sampling Point: I-01 WETLAND
Investigator(s): MATTHEW		CHT 2	115	Section Tou	nahin Banga:	Sec 8. T1N R3	E
Landform (billolong, torroog, of	Flat	-	_				Side slope of ditched cree
	706483 164	52		L	7259 128	cave, convex, none)	
Slope (%): <u>5 10 %</u> Lat:				Long: 404	200.120		Datum: OTMINADODZION
Soil Map Unit Name: PC-Pa	uiding Clay					NWI classifi	cation: Not Mapped
Are climatic / hydrologic condit	ions on the site	e typical	for this time of y	/ear?Yes 🗹	No	_ (If no, explain in F	(emarks.)
Are Vegetation, Soil	, or Hydro	logy	significantl	y disturbed?	Are "Norn	nal Circumstances"	present? Yes 🖌 No
Are Vegetation, Soil	, or Hydro	logy	naturally p	roblematic?	(If needed	d, explain any answe	ers in Remarks.)
SUMMARY OF FINDING	GS – Attacl	n site	map showin	g sampling	point loca	tions, transects	, important features, etc.
Hydrophytic Vegetation Pres	ent? Y	as √	No	Is the	Sampled Are	а	
Hydric Soil Present?	Yr	es √	No	withi	n a Wetland?	Yes _ ✓ _	No
Wetland Hydrology Present?	Y	es ✓	No	If ves	optional Wetla	and Site ID: Wetla	nd sample point I-01
Remarks: (Explain alternativ	e procedures h	ere or ir	n a separate rep	ort.)			
Wetland in bed of and a	along bank (of smal	Il ditched cree	ek			
	liong baint c	in onna					
HYDROLOGY							
Wetland Hydrology Indicate	ors:					Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum	of one is requi	red: che	ck all that apply))		Surface Soil	Cracks (B6)
Surface Water (A1)			Water-Stainer	d Leaves (BQ)		Oundee een	atterns (B10)
$- \qquad \qquad$			_ Water-Stained	a (B13)		Drainager a	ines (B16)
\checkmark Saturation (A3)			Marl Deposits	(B15)		Dry-Season	Water Table (C2)
Water Marks (B1)			Hvdrogen Sul	fide Odor (C1)		Cravfish Bu	rrows (C8)
Sediment Deposits (B2)		_	Oxidized Rhiz	rospheres on l	iving Roots (Ca	3) Saturation V	(isible on Aerial Imagery (C9)
Drift Deposits (B3)			Presence of R	Reduced Iron (C4)	Stunted or S	Stressed Plants (D1)
Algal Mat or Crust (B4)			- Recent Iron R	eduction in Til	ed Soils (C6)	Geomorphic	Position (D2)
Iron Deposits (B5)			_ Thin Muck Su	Irface (C7)		Shallow Aqu	uitard (D3)
Inundation Visible on Ae	rial Imagery (B	7)	Other (Explain	n in Remarks)		Microtopogr	aphic Relief (D4)
Sparsely Vegetated Con	cave Surface (B8)	_ 、 .	,		✓ FAC-Neutra	l Test (D5)
Field Observations:							
Surface Water Present?	Yes	No <u>✓</u>	Depth (inches	s):			
Water Table Present?	Yes <u>√</u>	No	Depth (inches	s): <u>9.0</u>			
Saturation Present?	Yes 🖌	No	Depth (inches	s): <u>10.0</u>	Wetlan	d Hydrology Prese	nt? Yes <u>√</u> No
(includes capillary fringe)							
Describe Recorded Data (str	eam gauge, mo	onitoring	i well, aerial phot	tos, previous ii	ispections), if a	ivailable:	
Remarks:							
Water in creek below el	evation of sa	ample	point				
			P •				
1							

Sampling Point: I-01 WET

Tree Stratum (Plot size: 30	Absolute	Dominant	Indicator Status	Dominance Test worksheet:		
		<u>Species</u> :	Status	Number of Dominant Species		
				That Are OBL, FACW, or FAC: (A)		
2				Total Number of Dominant		
3				Species Across All Strata: (B)		
4				Percent of Dominant Species		
5				That Are OBL, FACW, or FAC: (A/B)		
6				Prevalence Index worksheet:		
Total Cover	. <u>.</u> 0			Total % Cover of: Multiply by:		
50% of total cover: 0	20% o	f total cove	r: 0	OBL species 55 $x_1 = 55$		
Sapling/Shrub Stratum (Plot size: 30)				FACW species 0 $x 2 = 0$		
1				FAC species <u>15</u> x 3 = <u>45</u>		
·				FACU species 0 x 4 = 0		
2				UPL species $0 x 5 = 0$		
3				Column Totals: <u>70</u> (A) <u>100</u> (B)		
4				5 1 43		
5				Prevalence Index = B/A =		
6				Hydrophytic Vegetation Indicators:		
Total Cove	. 0			Rapid Test for Hydrophytic Vegetation		
E0% of total covers 0	20% at	f total anyo	. 0	\checkmark Dominance Test is >50%		
Herb Stratum (Plot size: 5	20%0	i lotal covel		✓ Prevalence Index is $\leq 3.0^1$		
Carex lacustris	30	Ves	OBI	Morphological Adaptations ¹ (Provide supporting		
	25	Vee		data in Remarks of on a separate sneet)		
2. Typha angustitolia	20	<u>Tes</u>				
3. Panicum virgatum	15	Yes	FAC	¹ Indicators of hydric soil and wetland hydrology must		
4				be present, unless disturbed or problematic.		
5				Definitions of Vegetation Strata:		
6						
7.				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height		
8						
0				Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3 28 ft (1 m) tall		
9	·					
10				Herb – All herbaceous (non-woody) plants, regardless		
11						
Total Cover	70			Woody vines – All woody vines greater than 3.28 ft in bound		
50% of total cover: <u>35</u>	20% o	f total cove	r: <u>14</u>	neight.		
Woody Vine Stratum (Plot size: 30)						
1.						
2						
2						
				Hydrophytic Vegetation		
4				Present? Yes 🖌 No		
Total Cover	<u> </u>					
50% of total cover: <u>0</u>	20% of	f total cover	<u> 0 </u>			
Remarks: (Include photo numbers here or on a separate sheet.)						

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth	Matrix Redox Features			_			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²	_ Texture Remarks
0-12	10YR3/1	100					Silt
12-22	10YR5/1	90	10YR5/8	10	С	М	Clay
				-			
				_			
<u> </u>							
¹ Type: C=Co	oncentration, D=Dep	letion, RN	=Reduced Matrix, CS	S=Covere	d or Coate	ed Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	Indicators:						Indicators for Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Belo	w Surface	e (S8) (LR	R R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Ep	pipedon (A2)		MLRA 149B)			Coast Prairie Redox (A16) (LRR K, L, R)
Black Hi	stic (A3)		Thin Dark Surfa	ace (S9) (LRR R, M	LRA 149E	B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	n Sulfide (A4)		Loamy Mucky I	Mineral (F	1) (LRR M	K, L)	Dark Surface (S7) (LRR K, L)
Stratified	Layers (A5)	<i></i>	Loamy Gleyed	Matrix (F2	2)		Polyvalue Below Surface (S8) (LRR K, L)
✓ Depleted	d Below Dark Surfac	e (A11)	Depleted Matrix	x (F3)			Thin Dark Surface (S9) (LRR K, L)
Thick Da	ark Surface (A12)		Redox Dark Su	Inface (F6)		Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy IV	lucky Mineral (ST)		Depieted Dark	Sunace (-7)		Pleamont Floodplain Solis (F19) (MLRA 1498
Sandy Gieyed Matrix (54) Kedox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 14							Red Parent Material (F21)
Sanay Kedox (S5)						Very Shallow Dark Surface (TE12)	
Dark Su	rface (S7) (I RR R I	MI RA 149	B)				Other (Explain in Remarks)
³ Indicators of	f hydrophytic vegeta	tion and w	etland hydrology mus	st be pres	ent, unles	s disturbe	ed or problematic.
Restrictive I	_aver (if observed)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,		
Type:	,						
Denth (in	-h) -						Hydric Soil Present? Yes ✓ No
Depth (ind	cnes):						
Remarks:							

Project/Site: NW OHIO WIND	City/County: PAULDING CO Sampling Date: 4/16/2013 7:12:57 PM					
Applicant/Owner: WESTWOOD	State: OH Sampling Point: J-01 UPLAND					
Investigator(a): MATTHEW VOLLBRECHT 2115	Section Township Dongo, Sec 9 T1N R3E					
	Section, Township, Range					
Landform (hillslope, terrace, etc.): 1122	Local relief (concave, convex, none):					
Slope (%): 0-3% Lat: 100792.4773	Long: 4546002.292 Datum: 011/11/AD 85215N					
Soil Map Unit Name: PC-Paulding clay	NWI classification: Not Mapped					
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes _✔ No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Circumstances" present? Yes ✓ No					
Are Vegetation, Soil, or Hydrology naturally pro	oblematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No _✓	Is the Sampled Area					
Hydric Soil Present? Yes No ✓	within a Wetland? Yes No $_{\checkmark}$					
Wetland Hydrology Present? Yes No	If yes, optional Wetland Site ID: Upland sample point J-01					
Remarks: (Explain alternative procedures here or in a separate repo	rt.)					
Upland sample point along a wetland located in the bec	l of a road ditch					
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained	Leaves (B9) Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna	(B13) Moss Trim Lines (B16)					
Saturation (A3)	(B15) Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfi	de Odor (C1) Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizo	spheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3) Presence of Re	educed Iron (C4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Iron Re	duction in Tilled Soils (C6) Geomorphic Position (D2)					
Iron Deposits (B5) Thin Muck Surf	ace (C7) Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain	in Remarks) Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present? Yes No ✓ Depth (inches):					
Water Table Present? Yes No ✓ Depth (inches):					
Saturation Present? Yes No ✓ Depth (inches): Wetland Hydrology Present? Yes No _✓					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring weil, aerial photo	s, previous inspections), ir available:					
Remarks:						

Sampling Point: J-01 UPL

True Structure (Distributed as 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 00)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: 0 (A/B)
6	·			
	0			Prevalence Index worksheet:
l otal Cove	r:		0	Total % Cover of: Multiply by:
50% of total cover: 0	20% c	of total cove	r: <u> </u>	OBL species 0 $x = 0$
Sapling/Shrub Stratum (Plot size: 30)				FACW species 0 $x^2 = 0$
1				FAC species 0 $x^3 = 0$
2				FACU species 05 $x 4 = 200$
3.				UPL species 35 $x 5 = 175$
4				$\begin{bmatrix} Column Iotals: \underline{100} \\ (A) \\ \underline{435} \\ (B) \end{bmatrix}$
	·			Prevalence Index = $B/A = 4.35$
5				
6				Hydrophytic Vegetation Indicators:
Total Cove	r: <u>0</u>			Rapid Test for Hydrophytic Vegetation
50% of total cover: _0	20% of	f total cove	r: <u>0</u>	Dominance l'est is >50%
Herb Stratum (Plot size: 5)				$- \frac{\text{Prevalence index is } \le 3.0}{1.00}$
1. Dactylis glomerata	65	Yes	FACU	data in Remarks or on a separate sheet)
2 Bromus inermis	35	Yes	UPL	Problematic Hydrophytic Vegetation ¹ (Explain)
2				
3	·			¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree Woody plants 2 in (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8.				Senting / should be when the loss than 2 in DDU
9		-		and greater than 3.28 ft (1 m) tall.
10				
	·			of size, and woody plants less than 3.28 ft tall.
11	400			
Total Cover	100			Woody vines – All woody vines greater than 3.28 ft in height
50% of total cover: <u>50</u>	20% o	f total cove	r: <u>20</u>	lingiti
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2.				
3	·			Hadeselada
0	·			Vegetation
4	0			Present? Yes No _✓
Total Cove	r: <u>0</u>		•	
50% of total cover: <u>0</u>	20% o	f total cove	r: <u>0</u>	
Remarks: (Include photo numbers here or on a separate s	sheet.)			
	·			

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth	Matrix		Redo	x Features	<u>S</u>	. 2	
(inches)	Color (moist)	%	Color (moist)	%	Type'	_Loc ²	_ <u>lexture</u> <u>Remarks</u>
0-19	10YR5/3	100					Silty Clay
<u> </u>				·			
				·			
<u> </u>							
				·			
			<u> </u>				2
Type: C=Co	oncentration, D=De	pletion, RM=	Reduced Matrix, CS	s=Covered	d or Coate	ed Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.
riyaric Soll I				o <i>i</i>	(00) (indicators for Problematic Hydric Solis":
Histosol	(A1)		Polyvalue Belov	w Surface	(S8) (LRI	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
	stic $(A2)$		Thin Dark Surfs))) (SO) (I			Coast Prairie Redox (AT6) (LRR R, L, R)
Hydroge	suc (A3) on Sulfide (ΔA)		Loamy Mucky M	/lineral (E1		LKA 1490 (1)	Dark Surface (S7) (IRR K I)
Stratified	1 avers (A5)		Loamy Gleved	Matrix (F2		, ⊑/	Polyvalue Below Surface (S8) (I BB K. I.)
Depleted	d Below Dark Surfac	ce (A11)	Depleted Matrix	(F3)	/		Thin Dark Surface (S9) (LRR K. L)
Thick Da	ark Surface (A12)		Redox Dark Su	rface (F6)			Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)		Depleted Dark	Surface (F	7)		Piedmont Floodplain Soils (F19) (MLRA 149B
Sandy G	Bleyed Matrix (S4)		Redox Depress	ions (F8)	,		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy R	Redox (S5)						Red Parent Material (F21)
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)
Dark Su	rface (S7) (LRR R,	MLRA 149E	3)				Other (Explain in Remarks)
³ Indicators of	f hydrophytic vegeta	ation and we	tland hydrology mus	t be prese	ent, unless	s disturbed	d or problematic.
Restrictive I	Layer (if observed)):					
Туре:							
Depth (ind	ches):						Hydric Soil Present? Yes No _✓
Remarks:	,						

I

Project/Site: NW OHIO WIND	City/County: PAULDING CO Sampling Date: 4/16/2013 6:39:10 PM					
Applicant/Owner: WESTWOOD	State: OH Sampling Point: J-01 WETLAND					
Investigator(s): MATTHEW VOLLBRECHT 2115	Section Township Range: Sec 9, T1N R3E					
Landform (hillslope, terrace, etc.). Flat	Local relief (concave, convex, none). Side slope of road ditch					
Plane (%) 5-8% Let 708790 5024	4548598 668					
	_ Long: Datum: Not Mapped					
Soil Map Unit Name: Rule Cay	NWI classification: NVI classification:					
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes <u>✓</u> No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significant	tly disturbed? Are "Normal Circumstances" present? Yes ✓ No					
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes 🗸 No	Is the Sampled Area					
Hydric Soil Present? Yes ✓ No	within a Wetland? Yes _ ✓ _ No					
Wetland Hydrology Present? Yes ✓ No	If ves. optional Wetland Site ID: Wetland sample point J-01					
Remarks: (Explain alternative procedures here or in a separate re	port.)					
Wetland located in the bed of a road ditch						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: check all that app	v) Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stain	ed Leaves (B9) Drainage Patterns (B10)					
✓ High Water Table (A2) Aquatic Fau	ma (B13) Moss Trim Lines (B16)					
✓ Saturation (A3) Marl Deposi	is (B15) Dry-Season Water Table (C2)					
Water Marks (B1) Hvdrogen S	ulfide Odor (C1) Cravfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rh	izospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3)	Reduced Iron (C4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Reduction in Tilled Soils (C6) Geomorphic Position (D2)					
Iron Deposits (B5) Thin Muck S	urface (C7) Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Expla	in in Remarks) Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	✓ FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present? Yes No ✓ Depth (inch	es):					
Water Table Present? Yes <u>✓</u> No Depth (inch	es): <u>4.0</u>					
Saturation Present? Yes ✓ No Depth (inch	es): <u>5.0</u> Wetland Hydrology Present? Yes <u>√</u> No					
(includes capillary fringe)	ates, provious inspections), if evoluble:					
Describe Recorded Data (stream gauge, monitoring well, aerial pr	otos, previous inspections), ir available:					
Remarks:						
Sampling Point: J-01 WET

Tree Stratum (Plat size, 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>00</u>)	<u>% Cover</u>	<u>Species</u> ?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: 100 (A/B)
6				
Tatal Caus	0			Prevalence Index worksheet:
	r. <u> </u>		0	I otal % Cover of: Multiply by:
50% of total cover: 0	20% o	of total cove	r: <u>0</u>	OBL species 23 $x_1 = 23$
Sapling/Shrub Stratum (Plot size: 50)				FACW species 0 $x^2 = 0$
1				FAC species 0 $x_3 = 0$
2				FACU species 0 $x 4 = 0$
3				$\begin{array}{c} \text{OPL species} \underline{0} \qquad & \text{X 5} = \underline{0} \\ \text{Oplume Tatalax 25} \qquad & \text{(A)} \underline{25} \qquad & \text{(B)} \end{array}$
4.				Column Totals: $\underline{23}$ (A) $\underline{23}$ (B)
5				Prevalence Index = $B/A = 1$
				Hydronhytic Vegetation Indicatory
6	0			Popid Test for Hydrophytic Vegetation
Total Cove	r: <u>0</u>			\checkmark Dominance Test in $\sim 50\%$
50% of total cover: 0	20% of	f total cover	r: <u>0</u>	\checkmark Dominance rest is >50%
Herb Stratum (Plot size: 5)				Morphological Adaptations ¹ (Provide supporting
1. Typha angustifolia	25	Yes	OBL	data in Remarks or on a separate sheet)
2.				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
	·			¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5	·			Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sanling/shrub - Woody plants less than 3 in DBH
9.				and greater than 3.28 ft (1 m) tall.
10				Herb - All berbaceous (non-woody) plants, regardless
				of size, and woody plants less than 3.28 ft tall.
	25			Weedy vince All woody vince greater than 2.20 ft in
Total Cover	. 20		-	height.
50% of total cover: <u>12.5</u>	20% o	f total cove	r: <u>5</u>	
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2				
3.				Hydronhytic
4				Vegetation
Total Cava	r. 0			Present? Yes <u>V</u> No
			0	
50% of total cover: 0	20% o	t total cover	r <u>: 0</u>	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Profile Desc	ription: (Describe	e to the de	pth needed to docu	ment the	indicator	or confirm	rm the absence of indicators.)
Depth	Matrix		Redo	ox Feature	es	0	_
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²	_ Texture Remarks
0-11	10YR3/1	100					Muck
11-24	10YR7/1	90	10YR5/8	10	С	Μ	Clay
				_			
				_			
			·				
——							
			·	_			
			·				
¹ Type: C=Co	oncentration, D=De	pletion, RN	I=Reduced Matrix, C	S=Covere	d or Coate	ed Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.
Histosol	$(\Delta 1)$		Polyvalue Belo	w Surface	(S8) (I RI	2 R	2 cm Muck (A10) (I RR K MI RA 149B)
Histosof	pipedon (A2)		MLRA 149B		, (00) (E R	х IX,	Coast Prairie Redox (A16) (LRR K, L, R)
Black Hi	stic (A3)		Thin Dark Surfa	ace (S9) (LRR R, M	LRA 149E	B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	n Sulfide (A4)		Loamy Mucky	Mineral (F	1) (LRR K	(, L)	Dark Surface (S7) (LRR K, L)
Stratified	Layers (A5)	(0.4.4)	Loamy Gleyed	Matrix (F2	2)		Polyvalue Below Surface (S8) (LRR K, L)
Depleted	d Below Dark Surface	ce (A11)	Depleted Matri	x (F3) urface (E6)	\		Thin Dark Surface (S9) (LRR K, L)
Sandy M	fucky Mineral (S1)		Redux Dark St	Surface (F0)) F7)		Piedmont Floodplain Soils (F12) (LRR R, L, R
Sandy G	Bleved Matrix (S4)		Redox Depress	sions (F8)	")		Mesic Spodic (TA6) (MLRA 144A, 145, 149E
Sandy R	edox (S5)			(-)			Red Parent Material (F21)
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)
Dark Su	rface (S7) (LRR R,	MLRA 149	B)				Other (Explain in Remarks)
³ Indicators of	f hydrophytic vegeta	ation and v	vetland hydrology mu	st be pres	ent, unless	s disturbe	ed or problematic.
Restrictive I	_ayer (if observed)):					
Type: CI	ay						
Depth (ind	ches): <u>11.0</u>						Hydric Soil Present? Yes <u> V</u> No
Remarks:							

Project/Site: NW OHIO W	/IND			Citv/Countv:	PAULDING	co	Sampling D	Date: 4/15/2	2013 8:02:06 PM
Applicant/Owner: WESTW	OOD				S	_{state:} OH	Sampling Poi	_{int:} K-01	UPLAND
Investigator(s) MATTHEV	V VOLLB	RECHT	2115	Section Tow	nshin Range:	Sec 10, T1N	 I R3E		
Landform (billslopa, torraco, c	te v. Flat				hone relief (conco		no). Flat		
	710226	235		4548	737 6500	ve, convex, no	nie). <u></u>	ΤΜ ΝΑΓ) 83713N
Slope (%): <u>0070</u> Lat:		200		Long: HOHC			Datum:	Monnoc	4
Soil Map Unit Name: PC-Pa		ау				NWI clas	ssification: <u>INOL</u>	Mappeo	1
Are climatic / hydrologic cond	itions on the	e site typic	cal for this time of y	ear?Yes 🔽	No	(If no, explain	in Remarks.)		
Are Vegetation, Soil _	, or H	ydrology	significantly	y disturbed?	Are "Norma	I Circumstance	es" present? Ye	es 🖌	No
Are Vegetation, Soil _	, or H	ydrology	naturally pr	roblematic?	(If needed,	explain any an	swers in Remark	ks.)	
SUMMARY OF FINDIN	GS – Att	ach sit	e map showing	g sampling	point location	ons, transe	cts, importa	nt featu	res, etc.
Hydrophytic Vegetation Pres	sent?	Yes	No ✓	Is the	Sampled Area				
Hydric Soil Present?		Yes	No ✓	withir	a Wetland?	Yes _	No_√		
Wetland Hydrology Present	?	Yes	No 🗸	If yes,	optional Wetland	d Site ID: Up	land sample p	point K-()1
Remarks: (Explain alternati	ve procedur	es here o	or in a separate repo	ort.)					
HYDROLOGY									
Wetland Hydrology Indica	tors:					Secondary Ir	dicators (minimu	um of two i	required)
Primary Indicators (minimun	n of one is r	equired; c	check all that apply)			Surface	Soil Cracks (B6)		
Surface Water (A1)			Water-Stained	d Leaves (B9)		Drainage	e Patterns (B10)		
High Water Table (A2)			Aquatic Fauna	a (B13)		Moss Tri	m Lines (B16)		
Saturation (A3)			Marl Deposits	(B15)		Dry-Sea	son Water Table	(C2)	
Water Marks (B1)			Hydrogen Sulf	fide Odor (C1)		Crayfish	Burrows (C8)		
Sediment Deposits (B2)			Oxidized Rhize	ospheres on Li	ving Roots (C3)	Saturatio	on Visible on Aer	ial Imager	y (C9)
Drift Deposits (B3)			Presence of R	Reduced Iron (C	;4) ad Caila (CC)	Stunted	or Stressed Plan	its (D1)	
Iron Deposits (B5)			Recent Iron R	rface (C7)	ed Solis (C6)	Geomor	Aquitard (D3)	<u>(</u>)	
Inundation Visible on A	erial Imager	(B7)	Other (Explain	in Remarks)		Shallow Microton	Aquitaru (D3) Iographic Relief ((D4)	
Sparsely Vegetated Co	ncave Surfa	ce (B8)		r in Romanoj		FAC-Nei	utral Test (D5)	(0+)	
Field Observations:		. ,					()		
Surface Water Present?	Yes	No	Depth (inches	s):					
Water Table Present?	Yes	No	Depth (inches	s):					
Saturation Present? (includes capillary fringe)	Yes	No	✓ Depth (inches	s):	Wetland	Hydrology Pre	esent? Yes	No	» <u>√ </u>
Describe Recorded Data (st	ream gauge	, monitor	ing well, aerial phot	tos, previous in	spections), if ava	ailable:			
Remarks:									

Sampling Point: K-01 UPL

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 50	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata:(B)
4	·			
			·	That Are OBL. FACW. or FAC: 0 (A/B)
5			·	
6			·	Prevalence Index worksheet:
Total Cove	r: <u>0</u>			Total % Cover of: Multiply by:
50% of total cover: 0	20% c	of total cove	er: 0	OBL species 0 $x = 0$
Sapling/Shrub Stratum (Plot size: 30)				FACW species 0 $x 2 = 0$
1				FAC species 0 $x 3 = 0$
	·			FACU species <u>30</u> x 4 = <u>120</u>
2	·	-	·	UPL species <u>40</u> x 5 = <u>200</u>
3	·		·	Column Totals: 70 (A) 320 (B)
4				
5				Prevalence Index = $B/A = \frac{4.57}{2}$
6.				Hydrophytic Vegetation Indicators:
Tatal Caus	0			Rapid Test for Hydrophytic Vegetation
l otal Cove	r:		•	Dominance Test is >50%
50% of total cover: 0	20% 0	f total cove	r: <u>0</u>	Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: <u>5</u>)				Morphological Adaptations ¹ (Provide supporting
1. Bromus inermis	40	Yes	UPL	data in Remarks or on a separate sheet)
2. Dactylis glomerata	30	Yes	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3				
	·			¹ Indicators of hydric soil and wetland hydrology must
4			·	be present, unless disturbed or problematic.
5			·	Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8.				Conting (shout) Weady plants loss than 2 in DDU
9				and greater than 3.28 ft (1 m) tall.
10	·		·	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3 28 ft tall
11				
Total Cover	<u>. 70 </u>			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: <u>35</u>	20% o	f total cove	_{r:} 14	neight.
Woody Vine Stratum (Plot size: 30)				
1				
2	·		·	
3	·		·	Hydrophytic
4				Present? Yes No V
Total Cove	r: 0			
50% of total cover: 0	20% o	f total cove	r: 0	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Profile Desc	cription: (Describe	to the depth	n needed to document th	e indicator	or confirm	n the absence	of indicators.)
Ueptn (inches)	Color (moist)	%	<u>Redox Featu</u> Color (moist) %	Type ¹	Loc ²	Texture	Remarks
0-24	10YR4/5	100				Silty loarr	
			·				
			·				
				rod or Coote	d Sond C	roino ² 1.00	etion: DL-Doro Lining M-Metrix
Hydric Soil	Indicators:		reduced Matrix, CS=COVE		u Sanu G	Indicators	for Problematic Hydric Soils ³ :
Histosol	(A1)	_	Polyvalue Below Surfa	ce (S8) (LR I	R R,	2 cm M	luck (A10) (LRR K, L, MLRA 149B)
Histic E	pipedon (A2)		MLRA 149B)			Coast I	Prairie Redox (A16) (LRR K, L, R)
Black H	istic (A3)	-	Thin Dark Surface (S9)) (LRR R, M	LRA 149B	B) 5 cm M	lucky Peat or Peat (S3) (LRR K, L, R)
Hydroge Stratifie	d Lavers (A5)	-	Loamy Mucky Mineral	(F1) (LRR n F2)	., ∟)	Dark S Polvval	unace (S7) (LRR K, L) lue Below Surface (S8) (LRR K, L)
Deplete	d Below Dark Surfac	e (A11)	Depleted Matrix (F3)			Thin Da	ark Surface (S9) (LRR K, L)
Thick Da	ark Surface (A12)	-	Redox Dark Surface (F	6)		Iron-Ma	anganese Masses (F12) (LRR K, L, R)
Sandy N	Aucky Mineral (S1)	-	Depleted Dark Surface Rodox Depressions (E)	e (F7) R)		Piedmo	ont Floodplain Soils (F19) (MLRA 149B) Specie (TA6) (MLRA 144A, 145, 149B)
Sandy C	Redox (S5)	-		0)		Red Pa	arent Material (F21)
Stripped	Matrix (S6)					Very SI	hallow Dark Surface (TF12)
Dark Su	urface (S7) (LRR R, I	MLRA 149B))			Other (Explain in Remarks)
³ Indicators o	f hydrophytic yegeta	tion and wet	land hydrology must be pre	sent unles	e disturbor	l or problematic	
Restrictive	Layer (if observed)		and hydrology must be pre				•
Туре:							
Depth (in	ches):					Hydric Soil	Present? Yes No _✓
Remarks:	,						
1							

I

Project/Site: NW OHIO WIND	City/County: PAL	JLDING CO	Sampling Date: 4/15/2013 8:05:13 PM
Applicant/Owner: WESTWOOD		_{State:} OH	Sampling Point: K-01 WETLAND
Investigator(s); MATTHEW VOLLBRECHT 2115	Section. Township	Range: Sec 10, T1	N R3E
Landform (hillslope, terrace, etc.); Flat	Local re	elief (concave, convex, n	one): Side slope of road ditch
Slope (%): 5-10% Lat. 710226.294	4548735	.644	Datum: UTM NAD 83Z13N
Sold Map Linit Name: Pc-Paulding Clav	Long		Datum
Are aligned to / hudral a sin and it is an the site to give this time of u			
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes <u>v</u> r	vo (if no, explair	n In Remarks.)
Are Vegetation, Soil, or Hydrology significantly	y disturbed?	Are "Normal Circumstand	ces" present? Yes _▼ No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic?	If needed, explain any a	nswers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling poi	nt locations, transe	ects, important features, etc.
Hydrophytic Vegetation Present? Yes V	Is the Sam	pled Area	
Hydric Soil Present? Yes ✓ No	within a W	etland? Yes _	✓ No
Wetland Hydrology Present? Yes ✓ No	If yes, optio	nal Wetland Site ID: W	etland sample point K-01
Remarks: (Explain alternative procedures here or in a separate repo	prt.)		
Wetland located in the bed of road ditch			
		O secondaria l	
Wetland Hydrology Indicators:		Secondary I	ndicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface	Soil Cracks (B6)
Surface Water (A1) Water-Stained	Leaves (B9)	Drainag	e Patterns (B10)
L <u>✓</u> High Water Table (A2) Aquatic Fauna	ı (B13)	Moss T	rim Lines (B16)
✓ Saturation (A3) Marl Deposits	(B15)	Dry-Sea	ason Water Table (C2)
Water Marks (B1) Hydrogen Sulf	ide Odor (C1)	Crayfish	n Burrows (C8)
Sediment Deposits (B2) Oxidized Rhize	ospheres on Living I	Roots (C3) Saturati	on Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of R	educed Iron (C4)	Stunted	or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Ro	eduction in Tilled So	uls (C6) Geomo	rphic Position (D2)
I mon Deposits (B5)		Shallow	Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain	i in Remarks)	Microto	pographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		FAC-N€	eutral Test (D5)
Field Observations:	<u>,</u>		
Surface Water Present? Yes No Y Depth (inches	^{s):}		
Water Table Present? Yes <u>✓</u> No Depth (inches	$(3): \frac{8.0}{40.0}$		
Saturation Present? Yes <u>✓</u> No Depth (inches	s): <u>10.0</u>	Wetland Hydrology Pi	resent? Yes <u>✓</u> No
Describe Recorded Data (stream gauge monitoring well aerial phot	os previous inspect	ions) if available:	
Remarks:			

Sampling Point: K-01 WET

Ture Oliverture (DL 4 1 30	Absolute	Dominan	t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 00)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1		·		That Are OBL, FACW, or FAC: 2 (A)
2		·		Total Number of Dominant
3				Species Across All Strata: <u>2</u> (B)
4				Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: 100 (A/B)
6	_			
	0	·		Prevalence Index worksheet:
l otal Cove	er:	-	0	Total % Cover of: Multiply by:
50% of total cover: 0	20% c	of total cove	er: <u>U</u>	OBL species 15 $x_1 = 15$
Sapling/Shrub Stratum (Plot size: 30)				FACW species 33 $x_2 = 70$
1				FAC species 0 $x^3 = 0$
2				FACU species 0 $x 4 = 0$
3.				$\begin{array}{c} \text{UPL species} \underline{0} \qquad x \ 5 = \underline{0} \\ \text{Output the species} \underline{50} \\ Output the spe$
4	_			Column Totals: $\underline{50}$ (A) $\underline{65}$ (B)
		·		Prevalence Index = $B/A = 1.7$
5		·		
6		·		Hydrophytic Vegetation Indicators:
Total Cove	er: 0	-		Rapid Test for Hydrophytic Vegetation
50% of total cover: 0	20% o	of total cove	er: 0	Dominance l'est is >50%
Herb Stratum (Plot size: 5)				✓ Prevalence index is ≤3.0
1. Phalaris arundinacea	35	Yes	FACW	data in Remarks or on a separate sheet)
2 Carex lacustris	15	Yes	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
2				
3		·		¹ Indicators of hydric soil and wetland hydrology must
4		·		be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				
7				at breast height (DBH), regardless of height.
8.				
0	_			and greater than 3.28 ft (1 m) tall.
		·		
10		·		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3 28 ft tall
11		·		
Total Cove	r: <u>50</u>			Woody vines – All woody vines greater than 3.28 ft in height
50% of total cover: <u>25</u>	20% c	of total cove	er: <u>10</u>	Toight.
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2				
2				
		·		Hydrophytic Vegetation
4		·		Present? Yes <u>No</u>
Total Cove	er: 0			
50% of total cover: 0	20% o	of total cove	er: 0	
Remarks: (Include photo numbers here or on a separate s	sheet)			
	511001.)			
1				

(Inches) Color (moist) % Type ¹ Loc ² Texture Remarks 0-10 10YR4/1 100 Silt	Depth	Matrix		Redox Features	_	
U-10 10YR4/1 100 Silt 10-16 10YR6/1 100 Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Silty Clay Image: Silty Silty Clay Image: Silty Si	(inches)	Color (moist)	%	Color (moist) % Type ¹ Loc ²	<u>Texture</u>	Remarks
10-16 10YR6/1 100 Silty Clay Image: Silty Clay Silty Clay Silty Silty Clay Image: Silty Clay Silty Clay Silty Clay Image: Silty Clay Silty Clay Silty Clay Image: Silty Clay	0-10	10YR4/1	100		<u>Silt</u>	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils* Histos (A1) Polyvalue Below Surface (S8) (LRR R, Histos (A1) Polyvalue Below Surface (S8) (LRR R, Histos (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, LRR A 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, L) Depleted Below Sulfde (A4) Loarny Muck (A10) (LRR K, L) Stratified Layers (A5) Loarny Gleyed Matrix (F2) Thick Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Redox (IS1) Depleted Dark Surface (F7) Sandy Redox (IS5) Redox Depressions (F8) Stripped Matrix (S6) Redox Depressions (F8) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Type: Deph (inchees): Deph (inchees)	10-16	10YR6/1	100		Silty Clay	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils [*] : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR K, L) Black Histic (A3)						
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Biack Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Biack Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Biack Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Biack Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (A11) Depleted Matrix (F2) Thic Dark Surface (A12) Redox Dark Surface (F6) Thic Dark Surface (A11) Depleted Matrix (F2) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Medva (S5) Redox Depressions (F8) Sandy Medox (S5) Wesi Spodic (TA6) (MLRA 144A, 145, 144A,						
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ¹ : Histic Epipedon (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Soil Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (F6) Thin Dark Surface (F6) Y Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Stratified C43 Redox Depressions (F8) Stratified Soil C12 Redox Depressions (F8) Stratified C44 Redox Depressions (F8) Stratified To oboptinic Soil (S1) Depleted Dark Surface (F7) Stripped Matrix (S4) Redox Depressions (F8) Matrix Soil Depleted Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and						
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histic Epipedon (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) Thin Dark Surface (F5) Polyvalue Below Surface (F6) Stratified Layers (A5) Loamy Mucky Mineral (F1) Stratified Stratified Surface (A11) Depleted Matrix (F2) Sandy Mucky Mineral (S1) Depleted Matrix (F3) Stratified Stratified Stratified Stratified Stratified Layers (A5) Iron-Manganese Masses (F12) (LRR K, L, P) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 145, 144 Sandy Redox (S5) Sandy Redox (S5) Other (Explain in Remarks) Bark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (If observed): Type: Metrix Soil Present? Yes / No						
'Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, L) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Thin Dark Surface (A11) Depleted Dark Surface (F6) Thick Dark Surface (A12) Redox Dark Surface (F7) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Stratified Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) User Surface (S7) (LRR K, L) Striped Matrix (S4) Redox Depressions (F8) Striped Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 1448A) Striped Matrix (S6) Very Shallow Dark Surface (F712) Dark Surface (S7) (LRR K, L) Red Parent Material (F21) Striped Matrix (S4) Redox Depressions (F8) Hydric Soil Present? Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetla						
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, L, Runch 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR K, L) Black Histic (A3) Thin Dark Surface (S9) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Dark Surface (A11) Depleted Matrix (F2) Thin Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Sandy Redox (S5) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Present? Yes / No						
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histic Epipedon (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Loamy Gleyed Matrix (F3) Thick Dark Surface (A11) Depleted Dark Surface (F6) Thick Dark Surface (A12) Redox Dark Surface (F7) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Redox (S5) Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Charler (S7) (LRR R, MLRA 149B) Stripped Matrix (S6) Coast Prairie Redox (A144A, 145, 143 Sandy Redox (S5) Coast Prairie (S7) (LRR R, MLRA 149B) Charler (S7) (LRR R, MLRA 149B) Coast Prairie Redox (S7) (LRR R, 144A, 145, 143 Sandy Redox (S5) Hydric Soil Present? Yes / No Dark Surface (S7) (LRR R, MLRA 149B) Cother (Explain in Remarks) Charter (Material (F21)) Very Shallow Dark Surface (TF						
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, L & Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Y Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:						
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, L Castring Redox (A16) (LRR K, L, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A4) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Thick Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Type:						
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Y Depleted Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Thick Dark Surface (S1) Depleted Dark Surface (F7) Stardy Gleyed Matrix (S4) Redox Depressions (F8) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes Yes No						
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, L, B) Histic Epipedon (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) ✓ Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Inon-Manganese Masses (F12) (LRR K, L, 4) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Stripped Matrix (S6) Redox Depressions (F8) Dark Surface (S7) (LRR R, MLRA 149B) Cother (Explain in Remarks) And Redox (S5) Query Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) And Redox (S5) Query Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Type: Depth (inches):						
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thick Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (F6) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, MLRA 144A, 145, 144 Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 144 Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Present? Yes ✓ No Pupt (inches): Depth (inches): Hydric Soil Present? Yes ✓ No						
Hydric Soil Indicators: Indicators for Problematic Hydric Soils*: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2) Indicators for Problematic Hydric Soils*: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2) Indicators for Problematic Hydric Soils*: Histic Case MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, P) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 144 Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 144 Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:	Type: C=C	oncentration, D=De	epletion, RM=	Reduced Matrix, CS=Covered or Coated Sand	Grains. ² Location	n: PL=Pore Lining, M=Matrix.
Histosol (A1)	Hydric Soil	Indicators:			Indicators for F	Problematic Hydric Soils":
Induct pppoon (12) Internet (12) Black Histic (A3)	Histoso Histic F	l (A1) pipedon (A2)		Polyvalue Below Surface (S8) (LRR R, MI RA 149B)	2 cm Muck Coast Prair	(A10) (LKR K, L, MLRA 149B) ie Redox (A16) (I RR K, L, R)
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) ✓ Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 144 Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 144 Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes ✓ Type: Depth (inches): Hydric Soil Present? Yes ✓ No	Black H	istic (A3)		Thin Dark Surface (S9) (LRR R, MLRA 14	9B) 5 cm Mucky	/ Peat or Peat (S3) (LRR K, L, R)
	Hydrog	en Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR K, L)	Dark Surfac	ce (S7) (LRR K, L)
• Depleted below Dark Surface (A11)	Stratifie	d Layers (A5) d Bolow Dark Surf	000 (A11)	Loamy Gleyed Matrix (F2)	Polyvalue E	Below Surface (S8) (LRR K, L)
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 14 Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 144) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes ✓ No	Thick D	ark Surface (A12)		Redox Dark Surface (F6)	Iron-Manga	inese Masses (F12) (LRR K, L, R)
	Sandy I	Mucky Mineral (S1)		Depleted Dark Surface (F7)	Piedmont F	loodplain Soils (F19) (MLRA 149B
	Sandy (Gleyed Matrix (S4)		Redox Depressions (F8)	Mesic Spoo	dic (TA6) (MLRA 144A, 145, 149B)
	Sandy i Stripped	d Matrix (S6)			Verv Shallo	w Dark Surface (TF12)
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): No	Dark Su	urface (S7) (LRR R	, MLRA 149E	3)	Other (Expl	ain in Remarks)
Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes ✓ No	a					
Type:	Indicators of	of hydrophytic veget	tation and we	tland hydrology must be present, unless disturb	ed or problematic.	
Depth (inches):	Type	Layer (II Observed	<i>.</i>			
	Depth (in	ches):			Hvdric Soil Pres	sent? Yes ✓ No
Remarks:	Deptil (iii	cries).			,	

Project/Site: NW OHIO WIND	City/County: PAULDI	NG CO	Sampling Date:				
Applicant/Owner: WESTWOOD		OH	Sampling Point: M-01 UPLAND				
Investigator(s): MATTHEW VOLLBRECHT 2115	Section, Township, Rang	_{ge:} Sec 17, T1N	R2E				
Landform (hillslope, terrace, etc.): Flat	Local relief (c	oncave, convex, no	_{ne):} _Flat				
Slope (%): 0-5% Lat: 697177.0886	Long: 4546718.465		Datum: UTM NAD 83Z13N				
Soil Map Unit Name: HtA-Hoytville silty clay, 0-1% slo	pes	NWI clas	sification: Not Mapped				
Are climatic / hydrologic conditions on the site typical for this tir	ne of year? Yes 🖌 No _	(If no, explain	in Remarks.)				
Are Vegetation, Soil, or Hydrology sign	ificantly disturbed? Are "N	ormal Circumstance	es" present? Yes 🖌 No				
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)							
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.							
Hydrophytic Vegetation Present? Yes No _	✓ Is the Sampled A	rea					
Hydric Soil Present? Yes No _	✓ within a Wetland	? Yes_	No _				
Wetland Hydrology Present? Yes No _	✓ If yes, optional We	etland Site ID:					
Remarks: (Explain alternative procedures here or in a separa	ate report.)						

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained	Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna	(B13) Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfi	de Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizo	spheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Re	educed Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Re	duction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surf	ace (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain	in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No ✓ Depth (inches	:
Water Table Present? Yes No ✓ Depth (inches	
Water Table Present? Yes No ✓ Depth (inches Saturation Present? Yes No ✓ Depth (inches (includes capillary fringe) Yes No ✓ Depth (inches	:: Wetland Hydrology Present? Yes No _✓
Water Table Present? Yes No _✓ Depth (inches Saturation Present? Yes No _✓ Depth (inches (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo	: Wetland Hydrology Present? Yes No _✓ s, previous inspections), if available:
Water Table Present? Yes No ✓ Depth (inches Saturation Present? Yes No ✓ Depth (inches (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo	Wetland Hydrology Present? Yes No _✓ vs, previous inspections), if available:
Water Table Present? Yes No ✓ Depth (inches Saturation Present? Yes No ✓ Depth (inches (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo	Wetland Hydrology Present? Yes No _✓ os, previous inspections), if available:
Water Table Present? Yes No ✓ Depth (inches Saturation Present? Yes No ✓ Depth (inches (includes capillary fringe) Depth (inches Describe Recorded Data (stream gauge, monitoring well, aerial photo Remarks:	Wetland Hydrology Present? Yes No _✓ os, previous inspections), if available:
Water Table Present? Yes No ✓ Depth (inches Saturation Present? Yes No ✓ Depth (inches (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo Remarks:	U: Wetland Hydrology Present? Yes No _✓ Des, previous inspections), if available:
Water Table Present? Yes No ✓ Depth (inches Saturation Present? Yes No ✓ Depth (inches (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo Remarks:	U: Wetland Hydrology Present? Yes No _✓ Des, previous inspections), if available:
Water Table Present? Yes No ✓ Depth (inches Saturation Present? Yes No ✓ Depth (inches (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo Remarks:	U: Wetland Hydrology Present? Yes No _✓ ps, previous inspections), if available:
Water Table Present? Yes No ✓ Depth (inches Saturation Present? Yes No ✓ Depth (inches (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo Remarks:	Wetland Hydrology Present? Yes No _✓ os, previous inspections), if available:
Water Table Present? Yes No ✓ Depth (inches Saturation Present? Yes No ✓ Depth (inches (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo Remarks:	Wetland Hydrology Present? Yes No _✓ wetland Hydrology Present? Yes No _✓ wetland Hydrology Present? Yes No _✓
Water Table Present? Yes No ✓ Depth (inches Saturation Present? Yes No ✓ Depth (inches (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo Remarks:	Wetland Hydrology Present? Yes No _✓ ws, previous inspections), if available:
Water Table Present? Yes No ✓ Depth (inches Saturation Present? Yes No ✓ Depth (inches (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo Remarks:	Wetland Hydrology Present? Yes No _✓ os, previous inspections), if available:
Water Table Present? Yes No ✓ Depth (inches Saturation Present? Yes No ✓ Depth (inches (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo Remarks:	E Wetland Hydrology Present? Yes No _✓ ps, previous inspections), if available:
Water Table Present? Yes No ✓ Depth (inches Saturation Present? Yes No ✓ Depth (inches (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo Remarks:	Wetland Hydrology Present? Yes No _✓ os, previous inspections), if available:

Sampling Point: M-01 UPL

Troo Stratum (Plat aiza: 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
	% Cover	<u>Species</u> ?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>2</u> (B)
4			·	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6				Prevalence Index worksheet:
Total Cover	0			Total % Cover of: Multiply by:
50% of total cover: 0	20% 0	f total cove	er: 0	$\frac{1}{OBL \text{ species } 0} \qquad \frac{1}{x_{1}} = 0$
Sapling/Shrub Stratum (Plot size: 30				FACW species 0 $x_2 = 0$
<u></u>				FAC species $0 \times 3 = 0$
·				FACU species <u>60</u> x 4 = <u>240</u>
2				UPL species <u>40</u> x 5 = <u>200</u>
3				Column Totals: <u>100</u> (A) <u>440</u> (B)
4				$\mathbf{D}_{\mathbf{r}}$
5				Prevalence Index = $B/A = \frac{-1}{2}$
6				Hydrophytic Vegetation Indicators:
Total Cover	. 0			Rapid Test for Hydrophytic Vegetation
50% of total cover: 0	20% of	total cove	r. 0	Dominance Test is >50%
Herb Stratum (Plot size: 5)				Prevalence Index is ≤3.0 ¹
1 Bromus inermis	40	Yes	UPL	Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)
2 Dactylis glomerata	40	Yes	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
Dissous fullonum	15	No	FACU	
		No		¹ Indicators of hydric soil and wetland hydrology must
4. Taraxacum officinale	5	INO	FACU	be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sanling/shrub - Woody plants less than 3 in DBH
9.				and greater than 3.28 ft (1 m) tall.
10				Herb - All berbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
T-1-1 O-1-1-	100			Woody vines – All woody vines greater than 3.28 ft in
l otal Cover:	100		20	height.
50% of total cover: <u>50</u>	20% o	f total cove	r: <u>20</u>	
Woody Vine Stratum (Plot size: 30)				
1				
2				
3				Hydrophytic
4				Vegetation
Total Cover	0			Present? fesNo
50% of total cover: 0	20% of	f total cove	r. 0	
Remarks: (Include photo numbers here or on a separate s	neet.)			

Profile Desc	cription: (Describe	to the dept	n needed to document the indicator or confirm	the absence of	indicators.)
Depth (inches)	<u>Matrix</u> Color (moist)	%	<u>Redox Features</u> Color (moist) % Type ¹ Loc ²	Texture	Remarks
0-22	10YR4/3	100		Silty Clav	Kontano
¹ Type: C=C	oncentration, D=Dep	eletion, RM=	Reduced Matrix, CS=Covered or Coated Sand Gr	ains. ² Locati	on: PL=Pore Lining, M=Matrix.
Histosol			Polyvalue Below Surface (S8) (I PP P		
Histic E	oipedon (A2)	-	MLRA 149B)	Coast Pra	airie Redox (A16) (LRR K, L, R)
Black H	istic (A3)	-	Thin Dark Surface (S9) (LRR R, MLRA 149B)) 5 cm Mud	cky Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)	-	Loamy Mucky Mineral (F1) (LRR K, L)	Dark Sur	ace (S7) (LRR K, L)
Stratified	d Layers (A5) d Below Dark Surfac	- e (A11)	Loamy Gleyed Matrix (F2) Depleted Matrix (F3)	Polyvalue	$ \begin{array}{c} \text{Below Sufface (S8) (LRR K, L)} \\ \text{Sufface (S9) (LRR K, I)} \end{array} $
Thick Da	ark Surface (A12)		Redox Dark Surface (F6)	Iron-Man	ganese Masses (F12) (LRR K, L, R)
Sandy N	lucky Mineral (S1)	-	Depleted Dark Surface (F7)	Piedmont	Floodplain Soils (F19) (MLRA 149B)
Sandy G	Bleyed Matrix (S4)	-	Redox Depressions (F8)	Mesic Sp	odic (TA6) (MLRA 144A, 145, 149B)
Sandy F	(S5) Matrix (S6)			Red Pare	int Material (F21) llow Dark Surface (TE12)
Dark Su	rface (S7) (LRR R, I	MLRA 149B)	1	Other (E>	plain in Remarks)
2					
[°] Indicators o	f hydrophytic vegeta	tion and wet	land hydrology must be present, unless disturbed	or problematic.	
Typo	Layer (if observed):	:			
Donth (in	abaa);		_	Hydric Soil Pr	esent? Yes No √
Depth (in	cnes).				
Remarks.					
1					
1					

I

Project/Site: NW OHIO WIND	City/County:	PAULDING	i CO	Sampling Date: 4/15/2013 6:38:09 PM		
Applicant/Owner: WESTWOOD			State [.] OH	Sampling Point: M-01 WETLAND		
Investigator(s): MATTHEW VOLLBRECHT 2115	Section Tow	nshin Range	Sec 17, T1N	R2E		
Landform (hillslope terrace etc.). Flat		nonip, italigo.	cave convex nor	B). Side slope road ditch		
Slope (%): 5-8% Let: 697177.5036	4546	5716.322		Datum: UTM NAD 83Z13N		
Solution Linit Name: HtA-Hovtville silty clay 0-1% slo	Long. <u>1013</u>			DatumDatumDatum		
Soli Map Onit Name. <u>The trief time only only of the cite</u>						
Are climatic / hydrologic conditions on the site typical for this tin	ne of year? Yes <u>v</u>	No	_ (If no, explain in	n Remarks.)		
Are Vegetation, Soil, or Hydrology signi	ificantly disturbed?	Are "Norn	nal Circumstances	s" present? Yes <u>✓</u> No		
Are Vegetation, Soil, or Hydrology natu	rally problematic?	(If needed	I, explain any ans	wers in Remarks.)		
SUMMARY OF FINDINGS – Attach site map she	owing sampling	point locat	tions, transec	ets, important features, etc.		
Hydrophytic Vegetation Present? Yes V	Is the	Sampled Area	a			
Hydric Soil Present? Yes ✓ No	withir	n a Wetland?	Yes _ ✓	No		
Wetland Hydrology Present? Yes 🗸 No	If ves.	optional Wetla	and Site ID: Wet	land sample point M-01		
Remarks: (Explain alternative procedures here or in a separa	te report.)					
Wetland located in road ditch Portions of the ditc	h have been rec	ently cleane	d and are evr	losed sub-soils		
		entry cleane	u anu are exp	0360 300-3013		
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Inc	licators (minimum of two required)		
Primary Indicators (minimum of one is required; check all that	apply)		Surface S	oil Cracks (B6)		
Surface Water (A1)	Stained Leaves (B9)		Drainage	Patterns (B10)		
High Water Table (A2)	Fauna (B13)		Moss Trin	n Lines (B16)		
✓ Saturation (A3) Marl De	posits (B15)	(B15) Dry-Season Water Table (C2)				
Water Marks (B1) Hydroge	en Sulfide Odor (C1)	iide Odor (C1) Crayfish Burrows (C8)				
Sediment Deposits (B2) Oxidize	d Rhizospheres on L	iving Roots (C3	3) <u>Saturation</u>	visible on Aerial Imagery (C9)		
Drift Deposits (B3) Presend	ce of Reduced Iron (C	24)	Stunted o	r Stressed Plants (D1)		
Algal Mat or Crust (B4) Recent	Iron Reduction in Till	ed Soils (C6)	Geomorph	hic Position (D2)		
Iron Deposits (B5) Thin Mu	uck Surface (C7)		Shallow A	quitard (D3)		
Inundation Visible on Aerial Imagery (B7) Other (B	Explain in Remarks)		Microtopo	graphic Relief (D4)		
Sparsely Vegetated Concave Surface (B8)			✓ FAC-Neut	tral Test (D5)		
Field Observations:						
Surface Water Present? Yes No / Depth	(inches):	—				
Water Table Present? Yes <u>✓</u> No Depth	(inches): <u>9.0</u>	—				
Saturation Present? Yes <u>✓</u> No Depth	(inches): <u>11.0</u>	Wetland	d Hydrology Pres	sent? Yes <u>✓</u> No		
Describe Recorded Data (stream gauge, monitoring well, aeria	al photos, previous ir	Ispections), if a	vailable:			
Remarks:						

Sampling Point: M-01 WET

Tree Stratum (Plot size: 30	Absolute % Cover	Dominant	Indicator	Dominance Test worksheet:
1	<u>_/0 00vci</u>			Number of Dominant Species That Are OBL EACIM or EAC: 2 (A)
2	·			
3	·			Total Number of Dominant Species Across All Strata: 2 (B)
0	·			
5				That Are OBL, FACW, or FAC: <u>100</u> (A/B)
6	·			
U	0			Prevalence Index worksheet:
		6 (. 0	OPL opposing 15 v1 = 15
50% of total cover:	20% 0	of total cove	r: <u> </u>	FACW species 20 $x_2 = 40$
Saping/Shiub Stratum (Piot size)				FAC species 0 $x_3 = 0$
1	·			FACU species 0 x 4 = 0
2	·			UPL species 0 x 5 = 0
3	·			Column Totals: <u>35</u> (A) <u>55</u> (B)
4	·			Prevalence Index = $B/A = 1.57$
5	·			
6				Hydrophytic Vegetation Indicators:
Total Cove	r: <u>0</u>		_	\checkmark Dominance Test is >50%
50% of total cover: 0	20% of	f total cove	r: <u>0</u>	\checkmark Prevalence Index is $\leq 3.0^1$
Herb Stratum (Plot size: 5)	00	Maa		Morphological Adaptations ¹ (Provide supporting
	20	Yes	FACW	data in Remarks or on a separate sheet)
2. Typha angustifolia	15	Yes	OBL	Problematic Hydrophytic Vegetation' (Explain)
3				¹ Indicators of hydric soil and wetland hydrology must
4	·			be present, unless disturbed or problematic.
5	·			Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cover	<u>.</u> 35			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: 17.5	20% o	f total cove	r: <u>7</u>	neight.
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2				
3				Hydrophytic
4				Vegetation
Total Cove	r: 0			Present? Yes V NO
50% of total cover: 0	20% o	f total cove	r: 0	
Pomarka: (Include photo numbers here or on a congrete a	hoot)			
Remarks. (include photo numbers here of on a separate s	neet.)			

(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
)-12	10YR4/1	100					Silt Clay	Romano
				·				
					<u> </u>			
							· · · · · · · · · · · · · · · · · · ·	
				·				
				·				
ype: C=C	oncentration, D=Dep	oletion, RM=	Reduced Matrix, CS	S=Covered	l or Coate	d Sand G	rains. ² Loca	ation: PL=Pore Lining, M=Matrix.
ydric Soil	Indicators:						Indicators f	or Problematic Hydric Soils ³ :
_ Histoso	(A1)		Polyvalue Belo	w Surface	(S8) (LR F	RR,	2 cm M	uck (A10) (LRR K, L, MLRA 149B)
_ HISTIC E	pipedon (A2)		MLRA 1498 Thin Dark Surf:) 200 (SQ) (L		DA 1/05	Coast F	rairie Redox (A16) (LRR K, L, R)
Hvdroge	en Sulfide (A4)		Loamy Mucky I	/ineral (F1) (LRR K	_KA 1496 . L)	Dark Si	ucky real of real (33) (LKK K, L, K,
Stratifie	d Layers (A5)		Loamy Gleyed	Matrix (F2))	, _/	Polyval	ue Below Surface (S8) (LRR K, L)
Deplete	d Below Dark Surfac	ce (A11)	Depleted Matrix	(F3)			Thin Da	ark Surface (S9) (LRR K, L)
Thick D	ark Surface (A12)		Redox Dark Su	rface (F6)			Iron-Ma	inganese Masses (F12) (LRR K, L, R
_ Sandy N	Aucky Mineral (S1)		Depleted Dark	Surface (F	7)		Piedmo	nt Floodplain Soils (F19) (MLRA 149
_ Sandy (Gleyed Matrix (S4)		Redox Depress	ions (F8)			Mesic S	Spodic (1A6) (MLRA 144A, 145, 1498 root Motorial (521)
Stripper	Matrix (S6)						Verv Sh	hallow Dark Surface (TE12)
Dark Su	Inface (S7) (LRR R,	MLRA 149E	3)				Other (I	Explain in Remarks)
_			,					. ,
ndicators c	f hydrophytic vegeta	ation and we	tland hydrology mus	t be prese	nt, unless	disturbe	d or problematic.	
estrictive	Layer (if observed)	:						
Type:								
Depth (in	ches):						Hydric Soil	Present? Yes <u>√</u> No
emarks:								re being conversed board on
L	nich has recently	/ Deen Cle	bor portions of t	are expo	sed suc	solis. r	ayoric solis al	re being assumed based on
3				le projec	si alea.			

Project/Site: NW OHIO WIND	City/County: PAUL	DING CO	Sampling Date: 4/15/2013 6:59:30 PM	
Applicant/Qwper: WESTWOOD		State: OH	Sampling Point: M-02 UPLAND	
Investigator(a), MATTHEW VOLLBRECHT 2115	Ocation Township (Sec 17 T1N R	2F	
	Section, Township, F	Range:	Flat	
Landform (hillslope, terrace, etc.):		ef (concave, convex, none)		
Slope (%): 0-5% Lat: 097524.0995	Long: 4545815.5	67	Datum: UTM NAD 83213N	
Soil Map Unit Name: Lc-Latty silty clay		NWI classifi	cation: Not Mapped	
Are climatic / hydrologic conditions on the site typical for this t	ime of year? Yes 🖌 No	(If no, explain in I	Remarks.)	
Are Vegetation, Soil, or Hydrology sig	nificantly disturbed? Are	e "Normal Circumstances"	present? Yes 🖌 No	
Are Vegetation, Soil, or Hydrology nat	turally problematic? (If	needed, explain any answ	ers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map sl	howing sampling point	locations, transect	s, important features, etc.	
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	✓ Is the Sample within a Weth ✓ If yes, optional	ed Area land? Yes al Wetland Site ID:Uplar	No_√ nd sample point M-01	
Remarks: (Explain alternative procedures here or in a separ	rate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indic	ators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that	at apply)	Surface Soi	l Cracks (B6)	
Surface Water (A1) Water	-Stained Leaves (B9)	Leaves (B9) Drainage Patterns (B10)		
High Water Table (A2) Aquati	ic Fauna (B13)	Moss Trim I	_ines (B16)	
Saturation (A3) Marl D	Deposits (B15)	Dry-Season Water Table		
Water Marks (B1) Hydro	gen Sulfide Odor (C1)	Crayfish Bu	rrows (C8)	
Sediment Deposits (B2) Oxidiz	ed Rhizospheres on Living Ro	oots (C3) Saturation \	Visible on Aerial Imagery (C9)	
Algol Mot or Crust (P4)	nce of Reduced from (C4)		Parition (D2)	
Iron Deposits (B5)	luck Surface (C7)	S (CO) Geomorphic Shallow Age	uitard (D3)	
Inundation Visible on Aerial Imageny (B7)	(Explain in Remarks)	Microtopog	ranhic Relief (D4)	
Sparsely Vegetated Concave Surface (B8)		FAC-Neutra	I Test (D5)	
Field Observations:				
Surface Water Present? Yes No ✓ Dent	h (inches):			
Water Table Present? Ves No ✓ Dept	h (inches):			
Saturation Present? Yes No ✓ Depth	h (inches): V	Netland Hydrology Prese	nt? Yes No _✓	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ae	rial photos, previous inspectio	ns), if available:		
Demonstration				
Remarks:				

Sampling Point: M-02 UPL

	Absolute	Dominan	t Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species		
1				That Are OBL, FACW, or FAC: 0 (A)		
2				Total Number of Dominant		
3				Species Across All Strata: 2 (B)		
4				Percent of Dominant Species		
5						
6				Prevalence Index worksheet:		
Total Cover	. 0			Total % Cover of: Multiply by:		
	20%	f total any		$\begin{array}{c} \hline \hline$		
50% of total cover: $\frac{30}{30}$	20%0		∃I. <u>♥</u>	$\frac{1}{2} = \frac{1}{2}$		
Sapling/Shrub Stratum (Plot size:)				$\frac{1}{2} = \frac{1}{2}$		
1				FACT species 60 $x_3 = 0$		
2				FACU species $\frac{00}{40}$ $x = \frac{240}{200}$		
3.				UPL species 40 $x = 200$		
				Column Totals: 100 (A) 440 (B)		
4				Prevalence Index = B/A = -4.4		
5						
6				Hydrophytic Vegetation Indicators:		
Total Cove	. 0			Rapid Test for Hydrophytic Vegetation		
			0	Dominance Test is >50%		
50% of total cover:	20% of	t total cove	er: <u> </u>	Prevalence Index is ≤3.0 ¹		
Herb Stratum (Plot size: <u>5</u>)	10			Morphological Adaptations ¹ (Provide supporting		
1. Bromus inermis	40	Yes	UPL	data in Remarks or on a separate sheet)		
2. Dactylis glomerata	40	Yes	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)		
3. Dipsacus fullonum	15	No	FACU			
A Taraxacum officinale	5	No	FACU	¹ Indicators of hydric soil and wetland hydrology must		
4. <u>- raraxaoum omonaio</u>	<u> </u>	110		be present, unless disturbed or problematic.		
5				Definitions of Vegetation Strata:		
6				Tree Weedy plants 2 in (7.6 cm) or more in diameter		
7				at breast height (DBH), regardless of height.		
8						
0				and greater than 3 28 ft (1 m) tall		
9						
10				Herb – All herbaceous (non-woody) plants, regardless		
11				or size, and woody plants less than 3.28 ft tall.		
Total Cover	100			Woody vines – All woody vines greater than 3.28 ft in		
50% of total cover: 50	20% 0	f total cove	er 20	height.		
Weisstel/ine Strature (Distribute 30						
(Plot size: 00)						
1						
2						
3				Hydrophytic		
4				Vegetation		
Tatal Cause				Present? Yes No V		
Total Cover			0			
50% of total cover: 0	20% o	f total cove	er: <u>0</u>			
Remarks: (Include photo numbers here or on a separate s	heet.)					
······································	,					

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth	Matrix		Redo	x Features	S	. 2			
(inches)	Color (moist)		Color (moist)	%	Type	_Loc ⁴	Iexture Remarks		
0-22	10YR4/5	100		. <u> </u>			Silty loar		
				·					
				·					
				·					
				·					
				·					
				·					
				·					
<u></u>							2		
Type: C=Co	oncentration, D=De	pletion, RM=	Reduced Matrix, CS	S=Covered	or Coate	d Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.		
Hydric Soil	indicators:						Indicators for Problematic Hydric Soils":		
Histosol	(A1)	-	Polyvalue Below	w Surface	(S8) (LRI	RR,	2 cm Muck (A10) (LRR K, L, MLRA 149B)		
Histic Ep	olpedon (A2)		MLRA 149B))			Coast Prairie Redox (A16) (LRR K, L, R)		
Black Hi	STIC (A3)	-	I nin Dark Suria	lice (59) (L /linoral (E1		LRA 1498	B) 5 cm Mucky Peat of Peat (S3) (LRR K, L, R)		
Stratified	1 Javers (A5)	-	Loamy Gleved I	Matrix (F2)) (LKK K)	, L)	Polyvalue Below Surface (S8) (I RR K I)		
Depleter	d Below Dark Surfa	- 	Loany Oleyeu I	(F3))		Thin Dark Surface (S9) (LRR K I)		
Thick Da	ark Surface (A12)		Redox Dark Su	rface (F6)			Iron-Manganese Masses (F12) (LRR K. L. R)		
Sandy M	luckv Mineral (S1)	-	Depleted Dark S	Surface (F	7)		Piedmont Floodplain Soils (F19) (MLRA 149B)		
Sandy G	Bleved Matrix (S4)	-	Redox Depress	ions (F8)	- /		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
Sandy R	Redox (S5)	•		()			Red Parent Material (F21)		
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)		
Dark Su	rface (S7) (LRR R,	MLRA 149B)				Other (Explain in Remarks)		
³ Indicators of	f hydrophytic vegeta	ation and wet	land hydrology mus	t be prese	nt, unless	s disturbed	d or problematic.		
Restrictive I	Layer (if observed)):							
Туре:									
Depth (ind	ches):						Hydric Soil Present? Yes No _✓		
Remarks:									
Remarks.									

Project/Site: NW OHIO WIND	City/County: PAULDI	ING CO	Sampling Date: 4/15/2013 7:09:26 PM
Applicant/Owner: WESTWOOD		State: OH	Sampling Point: M-02 WETLAND
Investigator(s): MATTHEW VOLLBRECHT 2115	Section Township Ran	Sec 17, T1N R	2E
Landform (hillolopo, torraço, etc.); Flat			Side slope of road ditch
ci (a) 5-10% (697528 0265	Local Teller (0	concave, convex, none).	
Slope (%): Lat: Lat:	Long: 4040010.004		Datum: OTMINAD 002 TON
Soil Map Unit Name: LC-Latty Silty Clay		NWI classific	cation: Not Mapped
Are climatic / hydrologic conditions on the site typical for this time of ye	ar?Yes 🖌 No _	(If no, explain in R	Remarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "N	Normal Circumstances"	present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If nee	eded, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point lo	ocations, transects	, important features, etc.
	Is the Sampled	Area	
Hydrophytio vegetation resent? res No	within a Wetland	d? Yes_√_	No
Wetland Hydrology Present? Yes Ves	If ves. optional W	vetland Site ID: Wetla	nd sample point M-02
Remarks: (Explain alternative procedures here or in a separate repo	rt.)		
Wetland located in the bed of a road ditch			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1) Water-Stained	Leaves (B9)	Drainage Pa	tterns (B10)
✓ High Water Table (A2) Aquatic Fauna	(B13)	Moss Trim L	ines (B16)
Saturation (A3)	(B15)	Dry-Season	Water Table (C2)
Water Marks (B1) Hydrogen Sulf	de Odor (C1)	Crayfish Bur	rows (C8)
Sediment Deposits (B2) Oxidized Rhize	spheres on Living Roots	(C3) Saturation V	isible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of R	educed Iron (C4)	Stunted or S	tressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Re	duction in Tilled Soils (C	6) Geomorphic	Position (D2)
Iron Deposits (B5) Thin Muck Sur	face (C7)	Shallow Aqu	itard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain	in Remarks)	Microtopogra	aphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		✓ FAC-Neutra	Test (D5)
Field Observations:			
Surface Water Present? Yes No ✓ Depth (inches):		
Water Table Present? Yes <u>✓</u> No Depth (inches): <u>7.0</u>		
Saturation Present? Yes <u>✓</u> No Depth (inches): <u>8.0</u> Wet	land Hydrology Prese	nt? Yes <u>√</u> No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial phot	s previous inspections)	if available:	
beschoe Recorded Data (stream gauge, monitoring weil, achar phot			
Remarks:			

Sampling Point: M-02 WET

Trop Strotum (Plat size: 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
	<u>% Cover</u>	<u>Species</u> ?	Status	Number of Dominant Species
1	·			That Are OBL, FACW, or FAC: [(A)
2	·			Total Number of Dominant
3				Species Across All Strata: [] (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Brovolonoo Index workshooti
Total Cove	r. 0			Total % Cover of: Multiply by:
	200/ 6		0	$\frac{1}{10000000000000000000000000000000000$
50% of total cover: <u>-</u>	20% 0	or local cove		EACW species 0 $x_2 = 0$
Sapling/Shrub Stratum (Plot size: 00)				FAC species 0 $x_3 = 0$
1	·			FACIL species 0 $x = 0$
2				$\frac{1}{100} \text{ species } 0 \text{ y } 5 = 0$
3				Column Totals: 85 (A) 85 (B)
4				
5.				Prevalence Index = $B/A = 1$
6				Hydrophytic Vegetation Indicators:
	0			Rapid Test for Hydrophytic Vegetation
l otal Cove	r:		<u>^</u>	\checkmark Dominance Test is >50%
50% of total cover: 0	20% o	f total cover	<u>.</u> 0	\checkmark Prevalence Index is $\leq 3.0^1$
Herb Stratum (Plot size: 5)				Morphological Adaptations ¹ (Provide supporting
1. Typha angustifolia	85	Yes	OBL	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed of problematic.
				Definitions of Vegetation Strata:
b				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7	·			at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11.				of size, and woody plants less than 3.28 ft tall.
Total Cove	. 85			Woody vines – All woody vines greater than 3.28 ft in
50% of total environ 42.5	20% c	of total covo	. 17	height.
	20%0			
Woody Vine Stratum (Plot size: 30)				
1				
2				
3				Hydrophytic
4				Vegetation Present? Ves V
Total Cove	r: 0			
50% of total cover: 0	20% o	f total cover	. 0	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Profile Desc	ription: (Describe	to the depth	needed to docur	nent the i	ndicator	or confirm	m the absence of indicators.)
Depth	Matrix		Redo	x Feature	S		_
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks
0-14	10YR3/1	100					Muck
	-						
				·			
				•			
				·			
							<u> </u>
<u> </u>							
¹ Type: C=Co	oncentration, D=Dep	letion, RM=R	educed Matrix, CS	S=Covered	d or Coate	ed Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicators for Problematic Hydric Soils ³ :
Histosol	(A1)	_	Polyvalue Belov	w Surface	(S8) (LRI	RR,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
🗹 Histic Ep	pipedon (A2)	_	MLRA 149B))	. , .		Coast Prairie Redox (A16) (LRR K, L, R)
Black His	stic (A3)	_	_ Thin Dark Surfa	ace (S9) (I	RR R, M	LRA 149B	B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	n Sulfide (A4)		_ Loamy Mucky N	Aineral (F	1) (LRR K	(, L)	Dark Surface (S7) (LRR K, L)
Stratified	Layers (A5)	_	Loamy Gleyed	Matrix (F2)		Polyvalue Below Surface (S8) (LRR K, L)
Depleted	Below Dark Surfac	e (A11)	Depleted Matrix	(F3)			Thin Dark Surface (S9) (LRR K, L)
Thick Da	rk Surface (A12)		_ Redox Dark Su	rface (F6)			Iron-Manganese Masses (F12) (LRR K, L, R
Sandy M	lucky Mineral (S1)		_ Depleted Dark	Surface (F	7)		Piedmont Floodplain Soils (F19) (MLRA 149
Sandy G	leyed Matrix (S4)	_	_ Redox Depress	ions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149E
Sandy R	edox (S5)						Red Parent Material (F21)
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)
Dark Sur	face (S7) (LRR R, I	MLRA 149B)					Other (Explain in Remarks)
³ Indicators of	hydrophytic vegeta	tion and wetla	and hydrology mus	st be prese	ent, unless	s disturbed	d or problematic.
Restrictive L	ayer (if observed)	:					
Type:							
Dopth (inc	aboc):						Hvdric Soil Present? Yes ✓ No
Remarks:							

Project/Site: NW OHIO WIND	City/County PAULDING CO
Applicant/Outpart WESTWOOD	City/County Sampling Date States OH
Applican/Owner	State Sampling Point
	Section, Township, Range: 000 10, 1111122
Landform (hillslope, terrace, etc.): 11at	Local relief (concave, convex, none):at
Slope (%): 0-5% Lat: 098542.7515	_ Long: _4545060.567 Datum: _0101 NAD 65215N
Soil Map Unit Name: LC-Latty SIIty Clay	NWI classification: Not Mapped
Are climatic / hydrologic conditions on the site typical for this time of \boldsymbol{y}	ear? Yes 🖌 No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Normal Circumstances" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No _✓ Hydric Soil Present? Yes No _✓	Is the Sampled Area within a Wetland? Yes No _ ✓
Wetland Hydrology Present? Yes No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate repo	эп.)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Leaves (B9) Drainage Patterns (B10) a (B13) Moss Trim Lines (B16) (B15) Dry-Season Water Table (C2) fide Odor (C1) Crayfish Burrows (C8) ospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Seduced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	eduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5)	rface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain	n in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No ✓ Depth (inches	s):
Water Table Present? Yes No ✓ Depth (inches	s):
Saturation Present? Yes No _✓ Depth (inches	s): Wetland Hydrology Present? Yes No √
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:
Kemarks:	

Sampling Point: N-01 UPL

Trop Stratum (Plot aize: 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
	<u>% Cover</u>	<u>Species</u> ?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2	·			Total Number of Dominant
3				Species Across All Strata: [] (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6				Prevalence Index worksheet:
Total Cove	r: 0			Total % Cover of: Multiply by:
50% of total actions 0	20% 0	of total cove	r: 0	$\begin{array}{c} \hline \hline \\ $
Sopling/Shrub Stratum (Diet size: 30	20 % 0	n lolai cove	I. <u> </u>	EACW species 0 $x^2 = 0$
Sapling/Shrub Stratum (Plot size)				FAC species 0 $x_3 = 0$
1				FACIL species 0 $x 4 = 0$
2				$\frac{1100 \text{ species}}{30} \times 5 = 150$
3				Column Totals: 30 (A) 150 (B)
4				
5				Prevalence Index = $B/A = 5$
6				Hydronhytic Vegetation Indicators:
0	0			Rapid Test for Hydrophytic Vegetation
Total Cove	r: <u>0</u>			Dominance Test is >50%
50% of total cover: 0	20% of	f total cover	0	$\frac{1}{2} = \frac{1}{2} $
Herb Stratum (Plot size: 5)				Morphological Adaptations ¹ (Provide supporting
1. Glycine spp	30	Yes	UPL	data in Remarks or on a separate sheet)
2.				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
	·			¹ Indicators of hydric soil and wetland hydrology must
4	·			be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8.				Septime/shouth Weady plants loss than 2 in DDU
9				and greater than 3.28 ft (1 m) tall.
10				
10	·			Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				
Total Cover	. 30			Woody vines – All woody vines greater than 3.28 ft in height
50% of total cover: <u>15</u>	20% o	f total cove	r: <u>6</u>	hoight
Woody Vine Stratum (Plot size: <u>30</u>)				
1.				
2				
2	·			
3				Hydrophytic Vegetation
4				Present? Yes No 🗸
Total Cove	r: <u>0</u>			
50% of total cover: 0	20% o	f total cover	. <u>.</u> 0	
Remarke: (Include photo numbers here or on a separate s	hoot)			
	sneet.)			

Profile Desc	ription: (Describe	to the depth	needed to docun	nent the indic	ator or confirm	the absence of indic	cators.)
(inches)	Color (moist)	%	Color (moist)	<u>x reatures</u>	vpe ¹ Loc ²	Texture	Remarks
0-25	10YR5/3	100				Silty Clay	
			duced Metrix CC				DL Doro Lining M. Motrix
Hvdric Soil	Indicators:		educed Matrix, CS		Joaled Sand Gra	Indicators for Pro	blematic Hvdric Soils ³ :
Histosol	(A1)		Polyvalue Belov	v Surface (S8)	(LRR R.	2 cm Muck (A	10) (LRR K. L. MLRA 149B)
Histic Ep	pipedon (A2)		MLRA 149B)	. eanace (ee)	(,	Coast Prairie I	Redox (A16) (LRR K, L, R)
Black Hi	stic (A3)		_ Thin Dark Surfa	ce (S9) (LRR	R, MLRA 149B)	5 cm Mucky P	eat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Mucky M	lineral (F1) (L	RR K, L)	Dark Surface	(S7) (LRR K, L)
Stratified	d Layers (A5) d Bolow Dark Surfa		Loamy Gleyed I	Matrix (F2)		Polyvalue Belo	bw Surface (S8) (LRR K, L)
Depleted Thick Da	ark Surface (A12)	.e (ATT)	Redox Dark Su	face (F6)		Iron-Mangane	se Masses (F12) (LRR K. L. R)
Sandy M	lucky Mineral (S1)		Depleted Dark S	Surface (F7)		Piedmont Floo	odplain Soils (F19) (MLRA 149B)
Sandy G	Bleyed Matrix (S4)		Redox Depress	ions (F8)		Mesic Spodic	(TA6) (MLRA 144A, 145, 149B)
Sandy R	edox (S5)					Red Parent Ma	aterial (F21)
Stripped	Matrix (S6)					Very Shallow I	Dark Surface (TF12)
Dark Su	made (57) (LRR R,	WILKA 149B)				Other (Explain	i in Remarks)
³ Indicators of	f hydrophytic vegeta	ation and wetla	nd hydrology mus	t be present, ι	Inless disturbed	or problematic.	
Restrictive I	Layer (if observed)	:	, ,,				
Туре:			_				
Depth (ind	ches):					Hydric Soil Presen	nt? Yes No_√
Remarks:	,						
S	ample point in a	n actively ti	led and cropp	ed field			

Project/Site: NW OHIO WIND	City/County: PAULDING CO Sampling Date: 4/15/2013 7:13:34 PM
Applicant/Owner: WESTWOOD	State: OH Sampling Point: N-01 WETLAND
Investigator(s): MATTHEW VOLLBRECHT 2115	Section, Township, Range: Sec 16, T1N R2E
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): Side slope of creek
Slope (%): 5-10% Lat: 698547.4047	Long: 4545657.916 Datum: UTM NAD 83Z13N
Soil Map Unit Name: Lc-Latty silty clay	NWI classification: Not Mapped
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🗸 No (If no, explain in Remarks.)
Are Vegetation . Soil . or Hydrology significantly	disturbed? Are "Normal Circumstances" present? Yes ✓ No
Are Vegetation . Soil . or Hydrology naturally pro	oblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site man showing	sampling point locations transects important features etc.
Hydrophytic Vegetation Present? Yes ✓ No	is the Sampled Area within a Wetland? Yes √ No
Hydric Soil Present? Yes ▼ No Wetland Hydrology Present? Yes √ No	If you optional Watland Site Up. Wetland sample point N-01
Remarks: (Explain alternative procedures here or in a separate repo	rt.)
	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained	Leaves (B9) Drainage Patterns (B10)
✓ High Water Table (A2) Aquatic Fauna	(B13) Moss Trim Lines (B16)
Saturation (A3)	(B15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfi	de Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizo	spheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Re	educed Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Re	eduction in Filled Soils (C6) Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7) Other (Explain	in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	✓ FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No ✓ Depth (inches)):
Water Table Present? Yes <u>✓</u> No Depth (inches): 10.0
Saturation Present? Yes <u>✓</u> No Depth (inches)): <u>11.0</u> Wetland Hydrology Present? Yes <u>√</u> No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
Remarks:	
Water located in wetland at lower elevations than the sa	imple point

Sampling Point: N-01 WET

Tree Stratum (Plot size: 30	Absolute % Covor	Dominant	Indicator	Dominance Test worksheet:
		<u>Species</u> ?	Status	Number of Dominant Species
l	·			That Are OBL, FACW, or FAC: (A)
2	·			Total Number of Dominant
3	·			Species Across All Strata: (B)
4	·			Percent of Dominant Species
5	·			That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
Total Cove	r: <u>0</u>			Total % Cover of:Multiply by:
50% of total cover: 0	20% c	of total cove	r: 0	OBL species <u>10</u> x 1 = <u>10</u>
Sapling/Shrub Stratum (Plot size: <u>30</u>)				FACW species <u>45</u> x 2 = <u>90</u>
1				FAC species 0 x 3 = 0
2.				FACU species 0 $x 4 = 0$
3				UPL species 0 $x 5 = 0$
0				Column Totals: <u>55</u> (A) <u>100</u> (B)
4	·			Prevalence Index = $B/A = 1.82$
5	·			
6	·			Hydrophytic Vegetation Indicators:
Total Cove	r: <u>0</u>			Rapid Test for Hydrophytic Vegetation
50% of total cover: 0	20% o	f total cove	r: 0	\checkmark Dominance rest is >50%
Herb Stratum (Plot size: 5)				Morphological Adaptations ¹ (Provide supporting
1. Phalaris arundinacea	45	Yes	FACW	data in Remarks or on a separate sheet)
2. Schoenoplectus fluviatilis	10	No	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
4.				Indicators of hydric soil and wetland hydrology must
5				
6				Definitions of Vegetation Strata:
7	·			Tree – Woody plants 3 in. (7.6 cm) or more in diameter
/				at breast height (DBH), regardless of height.
8	·			Sapling/shrub – Woody plants less than 3 in. DBH
9	·			and greater than 3.28 ft (1 m) tail.
10	·			Herb – All herbaceous (non-woody) plants, regardless
11				or size, and woody plants less than 3.26 it tail.
Total Cover	<u>. 55</u>			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: 27.5	20% o	f total cove	r: <u>11</u>	neight.
Woody Vine Stratum (Plot size: 30)				
1				
2.				
3				Hudronhutio
а				Vegetation
T				Present? Yes <u>V</u> No
		() . (.)	0	
50% of total cover: 0	20% 0	t total cove	r <u>: U</u>	
Remarks: (Include photo numbers here or on a separate s	heet.)			

/• • •	Matrix		<u> </u>	dox Feature	<u>s</u>	. ?	-	
(inches)	Color (moist)	%	Color (moist)	%	Туре			Remarks
0-15	10YR4/1	100					Silt	
15-22	10YR7/1	90	10YR5/8	10	С	<u>M</u>	Clay	
							·	
							·	
							·	
							·	
					·			
							·	
4								
Type: C=C	Concentration, D=De	epletion, RN	M=Reduced Matrix,	CS=Covere	d or Coa	ited Sand G	irains. ² Locati	ion: PL=Pore Lining, M=Matrix.
Histoso Histic E Black F Hydrog Stratifie	l (A1) ipipedon (A2) listic (A3) en Sulfide (A4) ed Layers (A5)		Polyvalue Be MLRA 149 Thin Dark Su Loamy Mucky	low Surface 0 B) Irface (S9) (I y Mineral (F ed Matrix (F2	(S8) (L LRR R, I 1) (LRR 2)	RR R, MLRA 149E K, L)	2 cm Muc Coast Pra 5 cm Muc 5 cm Muc Dark Surf Polyvalue	ck (A10) (LRR K, L, MLRA 149B) airie Redox (A16) (LRR K, L, R) cky Peat or Peat (S3) (LRR K, L, R) face (S7) (LRR K, L) e Below Surface (S8) (LRR K, L)
✓ Deplete _ Thick D _ Sandy I _ Sandy	ed Below Dark Surfa Dark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4)	ace (A11)	Depleted Mat Redox Dark S Depleted Dar Redox Depre	trix (F3) Surface (F6) k Surface (F ssions (F8)	7)		Thin Dark Iron-Man Piedmont Mesic Sp	k Surface (S9) (LRR K, L) ganese Masses (F12) (LRR K, L, R) t Floodplain Soils (F19) (MLRA 149B odic (TA6) (MLRA 144A, 145, 149B)
Sandy I Stripped Dark St	Redox (S5) d Matrix (S6) urface (S7) (LRR R	, MLRA 149	9B)				Red Pare Very Sha Other (Ex	ent Material (F21) Ilow Dark Surface (TF12) splain in Remarks)
³ Indicators of	of hydrophytic vege	tation and v	vetland hydrology m	ust be prese	ent, unle	ss disturbed	d or problematic.	
Restrictive _{Type:} <u>C</u>	Layer (if observed Clay layer	d):						
Depth (ir	nches): <u>15.0</u>						Hydric Soil Pr	esent? Yes <u>√</u> No
Remarks:								

Project/Site: NW OHIO WIND	City/County: PAULDING	со	Sampling Date: 4/15/2013 7:27:39 PM
Applicant/Owner: WESTWOOD	<u> </u>	State OH St	ampling Point: N-02 UPLAND
Investigator(s): MATTHEW VOLLBRECHT 2115	Section Township Banger	Sec 16. T1N R2	E
Londform (billance terrors atc.): Flat			Flat
Eandrom (misiope, tenace, etc.). <u>1944</u>		ive, convex, none):	
Slope (%): Lat: Slope (%):	_ Long:		Datum: OTMINAD 002101
Soil Map Unit Name: LC-Latty Silty Clay		NWI classifica	ation: Not Mapped
Are climatic / hydrologic conditions on the site typical for this time of y	/ear? Yes <u>/</u> No	(If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology significant	ly disturbed? Are "Norma	al Circumstances" pr	resent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed,	explain any answer	s in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locati	ons, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes No _✓	Is the Sampled Area		
Hydric Soil Present? Yes No ✓	within a Wetland?	Yes	No
Wetland Hydrology Present? Yes No ✓	If yes, optional Wetlan	d Site ID: Upland	sample point N-02
Remarks: (Explain alternative procedures here or in a separate rep	ort.)		
Upland sample point along wetland located in bed of a	an agricultural ditch		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicat	ors (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil C	Cracks (B6)
Surface Water (A1) Water-Stainer	d Leaves (B9)	Drainage Patt	terns (B10)
High Water Table (A2) Aquatic Faun	a (B13)	Moss Trim Lir	nes (B16)
Saturation (A3) Marl Deposits	; (B15)	Dry-Season V	Vater Table (C2)
Water Marks (B1) Hydrogen Sul	fide Odor (C1)	Crayfish Burro	ows (C8)
Sediment Deposits (B2) Oxidized Rhiz	Cospheres on Living Roots (C3)	Saturation Vis	sible on Aerial Imagery (C9)
Dhit Deposits (B3) Presence of P	Reduced Iron (C4)		Position (D2)
Iron Deposits (B5)	Inface (C7)	Shallow Aquit	ard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain	n in Remarks)	Microtopogram	phic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	r in tomanito,	FAC-Neutral	Test (D5)
Field Observations:			
Surface Water Present? Yes No ✓ Depth (inche	s):		
Water Table Present? Yes No ✓ Depth (inche	es):		
Saturation Present? Yes No 🗸 Depth (inche	(S): Wetland	Hydrology Present	t? Yes No_√
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if ava	ailable:	
Remarks:			

Sampling Point: N-02 UPL

Trop Stratum (Plot aize: 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
	<u>% Cover</u>	<u>Species</u> ?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: [] (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6				Prevalence Index worksheet:
Total Cove	r: 0			Total % Cover of: Multiply by:
50% of total actions 0	20% 0	of total cove	r: 0	$\begin{array}{c} \hline \hline \\ $
Sopling/Shrub Stratum (Diet size: 30	20 % 0	n lolai cove	I. <u> </u>	EACW species 0 $x^2 = 0$
Sapling/Shrub Stratum (Plot size)				FAC species 0 $x_3 = 0$
1				FACIL species 0 $x 4 = 0$
2				$\frac{1100 \text{ species}}{30} \times 5 = 150$
3				Column Totals: 30 (A) 150 (B)
4				
5				Prevalence Index = $B/A = 5$
6				Hydronhytic Vegetation Indicators:
0	0			Rapid Test for Hydrophytic Vegetation
Total Cove	r: <u>0</u>			Dominance Test is >50%
50% of total cover: 0	20% of	f total cover	0	$\frac{1}{2} = \frac{1}{2} $
Herb Stratum (Plot size: 5)				Morphological Adaptations ¹ (Provide supporting
1. Glycine spp	30	Yes	UPL	data in Remarks or on a separate sheet)
2.				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
	·			¹ Indicators of hydric soil and wetland hydrology must
4	·			be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8.				Septime/shouth Weady plants loss than 2 in DDU
9				and greater than 3.28 ft (1 m) tall.
10				
10	·			Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				
Total Cover	. 30			Woody vines – All woody vines greater than 3.28 ft in height
50% of total cover: <u>15</u>	20% o	f total cove	r: <u>6</u>	hoight
Woody Vine Stratum (Plot size: <u>30</u>)				
1.				
2				
2	·			
3				Hydrophytic Vegetation
4	·			Present? Yes No 🗸
Total Cove	r: <u>0</u>			
50% of total cover: 0	20% o	f total cover	. <u>.</u> 0	
Remarke: (Include photo numbers here or on a separate s	hoot)			
	sneet.)			

indefine Color (molet) % Type Loc Texture Remarks 0-27 10YR5/4 100 Silty clay	Depth	Cription: (Describe Matrix	to the depth	neeaea to docum Redox	ent the indicato	or or contirn	n the absence of	indicators.)	
0.27 10YR5/4 100 Silty clay	(inches)	Color (moist)	%	Color (moist)	<u>%</u> Type		Texture	Remarks	
Image: Concentration, Do-Depletion, RM-Reduced Matrix, CS-Covered or Costed Sand Grains. Indicators in the second sec	0-27	10YR5/4	100				Silty clay		
Type: C-CiConcentration, D=Depletion, RM-Reduced Matrix, CS=Covered or Coated Sand Grains. *Location: PL=Pore Lining, M=Matrix. Type: C-CiConcentration, D=Depletion, RM-Reduced Matrix, CS=Covered or Coated Sand Grains. *Location: PL=Pore Lining, M=Matrix. Histosol (A1) POlyvalue Bolow Surface (S9) (LRR R, IL, RA 1498) Coast Portice Redux (A10) (LRR K, L, RK K, L, R) Histosol (A1) Polyvalue Bolow Surface (S9) (LRR R, IL, RK K, L, R) Coast Portice Redux (A10) (LRR K, L, R) Black Histic (A3) Thin Dark, Surface (S9) (LRR R, L, R) Coast Portice Redux (A10) (LRR K, L, R) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Deplete Bolow Surface (S9) (LRR K, L, R) Sandy Mucky Mineal (A11) Deplete Dark Surface (F7) Polyvalue Bolow Surface (S9) (LRR K, L) Sandy Mucky Mineal (A11) Deplete Dark Surface (F7) Polyvalue Attrix (S9) Sandy Mucky Mineal (A11) Deplete Dark Surface (F7) Polyvalue Attrix (S9) Sandy Mucky (Baryet Matrix (S6) Red Attrix (F7) Polyvalue Attrix (S9) (LRR K, L) Sandy Mucky (Baryet Matrix (S6) Red Attrix (F7) Polyvalue Attrix (S6) (LRR K, L) Sandy Mucky (Baryet Matrix (S6) Red Attrix (F7) Polyvalue Attrix (S6) (LRR K, L) Sandy Mucky (Matrix (S6) Red Attrix (S7) (LRR K, L)									
Type: C-Concentration. D-Depletion. RM-Reduced Matrix, CS-Covered or Coated Sand Grains. *Location: PL=Pore Lining, M=Matrix. Type: C-Concentration. D-Depletion. RM-Reduced Matrix, CS-Covered or Coated Sand Grains. *Location: PL=Pore Lining, M=Matrix. Histoc For Poblement Hydric Solls : Indicators for Poblement Hydric Solls : Indicators for Poblement Hydric Solls : Histoc For Muck (A10) Polyvalue Balow Surface (S9) (LRR R, MLRA 149B) 5 cm Muck (A10) (LRR K, L, R) Black Histic (A3)									
Image: Concentration, D-Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains. *Location: PL=Pore Lining, M=Matrix. Type: CoConcentration, D-Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains. *Location: PL=Pore Lining, M=Matrix. Histosol (A1) Polyvalue Below Surface (S3) (LRR R, MLRA 1498) Coast Praine Reduced Matrix, CS-Covered or Coated Sand Grains. Histosol (A1) Polyvalue Below Surface (S3) (LRR R, L, R) Coast Praine Reduced (A16) (LRR K, L, R) Black Histo (A2) Thin Dark Surface (S9) (LRR R, MLRA 1498) Coast Praine Reduced (S1) (LRR K, L, R) Brait Histo (A3) Thin Dark Surface (S3) (LRR K, L, R) Depletiod Matrix (F2) Straffield Laystrace (A12) Redox Dark Surface (F0) Thin Dark Surface (S3) (LRR K, L, R) Straffield Laystrace (A12) Redox Dark Surface (F7) Piedmont Floodphati Solin (F12) (LRR K, L) Straffield Laystrace (A12) Redox Dark Surface (F7) Piedmont Floodphati (S2) Straffield Laystrace (A12) Redox Dark Surface (F7) Piedmont Floodphati (S2) Straffield Laystrace (A13) Depleted Dark Surface (F7) Piedmont Floodphati (S2) Straffield Laystrace (A12) Redox Dark Surface (F7) Other (Explain in Remarks) Straffield Laystrace (A12) Depletion Dark Surface (T2) Other (Explain in Remarks)									
Type:									
Image: Concentration, DuDepletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. ¹ Location: PL=Pore Lining, M=Matrix. Indicators: Indicators for Problematic Hydric Solis*: Indicators for Problematic Hydric Solis*: I Histo: Epipeoto (A2) MLRA 149B) Coast Prairie Redox (A10) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A10) (LRR K, L, R) I Hydric Soli Mide (A4) Loarny Gleyed Matrix (F2) Polyvalue Belox Dark Surface (S9) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Matrix (F3) Sandy Mucky Mineral (S1) Depleted Matrix (F3) Phetmont Floodplain Solis (F19) (MLR 144B) Sandy Alloyed Matrix (S1) Depleted Depleted Matrix (F2) Polyvalue Belox Dark Surface (F6) Indic R L) Sandy Cleyed Matrix (S1) Depleted Depleted Matrix (F3) Peidmont Floodplain Solis (F19) (MLR 144B) Sandy Cleyed Matrix (S1) Depleted Depleted Matrix (F2) Peidmont Floodplain Solis (F19) (MLR 144B) Sandy Cleyed Matrix (S1) Depleted Depleted Dark Surface (F7) Peidmont Floodplain Solis (F19) (MLR 144B) Sandy Cleyed Matrix (
Image: Solution of the second seco									
Type: C-Concentration, D-Dopletion, RM=Reduced Matrix, CS-Covered or Coated Sand Grains. ¹ Cocation: PL=Pore Lining, M-Matrix, Indicators for Problematic Hydric Solis ¹ : Indicators for Problematic Hydric Solis ¹ : Histic Epipedon (A2) Histic Epipedon (A2) Histic Epipedon (A2) Histic Epipedon (A2) Histic Epipedon (A2) Histic Epipedon (A2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Thin Dark Surface (S9) (LRR K, L) Depieted Borb Dark Surface (S9) (LRR K, L) Depieted Borb Dark Surface (S9) (LRR K, L) Depieted Borb Dark Surface (S9) (LRR K, L) Thick Dark Surface (S7) (LRR K, L) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Bandy Kurks (S4) Sandy Active (S6) Simped Matrix (S6) Bripped Matrix (S6) Bripped Matrix (S6) Bripped Matrix (S6) Bripped Matrix (S6) Bripped Matrix (S6) Bripped Matrix (S1) Depieted Dark Surface (TF1) Defieted Dark Surface (TF1) Dark Surface (S7) (LRR R, MLRA 149B) Sindped Matrix (S6) Bripped Matrix (S6) Bripped Matrix (S6) Depieted Dark Surface (TF12) Dark Surface (TF12) Dark Surface (TF12) Dark Surface (TF12) Depieted Dark Surfa									
Type: C-concentration, D=Depletion, RM-Reduced Matrix, CS=Covered or Coated Sand Grains. *Location: PL=Pore Lining, M=Matrix, NetWatrix, NetWatrix, NetWatrix, NetWatrix, NetWatrix, CS=Covered or Coated Sand Grains. Histicolo (A1) Polynatue Below Surface (S8) (LRR R, MLRA 149B) Coast Prainie Redox (A10) (LRR K, L, R) Histicolo (A2) Histicolo (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Loamy Gleyed Matrix (F3) Stratified Layers (A5) Loamy Gleyed Matrix (F3) Sandy Gleyed Matrix (F3) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Histicolo (A1) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Simped Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Dark Surface (S7) (LRR R, MLRA 149B) Sandy Cleyed Matrix (S4) Depleted Dark Surface (S7) Depleted Matrix (F2) Depleted Matrix (F3) Simped Matrix (S4) Red Darent Material (F21) U'ver Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Sandy Redox (S5) Sandy Cleyed Matrix (S4) Dark Surface (S7) (LRR R, MLRA 149B) Sandy Cleyed Matrix (S4) Red Parent Material (F21) U'ver Shallow Dark Surface (S7) (LRR R, MLRA 149B) Sandy Cleyed Matrix (S4) Dark Surface (S7) (LRR R, MLRA 149B) Sandy Cleyed Matrix (S4) Red Parent Material (F21) U'ver Shallow Dark Surface (S7) Dark Surface (S7) (LRR R, MLRA 149B) Dark Surface (S7) (LRR R, MLRA 149B) Sandy Cleyed Matrix (S4) Dark Surface (S7) (LRR R, MLRA 149B) Dark Surface (S7) (LRR R, MLRA 149B) Dark Surface (S7) (LRR R, MLRA 149					······				
"Type: C-Concentration, D-Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains. "Location: PL-Pore Lining, M-Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils": Indicators for Problematic Hydric Soils": Histos (A) MLRA 1498) Coast Problematic Hydric Soils": Coast Privale Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, L) Dark Surface (S1) (LRR K, L) Dark Surface (S3) (LRR K, L) Statilied Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Depleted Matrix (F2) Polyvalue Below Dark Surface (A12) Polyvalue Mineral (S1) Sandy Mucky Mineral (S1) Depleted Matrix (C1) Poleided Matrix (C2) Poleided Matrix (RA 1498) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplate Soils (F1) (MLRA 1498) Sandy Redox (S5) Wards Soif C10 (MLRA 1498) Red Aca	. <u> </u>								
"Type: C_Concentration, D_D_Depletion, RM_Reduced Matrix, CS=Covered or Coated Sand Grains. *Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils*: Indicators for Problematic Hydric Soils*: Histic Eppedon (A2) MLRA 149B) Coast Praine Redox (A10) (LRR K, L, R). Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) S orm Mucky Mureal (F1) (LRR K, L) Straffied Layers (A5) Loarny Mucky Mineral (F1) (LRR K, L) Depleted Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (F0) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Predmont Soil (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Predmont Soil (F19) (MLRA 149B) Sandy Redox (S5) Sandy Redox (S5) Wery Shallow Dark Surface (T12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) *Stripped Matrix (S6) Ursyn Shallow Dark Surface (T12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (If observed): Type: Type: Hydric Soil Present? Yes No ✓ Depth (inches): <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. *Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils*: Indicators for Problematic Hydric Soils*: Histosol (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A10) (LRR K, L, R) Black Histo (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) S on Mucky Pater or Peat (S3) (LRR K, L) Bratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L, R) Sandy Redex (A12) Redox Dark Surface (F7) Piedmont Floodpian Solis (F10) (MLRA 149B) Sandy Redex (S5) Redox Depressions (F8) Meterial (F21) Stratified Layer (Moserved): Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Remarks: Type: Daph (incheis): N									
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ¹ : Histos (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Hydrigen Sulfide (A4) Loarny Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Sandy Gleged Matrix (S4) Redox Dark Surface (F7) Piedevel Matrix (S4) Thin Dark Surface (S9) (LRR K, L, R) Sandy Redox (S5) Bandy Redox (S5) Mesic Spodi (Cr6) (MLR A14, 145, 149B) Redox Dark Surface (F7) Piedevel Matrix (S4) Stripped Matrix (S4) Redox Depressions (F8) Mesic Spodi (Cr6) (MLR A144, 145, 149B) Redox Ark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (F72) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (F72) Mesic Spodi (Cr6) (MLR A14A, 145, 149B) Sandy Redox (S5) Bandy Redox (S7) Redox Dark Surface (F7) Piedevel Matrix (S4) Redox Dark Surface (S7) (LR R, MLA149B) Dark Surface (S7) (LR R, MLRA 149B)									
Type: C-Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coaled Sand Grains. ³ Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils?: Indicators for Problematic Redox (A10) (LRR K, L, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Praine Redox (A10) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Depleted Below Surface (S9) (LRR K, L, R) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L, L) Depleted Below Dark Surface (S1) Depleted Dark Surface (F5) Ioro-Manganese Masses (F12) (LRR K, L, K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Medox (S5) Redox Depressions (F8) Mesic Sport (TA6) (MLRA 144A, 145, 149B) Sandy Gleged Matrix (S4) Redox Depressions (F8) Wesic Sport (TA6) (MLRA 144A, 145, 149B) Sing Glegies (S7) (LRR R, MLRA 144B) Users (S1) (LRR R, ML44A, 145, 149B) Users (S1) (LR R, NL44A, 145, 149B) Bark Surface (S7) (LRR R, MLRA 144B) Users (S1) (LR R, ML44A, 145, 149B) Users (S1) (CT (F12) (LR R, NL4A, 149B) Bark Surface (S7) (LRR R, MLRA 149B) Users (S1) (CT									
Type: Cacadit Indicators: Indicators of Problematic Hydric Soli Si: Histosol (A1)			- <u> </u>	Poducod Matrix CS				tion: DL_Doro Lining M_M	otriv
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Coast Praire Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) S om Mucky Peat or Paris Hydrogen Suffice (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L, C) Sandy Mucky Mineral (S1) Depleted Matrix (F3) Tino Dark Surface (F7) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Solis (F19) (MLRA 149B) Sandy Mucky Mineral (S2) Depleted Dark Surface (F7) Piedmont Floodplain Solis (F19) (MLRA 149B) Sandy Mucky Mineral (S2) Redox Dark Surface (F7) Piedmont Floodplain Solis (F19) (MLRA 144B, 145, 149B) Sandy Mucky Mineral (S3) Red Parent Material (F21) Very Shallow Dark Surface (T712) Dark Surface (S7) (LRR R, MLRA 149B) Orther (Explain in Remarks) Stripped Matrix (S6) Very Shallow Dark Surface (T712) Dark Surface (S7) (LRR R, MLRA 149B) Orther (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	Hydric Soil	Indicators:		Ceduced Mainx, CS		aleu Sanu G	Indicators fo	or Problematic Hydric Soil	ls ³ :
Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Sorm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S9) (LRR K, L, R) Depleted Below Dark Surface (A1) Depleted Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L, R) Depleted Below Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Redox Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Medox (S6) Redox Depressions (F8) Mesic Spoile (TA6) (MLRA 144, 145, 149B) Sittpiped Matrix (S4) Redox Peresent, unless disturbed or problematic. Restrictive Layer (If observed): Type: Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Remarks: Remarks: Sample point located in a tilled field Hydric Soil Present? Yes No ✓	Histosol	(A1)	_	Polyvalue Below	Surface (S8) (L	RR R,	2 cm Mu	ck (A10) (LRR K, L, MLRA	149B)
Black Histic (A3)	Histic E	pipedon (A2)		MLRA 149B)			Coast Pr	airie Redox (A16) (LRR K,	L, R)
	Black H	istic (A3)	-	Thin Dark Surfac	ce (S9) (LRR R,	MLRA 149B	5 cm Mu	cky Peat or Peat (S3) (LRF	R K, L, R)
Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Ifon-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Solis (F19) (MLRA 1498) Sandy Redox (S5) Stripped Matrix (S4) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) "Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (If observed): Type: Depth (inches): Remarks: Sample point located in a tilled field	Hydroge Stratifie	d Lavers (A5)	_	_ Loamy Mucky M	Ineral (F1) (LRR Iatrix (F2)	r , L)	Polyvalu	e Below Surface (S8) (LRR	K. L)
Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) " "Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (If observed): Type: Depth (inches): Restrictive Layer (If observed): Samy Be point located in a tilled field	Deplete	d Below Dark Surfac	e (A11)	Depleted Matrix	(F3)		Thin Dar	k Surface (S9) (LRR K, L)	, _/
	Thick Da	ark Surface (A12)	_	Redox Dark Surf	face (F6)		Iron-Mar	nganese Masses (F12) (LR	R K, L, R)
Sandy Gleyed Matrix (S4) Red X (S4) Red N Depressions (r5) Red Parent Material (F21) Red Parent Material (F21) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Red Parent Material (F21) Red Parent Material (F21) Red Parent Material (F21) Other (Explain in Remarks) Other (Explain in Remarks) Red Parent Material (F21) Red Parent (F21) Red Parent Material (F21) Red Parent (F21)Red Parent (F21) Red Parent (F21) Red Parent (F21)Red Parent (F21)Red Pa	Sandy N	Mucky Mineral (S1)	-	Depleted Dark S	urface (F7)		Piedmon	It Floodplain Soils (F19) (M	LRA 149B)
Stripped Matrix (S6) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:	Sandy C	Redox (S5)	_	Redox Depressio	5HS (F8)		Red Pare	ent Material (F21)	143, 1490)
Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No _✓ Remarks: Sample point located in a tilled field	Stripped	d Matrix (S6)					Very Sha	allow Dark Surface (TF12)	
^a ¹ adicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed):	Dark Su	urface (S7) (LRR R, I	MLRA 149B)				Other (E	xplain in Remarks)	
Restrictive Layer (if observed):	³ Indicators o	f hydrophytic yegeta	tion and wet	and hydrology must	be present unl	ee disturbac	l or problematic		
Type:	Restrictive	Laver (if observed):	:	and hydrology must	be present, unit				
Depth (inches): No _✓ Remarks: Sample point located in a tilled field	Type:								
Remarks: Sample point located in a tilled field	Depth (in	ches):		_			Hydric Soil P	resent? Yes N	lo_√
Sample point located in a tilled field	Remarks:								
	S	ample point loca	ited in a till	led field					

Project/Site: NW OHIO WIND	City/County: PAUL	DING CO Sampling Date: 4/15/2013 7:30:18 I
Applicant/Owner: WESTWOOD		State: OH Sampling Point: N-02 WETLAN
Investigator(s); MATTHEW VOLLBRECHT 2115	Section, Township, R	ange: Sec 16, T1N R2E
Landform (billslope, terrace, etc.). Flat	l ocal relie	f (concave, convex, none). Side slope of ditch
Slope (%): 5-10% Lat: 698698.6617	4546339.33	36 Datum: UTM NAD 83Z13N
Soil Map Linit Name: LC-Latty silty clay		Data
Are elimetia / hydrolegia conditions on the site typical for this time of y		//f no_ovaloin in Romarka)
Are climatic / hydrologic conditions on the site typical for this time of y		
Are Vegetation, Soil, or Hydrology significanti	y disturbed? Are	"Normal Circumstances" present? Yes <u>V</u> No
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If r	ieeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling point	locations, transects, important features, etc.
Hydrophytic Vegetation Present? Ves V	Is the Sample	ed Area
Hydric Soil Present? Yes ✓ No	within a Wetla	and? Yes <u>√</u> No
Wetland Hydrology Present? Yes ✓ No	If ves. optional	Wetland Site ID: Wetland sample point N-02
Remarks: (Explain alternative procedures here or in a separate rep	ort.)	
Wetland located in the bed of an agricultural ditch		
wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply))	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained	Leaves (B9)	Drainage Patterns (B10)
✓ High Water Table (A2) Aquatic Fauna	a (B13)	Moss Trim Lines (B16)
Veter Marke (P1)	(B15) Fide Oder (C1)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sul	nde Odor (C1)	Craylish Burrows (C8)
Drift Deposits (B3)	educed Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	eduction in Tilled Soils	(C6) Geomorphic Position (D2)
Iron Deposits (B5)	rface (C7)	Shallow Aguitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain	n in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		✓ FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes No ✓ Depth (inche	s):	
Water Table Present? Yes ✓ No _ Depth (inche	s): 9.0	
Saturation Present? Yes ✓ No _ Depth (inche	s): 11.0 w	/etland Hydrology Present? Yes _√ No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspection	is), if available:
Remarks:		

Sampling Point: N-02 WET

Trace Structures (Distributed and 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 00)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: _1 (A)
2				Total Number of Dominant
3				Species Across All Strata:(B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
5				
6				Prevalence Index worksheet:
Total Cove	r: <u>0</u>			Total % Cover of: Multiply by:
50% of total cover: 0	20% o	of total cove	r: <u>0</u>	OBL species $0 x 1 = 0$
Sapling/Shrub Stratum (Plot size: 30				FACW species <u>30</u> x 2 = <u>60</u>
1				FAC species 0 x 3 = 0
··				FACU species 0 x 4 = 0
2	·			UPL species 0 $x 5 = 0$
3				Column Totals: <u>30</u> (A) <u>60</u> (B)
4				2
5				Prevalence Index = $B/A = 2$
6.				Hydrophytic Vegetation Indicators:
Total Cava	0			Rapid Test for Hydrophytic Vegetation
	ı		0	✓ Dominance Test is >50%
50% of total cover: 0	20% of	f total cover	.0	✓ Prevalence Index is $\leq 3.0^1$
Herb Stratum (Plot size: 5)				Morphological Adaptations ¹ (Provide supporting
1. Phalaris arundinacea	30	Yes	FACW	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
				¹ Indicators of hydric soil and wetland hydrology must
4	·			be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sanling/shrub Weady plants loss than 2 in DPH
9				and greater than 3.28 ft (1 m) tall.
10				
10	·			ferb – All nerbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				
Total Cove	. 30			Woody vines – All woody vines greater than 3.28 ft in height
50% of total cover: <u>15</u>	20% o	f total cove	<u>6</u>	noight.
Woody Vine Stratum (Plot size: 30)				
1				
··				
2				
3				Hydrophytic
4				Present? Yes V No
Total Cove	r: <u>0</u>			
50% of total cover: 0	20% o	f total cover	0	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Depth (inches) Matrix Color (moist) Redox Features Color (moist) Type Loc ² Texture Remarks 0-10 10YR4/1 100 100 Silt	Profile Desc	cription: (Describe	to the de	pth needed to docu	ment the	indicator	or confiri	rm the absence of indicators.)
Clor (moist) % Color (moist) % Type' Loc' Texture Remarks 0-10 10YR4/1 100 Silt	Depth	Matrix		Redo	ox Feature	es	0	_
0-10 10YR4/1 100 Silt 10-16 10YR6/1 85 10YR5/8 15 C M Clay Image: Silt indicators in the indicators indicators in the indicator indicator indicator indicators in the indicator indicator indicator indicators in the indicator indicator indicator indicators	(inches)	Color (moist)	%	Color (moist)	%	Type'	_Loc ²	Texture Remarks
10-16 10YR6/1 85 10YR5/8 15 C M Clay	0-10	10YR4/1	100					Silt
Image: Solution of the second structure of the	10-16	10YR6/1	85	10YR5/8	15	С	М	Clav
Image: Strate (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Image: Strate (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Image: Strate (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Image: Stratified Layers (A5) Image: Stratified Layers (A1) Image: Stratified Layers (A5) Image: Stratified Carl (S1) Image: Stratified Layers (A5) Image: Stratified Carl (S1) Image: Stratified Carl (S1) Depleted Matrix (F3) Image: Stratified Carl (S1) Depleted Matrix (F3) Image: Stratified Carl (S1) Depleted Matrix (F3) Image: Stratified Carl (S2) Redox Dark Surface (F7) Image: Stratified Carl (S2) Red Parent Material (F21) Image: Stratified Carl (S2) Red Parent Material (F21) Image: Stratified Carl (S3) Red Parent Material (F21) Image: Stratified Carl (S3)<				1011(0/0		- -		
Image: Solution of the second seco			_		_			
Image: Specific Soli Indicators: Image: Specific Soli Indicators: Image: Ima								
'Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, R) Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S9) (LRR R, L) Stratified Layers (A5) Loamy Gleyed Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Minarel (S1) Depleted Parent Material (S1) Depleted Parent Material (S1) Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Stripped Matrix (S6) Other (Explain in Remarks) Other (Explain in Remarks)	——							
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Indicators for Problematic Hydric Soils ³ : Black Histic (A3) Thin Dark Surface (S9) (LRR K, L, R) Coast Prairie Redox (A16) (LRR K, L, R) Hydrigen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (F6) Thin Dark Surface (A12) Redox Dark Surface (F7) Polepleted Dark Surface (S9) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F12) (LRR A 149B) Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)								
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Hydrigen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Strattified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Dark Surface (A11) Depleted Dark Surface (F6) Thin Dark Surface (F6) Inion Manganese Graions (F19) (MLRA 149B) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Mecky (S5) Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Sandy Redox (S5) Outper Surface (S7) (LRR R, MLRA 149B) Sandy Redox (S5) Outper Surface (S7) (LRR R, MLRA 149B) Sandy Redox (S5) Outper Surface (S7) (LRR R, MLRA 149B)								
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR K, L) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Strattified Layers (A5) Loamy Gleyed Matrix (F2) Thin Dark Surface (F6) Thon-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Other (Explain in Remarks)								
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Thick Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Redox (S6) Redox Depressions (F8) Sandy Redox (S6) Redox Depressions (F8) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)								
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (F6) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S6) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)								
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Hydrogen Suffide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Hydrogen Suffide (A4) Loamy Gleyed Matrix (F2) Y Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Redox (S5) Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Sandy Redox (S5) Other (Explain in Remarks)								
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, R) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Very Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Redox (S5) Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (F21) Other (Explain in Remarks) Other (Explain in Remarks)								
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ :								
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ :	<u> </u>		_		-	·		
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ :								
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : — Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) — Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) — Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) — Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, C) — Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) — Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) — Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 144B) — Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) — Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)								
Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ :	1 Type: C=C	oncentration D-Der	oletion RM	I-Reduced Matrix C	S-Covere	d or Coate	d Sand G	Grains ² Location: PL=Pore Lining M=Matrix
 Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Black Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Coast Prairie Redox (A16) (LRR K, L, R) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) 	Hvdric Soil	Indicators:			0-001010			Indicators for Problematic Hydric Soils ³ :
	Histosol	(Δ1)		Polyvalue Belo	w Surface	(S8) (I R	R	2 cm Muck (A10) (I RR K I MI RA 149B)
	Histic Fr	oipedon (A2)		MLRA 149B		, (00) (E R	× 1X,	Coast Prairie Redox (A16) (LRR K, L, B)
	Black Hi	istic (A3)		Thin Dark Surf	, ace (S9) (LRR R. M	LRA 149E	B) 5 cm Mucky Peat or Peat (S3) (LRR K. L. R)
 Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Charles Content of the provided matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) 	Hydroge	en Sulfide (A4)		Loamy Mucky	Mineral (F	1) (LRR K	(, L)	Dark Surface (S7) (LRR K, L)
✓ Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L)	Stratified	d Layers (A5)		Loamy Gleyed	Matrix (F2	2)	, ,	Polyvalue Below Surface (S8) (LRR K, L)
	Deplete	d Below Dark Surfac	ce (A11)	Depleted Matri	x (F3)	,		Thin Dark Surface (S9) (LRR K, L)
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)	Thick Da	ark Surface (A12)		Redox Dark Su	urface (F6))		Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)	Sandy N	lucky Mineral (S1)		Depleted Dark	Surface (I	F7)		Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)	Sandy G	Bleyed Matrix (S4)		Redox Depress	sions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
	Sandy F	Redox (S5)						Red Parent Material (F21)
Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)	Stripped	I Matrix (S6)						Very Shallow Dark Surface (TF12)
2	Dark Su	rface (S7) (LRR R,	MLRA 149	B)				Other (Explain in Remarks)
Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	°Indicators o	f hydrophytic vegeta	ation and w	etland hydrology mu	st be pres	ent, unless	s disturbe	ed or problematic.
Restrictive Layer (if observed):	Restrictive	Layer (if observed)):					
Type: Clay	Type: C	lay						
Depth (inches): 10.0 Hydric Soil Present? Yes ✓ No	Depth (in	_{ches):} 10.0						Hydric Soil Present? Yes √ No
Remarks:	Remarks:	,						
	ritemanto.							

Project/Site: NW OHIO W	IND			Citv/Countv:	PAULDING	СО	Sampling D	Vate: 4/18/2013 3:12:58 PM
Applicant/Owner: WESTW	OOD					_{State:} OH	Sampling Poi	nt: N-03 UPLAND
Investigator(s); MATTHEW	VOLLB	RECHT 2	115	Section, Tov	vnship, Range:	Sec 16, T1N	NR2E	
Landform (hillslope terrace e	tc). Flat				ocal relief (conc	ave convex no	ne). Flat	
Slope (%): 0-5%	698297.	707		Long: 4545699.724				
Soil Mon Unit Name: LC-Lat	tv siltv cl	av		_ Long			Datum	Mapped
	the second second							
Are climatic / nydrologic condi	lions on the	e site typical	I for this time of y	/ear? Yes <u>v</u>	NO	(if no, explain	In Remarks.)	
Are Vegetation, Soil	, or H	ydrology	significantl	y disturbed?	Are "Norm	al Circumstanc	es" present? Ye	s <u>v</u> No
Are Vegetation, Soil	, or H	ydrology	naturally p	roblematic?	(If needed,	explain any an	nswers in Remark	s.)
SUMMARY OF FINDING	GS – Att	ach site	map showin	g sampling	g point locati	ions, transe	ects, importa	nt features, etc.
Hydrophytic Vegetation Pres	ent?	Yes	No✓	Is the	e Sampled Area			
Hydric Soil Present?		Yes	No ✓	withi	n a Wetland?	Yes	No_√	<u> </u>
Wetland Hydrology Present?	ji.	Yes	No	_ If yes	, optional Wetlar	nd Site ID: Up	land sample p	point N-03
Remarks: (Explain alternativ	e procedur	es here or i	n a separate rep	ort.)				
Upland sample point in	woodlot	adjacent	to Type 7 wo	oded swam	p wetland			
HYDROLOGY								
Wetland Hydrology Indicat	ors:					Secondary Ir	ndicators (minimu	m of two required)
Primary Indicators (minimum	of one is r	equired; che	eck all that apply)		Surface	Soil Cracks (B6)	
Surface Water (A1)			Water-Stained	d Leaves (B9)		Drainage	e Patterns (B10)	
High Water Table (A2)			Aquatic Fauna	a (B13)		Moss Tr	im Lines (B16)	
Saturation (A3)		_	Marl Deposits	(B15)		Dry-Sea	son Water Table	(C2)
Water Marks (B1)		_	_ Hydrogen Sul	fide Odor (C1)		Crayfish	Burrows (C8)	
Sediment Deposits (B2)		_	_ Oxidized Rhiz	ospheres on L	iving Roots (C3)	Saturatio	on Visible on Aeri	al Imagery (C9)
Drift Deposits (B3)		_	Presence of R	Reduced Iron (C4)	Stunted	or Stressed Plant	ts (D1)
Algal Mat or Crust (B4)		_	_ Recent Iron R	eduction in Til	led Soils (C6)	Geomor	phic Position (D2)
Iron Deposits (B5)		_	_ Thin Muck Su	rface (C7)		Shallow	Aquitard (D3)	
Inundation Visible on Ae	rial Imager	y (B7)	_ Other (Explair	n in Remarks)		Microtop	ographic Relief (D4)
Sparsely Vegetated Cor	icave Surfa	ce (B8)				FAC-Ne	utral Test (D5)	
Field Observations:				``````````````````````````````````````				
Surface Water Present?	Yes	No <u>*</u>	Depth (inche	s):				
Water Table Present?	Yes	No	Depth (inche	s):	—			
Saturation Present?	Yes	No _✓_	Depth (inche	s):	Wetland	Hydrology Pro	esent? Yes	No_✓
Describe Recorded Data (str	eam gauge	, monitoring	g well, aerial pho	tos, previous i	nspections), if av	ailable:		
	0 0							
Remarks:								

Sampling Point: N-03 UPL

Tree Stratum (Plot size: 30	Absolute	Dominant	Indicator Status	Dominance Test worksheet:
A Carva ovata	40	Yes	FACU	Number of Dominant Species
2 Celtis occidentalis	25	Yes	FAC	That Are OBL, FACW, or FAC: 2 (A)
2. Quercus palustris	15	No	FACW	Total Number of Dominant
3				
4				Percent of Dominant Species That Are OBL_FACW_or_FAC: 50 (A/B)
5				
6	80			Prevalence Index worksheet:
Total Cover				Total % Cover of: Multiply by:
50% of total cover: <u>40</u>	20% c	of total cove	r: <u>16</u>	OBL species $\frac{0}{45}$ x 1 = $\frac{0}{20}$
Sapling/Shrub Stratum (Plot size: <u>30</u>)				FACW species 15 $x_2 = 30$
1. Celtis occidentalis	5	Yes	FAC	FAC species 30 $x_3 = 90$
2				FACU species 03 $x 4 = 200$
3.				UPL species 0 $x = 0$
4				Column Totals: <u>110</u> (A) <u>300</u> (B)
5				Prevalence Index = $B/A = 3.45$
6				Hydronhytic Vegetation Indicators:
0	5			Rapid Test for Hydrophytic Vegetation
Total Cove				Dominance Test is >50%
50% of total cover: <u>2.5</u>	20% o	f total cover	<u>. 1</u>	Prevalence Index is $\leq 3.0^{1}$
Herb Stratum (Plot size: 5)				Morphological Adaptations ¹ (Provide supporting
1. Trillium sessile	25	Yes	FACU	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				1
4				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5.				Definitions of Vagatation Strata
6.				Definitions of Vegetation Strata.
7				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
0				at breast height (DDH), regardless of height.
o				Sapling/shrub – Woody plants less than 3 in. DBH
9				
10				Herb – All herbaceous (non-woody) plants, regardless
11				
Total Cover	25			Woody vines – All woody vines greater than 3.28 ft in height
50% of total cover: <u>12.5</u>	20% o	of total cove	<u>5</u>	Toight.
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2.				
3				Hydrophytic
				Vegetation
Tatal Cava				Present? Yes No 🗸
			0	
50% of total cover: 0	20% o	f total cover	<u> </u>	
Remarks: (Include photo numbers here or on a separate s	heet.)			

)-15 15-25		%	Color (moist)	% Tvn	e ¹ Loc ²	Texture	Remarks
15-25	10YR3/2	100		. <u> </u>		Silty Clav	
10 20	10VR4/2	100				Silty Clay	
	1011(4/2						
				·			
						·	
						·	
						·	
Type: C=Co	ncentration, D=Dep	oletion, RM	=Reduced Matrix, CS	S=Covered or Co	oated Sand G	irains. ² Loc	cation: PL=Pore Lining, M=Matrix.
Histosol ((A1)		Polyvalue Belov	w Surface (S8) (2 cm M	Auck (A10) (IRR K I MIRA 149B)
Histosof (ipedon (A2)		MLRA 149B)	LINN IX,	Coast	Prairie Redox (A16) (LRR K, L, R)
Black His	stic (A3)		Thin Dark Surfa	ace (S9) (LRR R	R, MLRA 1498	B) 5 cm N	Nucky Peat or Peat (S3) (LRR K, L, R)
Hydroger	n Sulfide (A4)		Loamy Mucky N	Mineral (F1) (LR	R K, L)	Dark S	Surface (S7) (LRR K, L)
_ Stratified Depleted	Below Dark Surfac	ce (A11)	Loamy Gleyed	(F3)		Polyva Thin D	ark Surface (S9) (LRR K, L)
Thick Da	rk Surface (A12)		Redox Dark Su	rface (F6)		Iron-M	anganese Masses (F12) (LRR K, L, R
Sandy M	ucky Mineral (S1)		Depleted Dark	Surface (F7)		Piedme	ont Floodplain Soils (F19) (MLRA 149
_ Sandy GI	leyed Matrix (S4)		Redox Depress	sions (F8)		Mesic	Spodic (TA6) (MLRA 144A, 145, 149E
Sandy Re Stripped	Matrix (S6)					Verv S	hallow Dark Surface (TF12)
_ Dark Sur	face (S7) (LRR R,	MLRA 1498	3)			Other ((Explain in Remarks)
Indicators of	hydrophytic vegeta	ition and we	etland hydrology mus	st be present, ur	less disturbed	d or problematic	
	ayer (il observed)	-					
Dopth (inc	boc):					Hvdric Soil	Present? Yes No √
	mes):					ingane con	

Project/Site: NW OHIO WIND	City/County: PAULDING CO Sampling Date: 4/18/2013 3:04:53 PM
Applicant/Owner: WESTWOOD	State: OH Sampling Point: N-03 WETLAND
Investigator(s) MATTHEW VOLLBRECHT 2115	Section Township Range: Sec 16 T1N R2E
Landform (billslong, torrage, etc.); Flat	Local reliat (concerve, convex, page): Flat
ch (c) 0-5% (c) 698296.625	4545712 387
Slope (%): Lat: Lat:	Long: 4040712.007 Datum: 0111110 002.1014
Soil Map Unit Name:Clary Clay	NWI classification: NOT Mapped
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>V</u> No (If no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes 🖌 No	
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.	
Hydrophytic Vegetation Present? Ves 🗸 No	Is the Sampled Area
Hydric Soil Present? Yes ✓ No	within a Wetland? Yes _ ✓ No
Wetland Hydrology Present? Yes ✓ No	If ves, optional Wetland Site ID: Wetland sample point N-03
Remarks: (Explain alternative procedures here or in a separate rep	ort.)
Wetland sample point in a Type 7 Wooded Swamp Wetland	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	Surface Soil Cracks (B6)
✓ Surface Water (A1) Water-Stainer	Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Faun	a (B13) Moss Trim Lines (B16)
✓ Saturation (A3) Marl Deposits	(B15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sul	fide Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhiz	ospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of F	teduced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat of Crust (B4) Recent Iron R	reace (C7) Shellow Aguitard (D2)
Inundation Visible on Aerial Imageny (BZ)	nace (Cr) Shallow Aquitato (DS)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes ✓ No Depth (inche	_{s):} 1.0
Water Table Present? Yes ✓ No Depth (inche	s): 0.0
Saturation Present? Yes Vo Depth (inche	s): 0.0 Wetland Hydrology Present? Yes ✓ No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if available:
Remarks:	
Sampling Point: N-03 WET

Tree Stratum (Plot size: 30)	Absolute	Dominant	Indicator	Dominance Test worksheet:
1 Carya ovata	40	Yes	FACU	Number of Dominant Species
2 Celtis occidentalis	25	Yes	FAC	That Are OBL, FACW, of FAC: (A)
3 Quercus palustris	15	No	FACW	Total Number of Dominant Species Across All Strata: 4 (B)
а				Become of Deminent Creation
5				That Are OBL, FACW, or FAC: <u>75</u> (A/B)
6				
Total Cover	. 80			Prevalence Index worksheet:
			16	OPL species 0 x 1 = 0
50% of total cover:	20% 0	or total cove		FACW species 15 $x_2 = 30$
Celtis occidentalis	5	Yes	FAC	FAC species 40 $x_3 = 120$
	<u> </u>	100		FACU species 40 x 4 = 160
2				UPL species 0 x 5 = 0
3				Column Totals: <u>95</u> (A) <u>310</u> (B)
4				Broyclence Index = P/A = -3.26
5				
6				Hydrophytic Vegetation Indicators:
Total Cove	<u>5</u>			Rapid Test for Hydrophytic Vegetation
50% of total cover: <u>2.5</u>	20% o	f total cover	. <u>.</u> 1	Dominance lest is >50%
Herb Stratum (Plot size: 5)				$\frac{1}{2} = \frac{1}{2} $
1. Carex blanda	10	Yes	FAC	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4.				Indicators of hydric soil and wetland hydrology must
5				
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
0				at breast height (DDH), regardless of height.
0				Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3 28 ft (1 m) tall
9				
10				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11	10			We advise a All used wines greater than 2.20 ft in
Total Cover	10		0	height.
50% of total cover: <u>5</u>	20% c	of total cove	r: <u>∠</u>	
Woody Vine Stratum (Plot size: 30)				
1				
2				
3				Hydrophytic
4				Vegetation Present? Yes V No
Total Cove	r: 0			
50% of total cover: <u>0</u>	20% o	f total cover	. <u>.</u> 0	
Pamarks: (Include photo numbers here or on a separate s	hoot)			
	neet.)			

Profile Desc	ription: (Describe	to the de	pth needed to docu	ment the	indicator	or confirm	m the absence of indicators.)
Depth	Matrix		Redo	ox Feature	es	0	
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc ²	Texture Remarks
0-14	10YR4/2	100					Loam
14-23	10YR6/1	80	10YR5/8	20	С	М	Clav
			·				
		_					
——							
<u> </u>			·	_			
¹ Type: C=Co	oncentration, D=Dep	oletion, RN	I=Reduced Matrix, C	S=Covere	d or Coate	ed Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	Indicators:						Indicators for Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Belo	w Surface	e (S8) (LR	R R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Ep	oipedon (A2)		MLRA 149B	5)			Coast Prairie Redox (A16) (LRR K, L, R)
Black Hi	stic (A3)		Thin Dark Surf	ace (S9) (LRR R, M	LRA 149E	B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	n Sulfide (A4)		Loamy Mucky	Mineral (F	1) (LRR K	ί, L)	Dark Surface (S7) (LRR K, L)
Stratified	d Layers (A5)	() ()	Loamy Gleyed	Matrix (F2	2)		Polyvalue Below Surface (S8) (LRR K, L)
Depleted	D Below Dark Surrac	ce (ATT)	Depleted Matri	X (F3) urface (E6)	\		Inin Dark Surface (S9) (LRR K, L)
Sandy M	Ark Surface (ATZ) Aucky Mineral (S1)		Redux Dark St	Surface (FO) E7)		IIOII-Manganese Masses (F12) (LRR N, L, R) Piedmont Floodplain Soils (F19) (MI RA 149 B)
Sandy R	leved Matrix (S4)		Depieted Dark	sions (F8)	()		Mesic Spodic (TA6) (MI RA 144A 145 149B)
Sandy B	edox (S5)						Red Parent Material (F21)
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)
Dark Su	rface (S7) (LRR R,	MLRA 149	B)				Other (Explain in Remarks)
			/				
³ Indicators of	f hydrophytic vegeta	ation and w	vetland hydrology mu	st be pres	ent, unles	s disturbe	d or problematic.
Restrictive I	_ayer (if observed)	:					
Type: CI	ay						
Depth (inc	_{ches)} . 14.0						Hydric Soil Present? Yes _ ✓ No
Pomarks:							
Remarks.							

Project/Site: NW OHIO WIND	City/County: PAULDING CO Sampling Date: 4/15/2013 8:02:06 PM
Applicant/Owner: WESTWOOD	State: OH Sampling Bailty O-01 UPLAND
Applicantowner	State Sampling Point
	Section, Township, Range: <u>600 10, 111112</u>
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): <u>Flat</u>
Slope (%): Lat:699844.1161	Long: Datum: DIM NAD 83213N
Soil Map Unit Name: Lc-Latty silty clay	NWI classification: Not Mapped
Are climatic / hydrologic conditions on the site typical for this time of \ensuremath{y}	ear? Yes 🖌 No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Normal Circumstances" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No _✓ Hydric Soil Present? Yes No _✓ Wetland Hydrology Present? Yes No _✓ Remarks: (Explain alternative procedures here or in a separate reported to the second seco	Is the Sampled Area within a Wetland? Yes No _√ If yes, optional Wetland Site ID: Upland sample point O-01
Upland sample point adjacent to wetland in the bed of	a road ditch
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained	Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna	a (B13) Moss Trim Lines (B16)
Saturation (A3) Marl Deposits	(B15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sult	ide Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhiz	ospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)Presence of R	educed Iron (C4) Stunted of Stressed Plants (D1)
Iron Deposits (B5)	rface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain	hade (CF) Chance (BC)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No ✓ Depth (inches	s):
Water Table Present? Yes No ✓ Depth (inches	s):
Saturation Present? Yes No ✓ Depth (inches	s): Wetland Hydrology Present? Yes No _/
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial phot	tos, previous inspections), if available:
Remarks:	
	I

Sampling Point: 0-01 UPL

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>50</u>)	<u>% Cover</u>	<u>Species?</u>	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2	·			Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: 0 (A/B)
6				
	0			Prevalence Index worksheet:
l otal Cove	r:		0	Total % Cover of: Multiply by:
50% of total cover: 0	20% c	of total cove	r: <u>U</u>	OBL species 0 $x = 0$
Sapling/Shrub Stratum (Plot size: 30)				FACW species 0 $x 2 = 0$
1				FAC species 0 $x^3 = 0$
2				FACU species 30 $x 4 = 120$
3.				UPL species 40 $x 5 = 200$
4				Column Totals: $\underline{70}$ (A) $\underline{520}$ (B)
	·			Prevalence Index = $B/A = 4.57$
5				
6				Hydrophytic Vegetation Indicators:
Total Cove	r: <u>0</u>			Rapid Test for Hydrophytic Vegetation
50% of total cover: 0	20% o	f total cove	. 0	Dominance Lest is >50%
Herb Stratum (Plot size: 5)				$- Prevalence index is \leq 3.0$
1. Bromus inermis	40	Yes	UPL	data in Remarks or on a separate sheet)
2 Dactvlis domerata	30	Yes	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2.				
3	·			¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree Woody plants 2 in (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8.				Septime / abruh Weady plants loss than 2 in DDL
9				and greater than 3.28 ft (1 m) tall.
10				
	·			ferb – All nerbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				
Total Cover	. 10			Woody vines – All woody vines greater than 3.28 ft in height.
50% of total cover: <u>35</u>	20% o	of total cove	r: <u>14</u>	
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2.				
3				Underschutig
0	·			Vegetation
4	0			Present? Yes No 🖌
I otal Cove	r: <u>U</u>		0	
50% of total cover: <u>0</u>	20% o	f total cove	r: <u> </u>	
Remarks: (Include photo numbers here or on a separate s	sheet.)			
	,			

Depth	Matrix		Redox Features	_	
(inches)	Color (moist)	<u>%</u> .	Color (moist) % Type ¹ Loc ²		Remarks
0-22	10YR4/5	100		Silty loar	
Type: C=C	oncentration, D=Dep	eletion, RM=	Reduced Matrix, CS=Covered or Coated Sand G	rains. ² Locatio	on: PL=Pore Lining, M=Matrix.
Hyaric Soli			Delayelue Delaye Surface (SS) (I DD D		
Histosol Histic Fi	(AT) pipedon (A2)	-	MLRA 149B)	Coast Pra	irie Redox (A16) (LRR K. L. R)
Black H	istic (A3)	-	Thin Dark Surface (S9) (LRR R, MLRA 149E	3) 5 cm Mucl	ky Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)	-	Loamy Mucky Mineral (F1) (LRR K, L)	Dark Surfa	ace (S7) (LRR K, L)
Stratifie	d Layers (A5)	-	Loamy Gleyed Matrix (F2)	Polyvalue	Below Surface (S8) (LRR K, L)
Deplete	d Below Dark Surfac	e (A11)	Depleted Matrix (F3)	Thin Dark	Surface (S9) (LRR K, L)
Sandy N	Aucky Mineral (S1)	-	Depleted Dark Surface (F7)	Piedmont	Floodplain Soils (F12) (MLRA 149B
Sandy C	Gleyed Matrix (S4)		Redox Depressions (F8)	Mesic Spo	odic (TA6) (MLRA 144A, 145, 149B)
Sandy F	Redox (S5)	-		Red Parer	nt Material (F21)
Stripped	Matrix (S6)			Very Shall	ow Dark Surface (TF12)
Dark Su	irface (S7) (LRR R, I	MLRA 149B)	Other (Exp	olain in Remarks)
³ Indicators o	f hvdrophvtic vegeta	tion and wet	land hydrology must be present, unless disturbed	d or problematic.	
Restrictive	Layer (if observed):				
Type:					
Depth (in	ches):			Hydric Soil Pre	esent? Yes No _✓
Remarks:	,				

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Project/Site: NW OHIO WIND	City/County: PAULDING CO Sampling Date: 4/15/2013 8:05:13 PM
Applicant/Owner: WESTWOOD	State: OH Sampling Point: O-1 WETLAND
Investigator(s): MATTHEW VOLLBRECHT 2115	Section Townshin Range: Sec 15 T1N R2E
Landform (hillslope, terrace, etc.); Flat	Local relief (concave, convex, none). Side slope of road ditch
Class (%) 5-10% (699838 5362	4546798 656
	Long: Datum: Not Monpod
Soil Map Unit Name: Sity Clay	NWI classification: NOT Mapped
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes <u>V</u> No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology signification	antly disturbed? Are "Normal Circumstances" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology natural	y problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ving sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes 🗸 No	Is the Sampled Area
Hydric Soil Present? Yes ✓ No	within a Wetland? Yes _ ✓ _ No
Wetland Hydrology Present? Yes ✓ No	If ves. optional Wetland Site ID: Wetland sample point O-01
Remarks: (Explain alternative procedures here or in a separate	report.)
Wetland located in the bed of a road ditch	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that ap	ply) Surface Soil Cracks (B6)
Surface Water (A1) Water-Stai	ned Leaves (B9) Drainage Patterns (B10)
✓ High Water Table (A2)	una (B13) Moss Trim Lines (B16)
✓ Saturation (A3) Marl Depo	sits (B15) Drv-Season Water Table (C2)
Water Marks (B1) Hvdrogen	Sulfide Odor (C1) Cravfish Burrows (C8)
Sediment Deposits (B2) Oxidized F	chizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	of Reduced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iro	n Reduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5)	Surface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Exp	lain in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	✓ FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No ✓ Depth (ind	ches):
Water Table Present? Yes ✓ No Depth (ind	shes): <u>6.0</u>
Saturation Present? Yes ✓ No Depth (ind	shes): 7.0 Wetland Hydrology Present? Yes ✓ No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial p	notos, previous inspections), ir available:
Remarks:	
1	

Sampling Point: 0-01 WET

Trac Stratum (Dist size, 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
	% Cover	<u>Species</u> ?	Status	Number of Dominant Species
1	·			That Are OBL, FACW, or FAC: 2 (A)
2	·			Total Number of Dominant
3				Species Across All Strata: <u>2</u> (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
Total Cove	_{r:} 0			Total % Cover of: Multiply by:
50% of total actions 0	20% 0	of total cove	r: 0	$\frac{1}{\text{OBL species}} \frac{15}{x_1 = 15}$
Sopling/Shrub Stratum (Dist size: 30	20 % 0	n lolai cove	I. <u> </u>	FACW species 35 $x_2 = 70$
Saping/Shiub Stratum (Plot size)				FAC species 0 $x_3 = 0$
1	·			FACU species 0 $x = 0$
2				$\frac{1}{100} \text{ species } 0 specie$
3				Column Totals: 50 (A) 85 (B)
4				
5				Prevalence Index = $B/A = 1.7$
6	·			Hydronhytic Vegetation Indicators:
0	0			Rapid Test for Hydrophytic Vegetation
Total Cove	r: <u>0</u>			\checkmark Dominance Test is >50%
50% of total cover: 0	20% of	f total cover	. <u>.</u> 0	\checkmark Prevalence Index is $\leq 3.0^{1}$
Herb Stratum (Plot size: 5				Morphological Adaptations ¹ (Provide supporting
1. Phalaris arundinacea	35	Yes	FACW	data in Remarks or on a separate sheet)
2. Carex lacustris	15	Yes	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
3	·			
	·			¹ Indicators of hydric soil and wetland hydrology must
4	·			be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sanling/shrub Woody plants loss than 3 in DBH
9.				and greater than 3.28 ft (1 m) tall.
10	·			
	·			of size, and woody plants less than 3.28 ft tall.
11	<u> </u>			
Total Cover	. 50		1.0	height.
50% of total cover: <u>25</u>	20% o	f total cove	r: <u>10</u>	
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2.				
3				Underschutig
0	·			Vegetation
4	·			Present? Yes 🖌 No
Total Cove	r: <u>0</u>			
50% of total cover: 0	20% o	f total cover	r <u>:</u> 0	
Remarks: (Include photo numbers here or on a separate s	heet.)			
	,			
<u></u>				

Dopui	Matrix	X	Rec	dox Feature	es1	. ?	- <u>-</u> .	
(inches)	Color (moist)	%	Color (moist)	%	<u>Type</u>	Loc	Texture Remarks	
0-11	10YR3/1	100					Muck	
11-20	10YR5/1	85	10YR5/8	15	C	М	Silty Clay	
¹ Type: C=C	oncentration, D=D	Depletion, RN	/-Reduced Matrix, (CS=Covere	ed or Coate	ed Sand C	Grains. ² Location: PL=Pore Lining, M=Matriv	
Histoso Histic E Black H Hydroge Stratifie Deplete Thick D Sandy N Sandy R Sandy R Sandy R Sandy R Dark Su	I (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surf ark Surface (A12) Mucky Mineral (S1 Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR F	face (A11))) R, MLRA 14	Polyvalue Bel MLRA 149 Thin Dark Sur Loamy Mucky Depleted Mat Redox Dark S Depleted Darl Redox Depres	ow Surface B) face (S9) (Mineral (F d Matrix (F d Matrix (F3) Gurface (F6 < Surface (Ssions (F8)	e (S8) (LR LRR R, M 1) (LRR K 2)) F7)	R R, LRA 1498 (, L)	 2 cm Muck (A10) (LRR K, L, MLRA 149 Coast Prairie Redox (A16) (LRR K, L, F 5 cm Mucky Peat or Peat (S3) (LRR K, Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, Piedmont Floodplain Soils (F19) (MLRA Mesic Spodic (TA6) (MLRA 144A, 145, Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) 	B)) ∟, R) -) 149E 149B
³ Indicators o	of hydrophytic vege	etation and v	vetland hydrology m	ust be pres	ent, unles	s disturbe	d or problematic.	
Type: <u>C</u>	Layer (if observe	ed):						
Depth (in	ches):							

I

Project/Site: NW OHIO WIND	City/County: PAULDING CO Sampling Date: 4/16/2013 7:33:11 PM					
Applicant/Owner: WESTWOOD	State: OH Sampling Point: P-1 UPLAND					
Investigator(s): MATTHEW VOLLBRECHT 2115	Section, Township, Range: Sec 14 T1N R2E					
Landform (billslope terrace etc.): Flat	l ocal relief (concave, convex, none). Flat					
Slope (%): 0-5% Lot: 702378.9868	Long: 4545848.344					
Call Mar Unit Names C-l atty silty clay						
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes _✔ No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significant	y disturbed? Are "Normal Circumstances" present? Yes <u>✓</u> No					
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No ✓	Is the Sampled Area					
Hydric Soil Present? Yes No	within a Wetland? Yes No _✓					
Wetland Hydrology Present? Yes No _✓	If yes, optional Wetland Site ID: Upland sample point P-01					
Remarks: (Explain alternative procedures here or in a separate report.)						
Upland sample point adjacent to wetland located in the	e bed of a road ditch					
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Staine	Leaves (B9) Drainage Patterns (B10)					
High Water Table (A2) Aquatic Faun	a (B13) Moss Trim Lines (B16)					
Saturation (A3)Marl Deposits	(B15) Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Su	Tide Odor (C1) Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhiz	ospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)					
Algol Mat or Cruct (P4)	educed from (C4) Stuffed of Stressed Flants (D1)					
Iron Deposits (B5)	rface (C7) Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain	in Remarks) Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present? Yes No ✓ Depth (inche	s):					
Water Table Present? Yes No ✓ Depth (inche	s):					
Saturation Present? Yes No 🗸 Depth (inche	s): Wetland Hydrology Present? Yes No ✓					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial pho	os, previous inspections), if available:					
Remarks:						

Sampling Point: P-01 UPL

30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 50)	<u>% Cover</u>	<u>Species?</u>	Status	Number of Dominant Species
1			·	That Are OBL, FACW, or FAC: 0 (A)
2	·		·	Total Number of Dominant
3	·			Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6				Provalence Index worksheet:
Total Cove	. 0			Total % Cover of: Multiply by:
50% of total action 0	20% c	of total cove	O	$\begin{array}{c} \hline \hline \\ $
Sapling/Shrub Stratum (Plot size: 30	20780			FACW species 0 $x^2 = 0$
				FAC species 0 $x_3 = 0$
1	·			FACU species $85 \times 4 = 340$
2	·			UPL species $15 \times 5 = 75$
3	·			Column Totals: 100 (A) 415 (B)
4				
5				Prevalence Index = $B/A = 4.15$
6.				Hydrophytic Vegetation Indicators:
Total Covo	0			Rapid Test for Hydrophytic Vegetation
	•		0	Dominance Test is >50%
50% of total cover: 0	20% o	f total cove	r: <u>0</u>	Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: 5)	65	Yes	FACU	Morphological Adaptations ¹ (Provide supporting
2 Bromus inermis	15	No		Problematic Hydrophytic Vegetation ¹ (Explain)
	15	No		
			FACU	¹ Indicators of hydric soil and wetland hydrology must
4. I araxacum officinale	5	NO	FACU	be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				
7				at breast height (DBH), regardless of height.
8.				Continue determine the state lass them 2 in DDU
9				and greater than 3.28 ft (1 m) tall.
10				
10				ferb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11	100			
Total Cover	100			woody vines – All woody vines greater than 3.28 ft in height.
50% of total cover: <u>50</u>	20% c	f total cove	r: <u>20</u>	
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2				
3.				Hydrophytic
4				Vegetation
Total Cause				Present? Yes No 🖌
	r: <u> </u>		0	
50% of total cover: 0	20% o	f total cove	r: <u>0</u>	
Remarks: (Include photo numbers here or on a separate s	heet.)			

(inches) Color (moist) % Type ¹ Loc ² Texture Remarks 0-25 10YR4/3 100 Silty Loar	Depth	Matrix		Redox Features		
0-25 10YR4/3 100 Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar Image: Silty Loar <td>(inches)</td> <td>Color (moist)</td> <td></td> <td>Color (moist) % Type¹ Loc²</td> <td></td> <td>Remarks</td>	(inches)	Color (moist)		Color (moist) % Type ¹ Loc ²		Remarks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. tydric Soil Indicators: Indicators for Problematic Hydric Soils': Histos [A1] Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histos [A3] Thin Dark Surface (S9) (LRR K, MLRA 149B) Hydric Soil Indicators: 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histos [A1] Polyvalue Below Surface (S9) (LRR R, MLRA 149B) Hydrogen Sulfide (A4) Loarny Mucky Mineral (F1) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Dark Surface (A11) Depleted Dark Surface (F6) Thick Dark Surface (A12) Redox Dark Surface (F7) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Sandy Redox (S5) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Type: Depleted Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	0-25	10YR4/3	100		Silty Loar	
Type: C-Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. type: C-Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. type: C-Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. type: MLRA 149B Indicators for Problematic Hydric Solis ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Coast Praine Redox (A16) (LRR K, L, R) Histosol (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Praine Redox (A16) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Wincky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Solis (F12) (MLRA 149E) Sandy Redox (S5) Redox Depressions (F8) Meei Averant Material (F21) Stripped Matrix (S6) Coher (Explain in Remarks) Cher (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Type: Type:						
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Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. tydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histic Epipedon (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Learny Mucky Mineral (F1) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Sandy Mucky Mineral (S1) Depleted Matrix (F3) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S4) Other (Explain in Remarks) Indicators of hydrophybric vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Type: Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)					·	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. tydric Soil Indicators: Indicators for Problematic Hydric Soils ¹ : Histic Epipedon (A2) MLRA 149B) Black Histic (A3)						
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ³ Location: PL=Pore Lining, M=Matrix. Indicators: Indicators for Problematic Hydric Soils*: Indicators for Problematic Hydric Soils*: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) ALRA 149B) Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S9) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Inon-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Matrix (F3) Thin Dark Surface (F7) Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Stripped Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Stripped Matrix (S6) Other (Explain in Remarks) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. No Reservice: Hydric Soil Present? Yes No No <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. tydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Jege Addition (A2) MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Depleted Below Dark Surface (A12) Redox Dark Surface (F6) Thic Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Rodx (S5) Redox Depressions (F8) Sandy Rodx (S5) Redox Depressions (F8) Stripped Matrix (S6) Very Shallow Dark Surface (T712) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Ype: Type: Depleted Soil Present? Yes No/					·	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Indicators for Problematic Hydric Soils?: Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR K, L) Dark Surface (S7) (LRR K, L, R) Stratified Layers (A5) Loamy Mucky Mineral (F1) Depleted Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S1) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 1448, 145, 149B) Sandy Gleyed Matrix (S6) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 1444, 145, 149B) Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 1444, 145, 149B) Sandy Redox (S5) Other (Explain in Remarks) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. No Retrictive Layer (if observed): Ype: No Type:						
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soli Indicators: Indicators for Problematic Hydric Solis ² : Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A10) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A10) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F2) Polyvalue Below Surface (S9) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Solis (F19) (MLRA 149E) Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (If observed): Type: Mydric Soil Present? Yes						
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ² : Histos (A1) Polyvalue Below Surface (S8) (LRR R, Histos Epipedon (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky (A10) (LRR K, L, R) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S3) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Medox (S5) Red Depressions (F8) Mesic Spodic (TA6) (MLRA 1449B) Sandy Redox (S5) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Hydric Soil Present? Yes No / No /					·	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. tydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, L S) Histosol (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 149B) Histosol (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Loamy Gleyed Matrix (F3) Stratified Layers (A5) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Stripped Matrix (S6) Redox Depressions (F8) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Type: Depth (inches): Depth (inches): Hydric Soil Present? Yes No						
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. tydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Indicators for Problematic Hydric Soils ³ : Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky (A10) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stattlifed Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F7) Piedmont Floodplain Soils (F12) (MLRA 149E) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 1444, 145, 149E) Sandy Redox (S5) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. No Restrictive Layer (if observed): Ype: Ype: No Depth (i						
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. tydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, L, CAR, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Black Histor (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histor (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Muck (A10) (LRR K, L, R) Black Histor (A3) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S3) (LRR K, L, R) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 1448, 145, 149B Sandy Redox (S5) Potyre (Erplain in Remarks) Pother (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. No Retropertoric Hydric Soil Present? Yes No No					·	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. tydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, LARA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Thic Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 1449 Sandy Gleyed Matrix (S6) Mesic Spodic (TA6) (MLRA 1444, 145, 149B Striged Matrix (S6) Sandy Redox (S5) Other (Explain in Remarks) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. No Restrictive Layer (if observed): Type: No V Depth (inches): Depth (inches): No V					·	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histoc A10 MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 1449E) Sandy Gleyed Matrix (S6) Mesic Spodic (TA6) (MLRA 1444, 145, 149B Sandy Sturface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Stripped Matrix (S6) Wery Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Hydric Soil Present? Yes No Indicators of hydrophytic vegetation and wetland hydrology must be present, unless						
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Law 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Muck (A16) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. No Restrictive Layer (if observed): Type: No Yes Type: <						
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ^2Location: PL=Pore Lining, M=Matrix. Histosol (A1)					·	
Hydric Soil Indicators:	Type: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, CS=Covered or Coated Sand G	rains. ² Location	n: PL=Pore Lining, M=Matrix.
	Hydric Soil	Indicators:			Indicators for I	Problematic Hydric Soils":
	Histosol	(A1)		Polyvalue Below Surface (S8) (LRR R,	2 cm Muck	(A10) (LRR K, L, MLRA 149B)
Black Histic (A3)	— Histic Ep	Dipedon (A2)		MLRA 149B)	Coast Prair	Tie Redox (A16) (LRR K, L, R)
	Black Hi	STIC (A3)		Thin Dark Surrace (S9) (LRR R, MLRA 149E	5 cm Muck	y Peat of Peat (S3) (LRR K, L, R)
	Hyuruye Stratifio	A Lavers (A5)		Loamy Gleved Matrix (E2)	Dark Surra	$\frac{\mathcal{L}(\mathcal{S})}{\mathcal{L}(\mathcal{R}, \mathcal{R}, \mathcal{L})}$
	Stratiliet	d Below Dark Surfac	ρ (Δ11)	Loaniy Gleyed Matrix (F2) Depleted Matrix (F3)	Thin Dark S	Surface (S9) ($\mathbf{LRR} \times \mathbf{I}$)
	Depicted Thick Da	ark Surface (A12)	с (ATT)	Redox Dark Surface (F6)	Iron-Manga	anese Masses (F12) (LRR K. L. R)
Sandy Gleyed Matrix (S4)	Sandy N	lucky Mineral (S1)		Depleted Dark Surface (F7)	Piedmont F	Floodplain Soils (F19) (MLRA 149B
	Sandy G	Bleyed Matrix (S4)		Redox Depressions (F8)	Mesic Spoo	dic (TA6) (MLRA 144A, 145, 149B)
Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks)	Sandy F	Redox (S5)			Red Parent	t Material (F21)
Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)	Stripped	Matrix (S6)			Very Shallo	ow Dark Surface (TF12)
Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	Dark Su	rface (S7) (LRR R, I	MLRA 149B		Other (Exp	lain in Remarks)
¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Promotes:						
Restrictive Layer (if observed): Type:	Indicators o	f hydrophytic vegeta	tion and we	tland hydrology must be present, unless disturbed	d or problematic.	
Type:	Restrictive	Layer (if observed)	:			
Depth (inches): No_√ Permatks:	Туре:					
	Depth (in	ches):			Hydric Soil Pres	sent? Yes No _∕
VEII/dins.	Remarks:	,				

Project/Site: NW OHIO WIND	City/County: PAULE	DING CO	Sampling Date: 4/16/2013 6:17:30 PM			
Applicant/Owner: WESTWOOD	_ , ,	_{State:} OH	Sampling Point: P-01 WETLAND			
Investigator(s): MATTHEW VOLLBRECHT 2115	Section, Township, Ra	ange: Sec 14 T1N	R2E			
Landform (hillslope, terrace, etc.): _Flat	Local relief	f (concave, convex, nor	ne): Side slope of road ditch			
Slope (%): 5-8% Lat: 702377.8254	Long: 454848.156	5	Datum: UTM NAD 83Z13N			
Soil Map Unit Name: Lc-Latty silty clay		NWI clas	sification: Not Mapped			
Are climatic / hydrologic conditions on the site typical for this time of	f year? Yes 🖌 No _	(If no, explain i	n Remarks.)			
Are Vegetation, Soil, or Hydrology significat	ntly disturbed? Are	"Normal Circumstance	s" present? Yes 🖌 No			
Are Vegetation , Soil , or Hydrology naturally	problematic? (If n	eeded, explain any ans	wers in Remarks.)			
SUMMARY OF FINDINGS – Attach site map showi	ng sampling point	locations. transe	cts, important features, etc.			
	Is the Sampler	d Area				
Hydrophytic Vegetation Present? Yes <u>Veg</u> No	within a Wetla	ind? Yes_v	′ No			
Wetland Hydrology Present? Yes ✓ No	If yes, optional	Wetland Site ID: We	tland sample point P-01			
Remarks: (Explain alternative procedures here or in a separate re	eport.)		<u>·</u>			
Wetland Hydrology Indicators:	h.d)	Secondary Inc	Dicators (minimum of two required)			
Primary indicators (minimum of one is required, check all that app	iy) od Loovoo (P0)	Sunace a	Dettorne (B10)			
✓ High Water Table (A2) Aquatic Fau	ed Leaves (D9)	Drainage Moss Trir	n Lines (B16)			
✓ Saturation (A3) Marl Deposi	its (B15)	(B15) Dry-Season Water Table (C2)				
Water Marks (B1)	ulfide Odor (C1)	ide Odor (C1) Crayfish Burrows (C8)				
Sediment Deposits (B2) Oxidized Rh	izospheres on Living Roo	ots (C3) Saturatio	n Visible on Aerial Imagery (C9)			
Drift Deposits (B3) Presence of	Reduced Iron (C4)	Stunted c	or Stressed Plants (D1)			
Algal Mat or Crust (B4) Recent Iron	Reduction in Tilled Soils ((C6) Geomorp	hic Position (D2)			
Iron Deposits (B5) Thin Muck S	Surface (C7)	Shallow A	Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7) Other (Expla	ain in Remarks)		tral Test (D5)			
Field Observations:						
Surface Water Present? Yes No ✓ Depth (incl	nes):					
Water Table Present? Yes ✓ No Depth (incl	nes): 4.0					
Saturation Present? Yes <u>✓</u> No Depth (inch	nes): <u>6.0</u> w	etland Hydrology Pre	sent? Yes <u>√</u> No			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial ph	notos, previous inspection:	s), if available:				
Remarks:	valo point					
	ipie point					

Sampling Point: P-01 WET

Trac Stratum (Distaires 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u></u>)	<u>% Cover</u>	<u>Species</u> ?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:(A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
Total Cove	r: <u>0</u>			Total % Cover of:Multiply by:
50% of total cover: 0	20% c	of total cove	er: 0	OBL species <u>70</u> x 1 = <u>70</u>
Sapling/Shrub Stratum (Plot size: <u>30</u>)				FACW species 0 $x 2 = 0$
1				FAC species 0 x 3 = 0
2.	_			FACU species 0 x 4 = 0
3				UPL species $\frac{0}{70}$ x 5 = $\frac{0}{70}$
0				Column Totals: <u>70</u> (A) <u>70</u> (B)
4				Prevalence Index = $B/A = 1$
5		·		
6			·	Hydrophytic Vegetation Indicators:
Total Cove	er: 0			Rapid Test for Hydrophytic Vegetation
50% of total cover: 0	20% o	f total cove	r: <u>0</u>	\checkmark Dominance rest is >50%
Herb Stratum (Plot size: 5)				Morphological Adaptations ¹ (Provide supporting
1. Carex lacustris	70	Yes	OBL	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed of problematic.
				Definitions of Vegetation Strata:
o				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
/			·	at breast height (DBH), regardless of height.
8			·	Sapling/shrub – Woody plants less than 3 in. DBH
9			·	and greater than 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cove	r: <u>70</u>			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: <u>35</u>	20% c	of total cove	r: <u>14</u>	neight.
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2.				
3				Hudronhutio
A				Vegetation
				Present? Yes 🗸 No
			0	
50% of total cover: 0	20% o	f total cove	r: 0	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Depth	Matrix		Redox Features		_
(inches)	Color (moist)	%	<u>Color (moist)</u> % Type ¹ L	<u>.oc² Texture</u>	Remarks
0-12	10YR2/1	100		Muck	
12-22	10YR4/1	100		Silty Clay	
	· · · · · · · · · · · · · · · · · · ·				
	·				
	Concentration D-D	enletion RM-	-Reduced Matrix, CS-Covered or Coated Si	and Grains ² Location:	PI – Pore Lining, M–Matrix
Hydric Soil	Indicators:			Indicators for Pro	blematic Hydric Soils ³ :
Histoso	l (A1)		Polyvalue Below Surface (S8) (LRR R,	2 cm Muck (A	10) (LRR K, L, MLRA 149B)
✓ Histic E	pipedon (A2)		MLRA 149B)	Coast Prairie	Redox (A16) (LRR K, L, R)
Black H	listic (A3)		Thin Dark Surface (S9) (LRR R, MLRA	149B) 5 cm Mucky F	Peat or Peat (S3) (LRR K, L, R)
Hydroge Stratifie	en Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR K, L)	Dark Surrace	(S7) (LRR K, L) ow Surface (S8) (LRR K L)
Deplete	d Below Dark Surfa	ace (A11)	Depleted Matrix (F3)	Thin Dark Sur	face (S9) (LRR K, L)
Thick D	ark Surface (A12)		Redox Dark Surface (F6)	Iron-Mangane	se Masses (F12) (LRR K, L, R)
Sandy I	Mucky Mineral (S1)	1	Depleted Dark Surface (F7)	Piedmont Floo	odplain Soils (F19) (MLRA 149B)
Sandy (Gleyed Matrix (S4)		Redox Depressions (F8)	Mesic Spodic	(TA6) (MLRA 144A, 145, 149B)
Sandy i	d Matrix (S6)			Verv Shallow	Dark Surface (TF12)
Dark Su	urface (S7) (LRR R	, MLRA 149E	3)	Other (Explain	n in Remarks)
<u>^</u>					
³ Indicators of	of hydrophytic vege	tation and we	tland hydrology must be present, unless dis	turbed or problematic.	
Restrictive	Layer (If observed Clav	a):			
Type: <u>-</u>	12			Hydric Soil Proso	ht? Vos √ No
Depth (in	iches):			Hydric Soli Presei	
Remarks:					

I

Project/Site: NW OHIO WIND	City/County: PAULDING CO Sampling Date: 4/17/2013 5:05:08 PM				
Applicant/Owner: WESTWOOD	State: OH Sampling Point: P-02 UPLAND				
Investigator(s): MATTHEW VOLLBRECHT 2115	Section, Township, Range: Sec 14 T1N R2E				
Landform (hillslope, terrace, etc.). Flat	Local relief (concave, convex, none). Flat				
Slope (%): 0-5% Lat: 701425.2017	Long: 4545939.744 Datum: UTM NAD 83Z13N				
Soil Map Unit Name: Sb-Saranac silty clay loam, occasiona	Ily flooded NWI classification: Not Mapped				
Are climatic / hydrologic conditions on the site typical for this time of ye	ar? Yes 🖌 No (If no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology significantly	^y disturbed? Are "Normal Circumstances" present? Yes <u>√</u> No				
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.				
Hydrophytic Vegetation Present? Yes No _✓ Hydric Soil Present? Yes No _✓ Wetland Hydrology Present? Yes No _✓	Is the Sampled Area within a Wetland? Yes No _√ If yes, optional Wetland Site ID: Upland Sample Point P-02				
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1) Water-Stained	Leaves (B9) Drainage Patterns (B10)				
High Water Table (A2)	(B13) Moss Trim Lines (B16)				
Saturation (A3)	(B15) Dry-Season Water Table (C2)				
Water Marks (B1) Hydrogen Sulf	de Odor (C1) Crayfish Burrows (C8)				
Sediment Deposits (B2) Oxidized Rhize	ospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3) Presence of R	educed Iron (C4) Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4) Recent Iron Re	eduction in Tilled Soils (C6) Geomorphic Position (D2)				
Iron Deposits (B5) Thin Muck Sur	face (C7) Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7) Other (Explain	in Remarks) Microtopographic Relief (D4)				
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present? Yes No ✓ Depth (inches):				
Water Table Present? Yes No ✓ Depth (inches):				
Saturation Present? Yes No _✓ Depth (inches (includes capillary fringe)): Wetland Hydrology Present? Yes No _/				
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:				
Remarks:					

Sampling Point: P-02 UPL

20	Absolute	Dominant	Indicator	Dominance Test worksheet
Tree Stratum (Plot size: 30)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3.				Species Across All Strata: 1 (B)
4	·			Percent of Dominant Species That Are OBL_EACW_or_EAC: 0 (A/B)
5	·			
6	·			Prevalence Index worksheet:
Total Cove	r: <u>0</u>			Total % Cover of:Multiply by:
50% of total cover; 0	20% c	of total cove	<u>- 0</u>	OBL species _0 x 1 = _0
Sapling/Shrub Stratum (Plot size: 30				FACW species 0 x 2 = 0
1				FAC species 0 x 3 = 0
1	·			FACU species 0 x 4 = 0
2	·			UPL species 40 x 5 = 200
3	·			Column Totals: 40 (A) 200 (B)
4				
5				Prevalence Index = $B/A = $
6.				Hydrophytic Vegetation Indicators:
Tatal Caus	0			Rapid Test for Hydrophytic Vegetation
	r		0	Dominance Test is >50%
50% of total cover: 0	20% o	f total cover	<u>. 0</u>	Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: 5)	40	Maria		Morphological Adaptations ¹ (Provide supporting
1. Glycine spp	40	Yes	UPL	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation (Explain)
3				1
4.				Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic
5				
o				Definitions of Vegetation Strata:
-	·			Tree - Woody plants 3 in. (7.6 cm) or more in diameter
/	· ——			at breast height (DBH), regardless of height.
8	·			Sapling/shrub – Woody plants less than 3 in. DBH
9	·			and greater than 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cover	. 40			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: 20	20% o	f total cove	8	height.
Woody Vine Stratum (Plot size: 30				
(1 lot 0.20)				
l	·			
2	·			
3				Hydrophytic
4				Vegetation Present? Ves No
Total Cove	_{r:} 0			
50% of total cover: 0	20% o	f total cover	<u>.</u> 0	
Pomorko: (Includo photo numbero horo er en o comorte a	hoot)			
Remarks. (Include photo numbers here of on a separate s	neel.)			

Depth	Matrix		Redo	x Features	_ 1	2	_		
(inches)	Color (moist)	%	Color (moist)		Type' L	oc ²		Remarks	
0-29	10YR4/2	100					Silty Clay		
				·					
				·					
				·					
				·					
				·					
	_		B 1 1 1 1 1 1 1 1 1 1		<u> </u>		. 2.		
Type: C=C	oncentration, D=Dep	pletion, RM=	Reduced Matrix, CS	S=Covered or	· Coated Sa	and Gr	ains. ² Locat	ion: PL=Pore Lining, M=	Matrix.
Hyaric Soli	indicators:			o ((o)			Indicators to	r Problematic Hydric So	
Histosol	(A1)		Polyvalue Below	v Surface (Sa	B) (LRR R,		2 cm Muo	ck (A10) (LRR K, L, ML R	(A 149B)
	pipedon (AZ)		Thin Dark Surfa			1400	Coast Pra	airie Redox (A16) (LRR P	N, L, K)
	Suc(A3)			/ineral (F1) (1490) 5 cm Mud Dark Suri	face (S7) (I RR K I)	$(\mathbf{K} \mathbf{K}, \mathbf{L}, \mathbf{K})$
Tryuroge Stratifie	d Lavers (A5)		Loamy Gleved I	Matrix (F2)	LIXIX IX, L)		Polyvalue	Below Surface (S8) (LR	RKI)
Otratilie	d Below Dark Surfac	e (A11)	Depleted Matrix	(F3)			Thin Dark	Surface (S9) (LRR K. L)
Thick Da	ark Surface (A12)		Redox Dark Su	rface (F6)			Iron-Man	ganese Masses (F12) (L	-, RR K, L, R)
Sandy N	/lucky Mineral (S1)		Depleted Dark S	Surface (F7)			Piedmon	t Floodplain Soils (F19) (MLRA 149B
Sandy C	Gleyed Matrix (S4)		Redox Depress	ions (F8)			Mesic Sp	odic (TA6) (MLRA 144A	, 145, 149B)
Sandy F	Redox (S5)						Red Pare	ent Material (F21)	
Stripped	l Matrix (S6)						Very Sha	llow Dark Surface (TF12))
Dark Su	rface (S7) (LRR R, I	MLRA 149B	5)				Other (E)	plain in Remarks)	
3									
Indicators o	f hydrophytic vegeta	tion and we	tland hydrology mus	t be present,	unless dis	turbed	or problematic.		
Restrictive	Layer (if observed)								
Type:									
Depth (in	ches):						Hydric Soil Pr	esent? Yes	No_√
Remarks:							1		
-							un tille al		
I	est pit in a agrici	ultural fiel	d adjacent to lar	ge creek,	solis nav	e bee	en tilled		

Project/Site: NW OHIO WIND	City/County: PAULDING CO Sampling Date: 4/17/2013 5:08:33 PM
Applicant/Owner: WESTWOOD	State: OH Sampling Point: P-02 WETLAND
Investigator(s): MATTHEW VOLLBRECHT 2115	Section, Township, Range: Sec 14 T1N R2E
Landform (hillslope, terrace, etc.): Terrace	Local relief (concave, convex, none): _side slope of creek bank
Slope (%): 10-15% Lat: 701414.1485	Long: 454932.209 Datum: UTM NAD 83Z13N
Soil Map Unit Name: Sb-Saranac silty clay loam, occasiona	Ily flooded NWI classification: Not Mapped
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🗸 No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly	disturbed? Are "Normal Circumstances" present? Yes ✓ No
Are Vegetation , Soil , or Hydrology naturally pro-	oblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	a sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes <u>V</u> No	is the Sampled Area within a Wetland? Yes √ No
Hydric Soll Present? Yes ▼ No Wetland Hydrology Present? Yes ✓ No	If yes entional Watland Site Jp. Wetland sample point P-02
Remarks: (Explain alternative procedures here or in a separate repo	rt.)
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained	Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna	(B13) Moss Trim Lines (B16)
Saturation (A3) Marl Deposits	(B15) Dry-Season Water Table (C2)
Viater Marks (B1) Hydrogen Sum Vidized Phize	de Odor (C1) Craynsn Burrows (C8)
✓ Drift Deposits (B3) Presence of Re	educed Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	eduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5)	face (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain	in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	✓ FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No V Depth (inches):
Saturation Present? Yes No V Depth (inches)
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
Remarks:	
Sample point did not have water in borehole at time of c	lelineation but appears to have been inundated recently

Sampling Point: P-02 WET

Trac Stratum (Distainer 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u></u>)	<u>% Cover</u>	<u>Species</u> ?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3		·		Species Across All Strata: (B)
4				Percent of Dominant Species
5		. <u> </u>		That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
Total Cove	r: <u>0</u>			Total % Cover of:Multiply by:
50% of total cover: 0	20% c	of total cove	r: 0	OBL species <u>50</u> x 1 = <u>50</u>
Sapling/Shrub Stratum (Plot size: <u>30</u>)				FACW species 0 $x 2 = 0$
1				FAC species 0 x 3 = 0
2				FACU species 0 x 4 = 0
3				UPL species 0 $x 5 = 0$
				Column Totals: <u>50</u> (A) <u>50</u> (B)
-				Prevalence Index = $B/A = 1$
5		·		
6				Hydrophytic Vegetation Indicators:
Total Cove	r: <u>0</u>			Apple Test for Hydrophytic Vegetation
50% of total cover: 0	20% o	f total cove	r: 0	\checkmark Dominance rest is >50%
Herb Stratum (Plot size: 5)				Morphological Adaptations ¹ (Provide supporting
1. Carex lacustris	50	Yes	OBL	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed of problematic.
				Definitions of Vegetation Strata:
o				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
/				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cove	. <u>.</u> 50			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: <u>25</u>	20% c	of total cove	r: <u>10</u>	neight.
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2.				
3				Hudronhutio
A				Vegetation
Total Cours				Present? Yes 🗸 No
	1. <u> </u>		0	
50% of total cover: 0	20% 0	r total cove	r: <u> </u>	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Profile Desc	ription: (Describe	to the dept	h needed to docur	nent the i	ndicator	or confirm	m the absence of indicators.)
Depth	Matrix		Redo	x Feature	s		
<u>(inches)</u>	Color (moist)		Color (moist)	%	Type'		Texture Remarks
0-22	10YR4/1	100					Silt
22-25	10YR6/1	100					Clay
				·	·		
				·			·
				·			·
					·		·
				·	·		· ·
				·			
				·	·		·
¹ Type: C=Co	oncentration, D=Dep	pletion, RM=I	Reduced Matrix, CS	S=Covere	d or Coate	ed Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:	· · · ·					Indicators for Problematic Hydric Soils ³ :
Histosol	(A1)	_	Polyvalue Belov	v Surface	(S8) (LRI	R R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Ep	pipedon (A2)		MLRA 149B))			Coast Prairie Redox (A16) (LRR K, L, R)
Black Hi	stic (A3)	-	Thin Dark Surfa	ice (S9) (I	RR R, M	LRA 149B	B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	n Sulfide (A4)	-	Loamy Mucky N	/lineral (F	1) (LRR K	Σ, L)	Dark Surface (S7) (LRR K, L)
Stratified	l Layers (A5)	-	Loamy Gleyed	Matrix (F2	2)		Polyvalue Below Surface (S8) (LRR K, L)
Depleted Thick Do	a Below Dark Surfac	e (A11)	Depleted Matrix	(F3) rfaco (E6)			I nin Dark Sufface (S9) (LRR K, L)
Sandy M	lucky Mineral (S1)	-	Redux Dark Su	Surface (F0)	7)		Piedmont Floodplain Soils (F19) (MI RA 149B)
Sandy G	Bleved Matrix (S4)	-	Redox Depress	ions (F8)	,,		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy R	edox (S5)	-		(-)			Red Parent Material (F21)
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, I	MLRA 149B))				Other (Explain in Remarks)
2							
°Indicators of	f hydrophytic vegeta	tion and wet	land hydrology mus	t be prese	ent, unless	s disturbec	d or problematic.
Restrictive I	Layer (if observed)	:					
Type: CI	ay						
Depth (ind	ches): <u>22</u>						Hydric Soil Present? Yes No _✓
Remarks:	oil opposito to ba	م مالیہ بنما م	anacita avar ala				
5	on appears to be	e alluvial d	eposits over cla	iy			

Project/Site: NW OHIO WIND	City/County: PAULDING	G CO	Sampling Date:
Applicant/Owner: WESTWOOD		State: OH	Sampling Point: P-03 UPLAND
Investigator(s): MATTHEW VOLLBRECHT 2115	Section, Township, Range:	Sec 14 T1N R2	2E
Landform (hillslope, terrace, etc.): Flat	Local relief (con	cave, convex, none)	: Flat
Slope (%): 0-5% Lat: 701201.5135	Long: 4546340.359		Datum: UTM NAD 83Z13N
Soil Map Unit Name: Sb-Saranac silty clay loam, occasiona	lly flooded	NWI classifi	cation: Not Mapped
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🖌 No	(If no, explain in I	Remarks.)
Are Vegetation, Soil, or Hydrology significantly	v disturbed? Are "Norr	mal Circumstances"	present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If neede	d, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point loca	tions, transects	s, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No _✓ Yes No _✓ Yes No _✓	Is the Sampled Area within a Wetland? Yes No _√ If yes, optional Wetland Site ID: Upland sample point P-03
Remarks: (Explain alternative proced	dures here or in a separate report.)	·

HYDROLOGY

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

Sampling Point: P-03 UPL

20	Absolute	Dominant	Indicator	Dominance Test worksheet
Tree Stratum (Plot size: 30)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata:(B)
4				Demonst of Deminent Creation
5	·			That Are OBL, FACW, or FAC: 0 (A/B)
3	·			
б	0			Prevalence Index worksheet:
Total Cove	r: <u>0</u>			Total % Cover of:Multiply by:
50% of total cover: 0	20% c	of total cover	r: <u>0</u>	OBL species 0 $x = 0$
Sapling/Shrub Stratum (Plot size: 30)				FACW species 0 $x 2 = 0$
1				FAC species 0 $x 3 = 0$
2.				FACU species 0 $x 4 = 0$
3				UPL species 40 x 5 = 200
0				Column Totals: <u>40</u> (A) <u>200</u> (B)
4	·			Prevalence Index = $B/A = 5$
5				
6	·			Hydrophytic Vegetation Indicators:
Total Cove	r: <u>0</u>			Rapid Test for Hydrophytic Vegetation
50% of total cover: 0	20% o	f total cover	0	Dominance Test is >50%
Herb Stratum (Plot size: 5				Prevalence Index is ≤3.0'
1. Glycine spp	40	Yes	UPL	Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
4				¹ Indicators of hydric soil and wetland hydrology must
	·			be present, unless disturbed of problematic.
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				
Total Cover	<u>.</u> 40			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: <u>20</u>	20% c	of total cover	- <u>8</u>	neight.
Woody Vine Stratum (Plot size: 30)				
1.				
2				
2	·			
3	·			Hydrophytic Vegetation
4	·			Present? Yes No 🗸
Total Cove	r: <u>0</u>			
50% of total cover: <u>0</u>	20% o	f total cover	<u>. 0</u>	
Remarks: (Include photo numbers here or on a separate s	heet.)			1

Profile Desc	cription: (Describe	to the depth	n needed to document	the indicator or co	nfirm the absence of in	ndicators.)
Depth (inches)	<u>Matrix</u> Color (moist)	%	<u>Redox Fe</u> Color (moist)	atures % Type ¹ Lo	c ² Texture	Remarks
0-26	10YR4/6	100		<u>//</u>	Silty Clay	
						n. D. Dara Lining M. Matrix
Hvdric Soil	Indicators:	Dietion, RIVI=	Reduced Matrix, CS=CC	overed or Coated Sar	Indicators for	n: PL=Pore Lining, M=Matrix. Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Below Su	rface (S8) (LRR R.	2 cm Muck	(A10) (LRR K. L. MLRA 149B)
Histic Ep	pipedon (A2)	-	MLRA 149B)		Coast Prai	rie Redox (A16) (LRR K, L, R)
Black Hi	stic (A3)	-	Thin Dark Surface (S9) (LRR R, MLRA 1	149B) 5 cm Muck	y Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)	-	Loamy Mucky Mine	ral (F1) (LRR K, L)	Dark Surfa	ce (S7) (LRR K, L)
Stratified	d Layers (A5) d Bolow Dark Surfac	-	Loamy Gleyed Matrix Doploted Matrix (E3)	ix (F2)	Polyvalue	Below Surface (S8) (LRR K, L)
Depleted	ark Surface (A12)	e (ATT) _	Depleted Matrix (F3) e (F6)	Iron-Manga	anese Masses (F12) (LRR K. L. R)
Sandy N	lucky Mineral (S1)	-	Depleted Dark Surfa	ace (F7)	Piedmont I	Floodplain Soils (F19) (MLRA 149B)
Sandy C	Bleyed Matrix (S4)	-	Redox Depressions	(F8)	Mesic Spo	dic (TA6) (MLRA 144A, 145, 149B)
Sandy F	Redox (S5)				Red Paren	t Material (F21)
Stripped	Matrix (S6)				Very Shall	bw Dark Surface (TF12)
Dark Su	mace (57) (LRR R, I	MLRA 149B)			Other (Exp	nain in Remarks)
³ Indicators o	f hydrophytic vegeta	tion and wet	and hydrology must be	present, unless distu	rbed or problematic.	
Restrictive	Layer (if observed)	:	, ,,			
Type:						
Depth (in	ches):				Hydric Soil Pre	sent? Yes No _✓
Remarks:						
S	ample point in a	tilled whe	at field			

Project/Site: NW OHIO WIND	City/County: PAULDING CO Sar	npling Date: 4/17/2013 5:08:33 PM
Applicant/Owner: WESTWOOD	_{State} OH _{Sam}	ling Point: P-03 WETLAND
Investigator(s); MATTHEW VOLLBRECHT 2115	Section, Township, Range: Sec 14 T1N R2E	
Landform (hillslope, terrace, etc.). Flat	Local relief (concave, convex, none). Sid	de slope of creek bank
Slope (V): 10-15% Let: 701203.1959	4546344.182	UTM NAD 83Z13N
Shope (%) Lat Lat Lat	v flooded	Not Manned
Soil Map Unit Name:Solaranae Sitty clay loant, occasiona	NWI classification	
Are climatic / hydrologic conditions on the site typical for this time of ye	ar?Yes _✔ No (If no, explain in Rema	rks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Circumstances" prese	nt? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally pr	blematic? (If needed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, im	portant features, etc.
Hydrophytic Vegetation Present? Ves V	Is the Sampled Area	
Hydric Soil Present? Yes ✓ No	within a Wetland? Yes _ ✓	No
Wetland Hydrology Present? Yes ✓ No	If yes, optional Wetland Site ID. Wetland S	ample Point P-03
Remarks: (Explain alternative procedures here or in a separate repo	t.)	
Wotland fringe of crock	-,	
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indicators	(minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Crac	ks (B6)
Surface Water (A1) Water-Stained		(B10)
High Water Table (A2)	B13) Moss Trim Lines	(B16)
Saturation (A3)	315) Dry-Season Wate	ar Table (C2)
Water Marks (B1)	e Odor (C1) Cravfish Burrows	(C8)
✓ Sediment Deposite (P2)	vebores on Living Poots (C2) Soturation Visible	(CO)
\checkmark Drift Deposits (B2) \square Drosence of P	duced Iron (C4)	od Plants (D1)
Algal Mat or Crust (B4)	Auction in Tilled Soils (C6)	tion (D2)
Iron Doposite (B5)	Shallow Aquitard	
Inter Deposits (B3) Thirt Mack Sal	a Remarka) Microtopographia	(D3) Poliof (D4)
Sparcely Vegetated Conceive Surface (B8)		
Sparsely vegetated Concave Sunace (Bo)		(D5)
Surface Water Present? Yes <u>No Y</u> Depth (inches	·	
Water Table Present? Yes No ✓_ Depth (inches		
Saturation Present? Yes No ✓ Depth (inches	Wetland Hydrology Present?	Yes <u>✓</u> No
Describe Recorded Data (stream gauge, monitoring well, aerial phot	s, previous inspections), if available:	
Remarks:		
No saturation at sample point but evidence of recent int	ndation	

Sampling Point: P-03 WET

Trop Stratum (Plat size: 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
	% Cover	<u>Species</u> ?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2	·			Total Number of Dominant
3	·			Species Across All Strata: [] (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
Total Cove	r: <u>0</u>			Total % Cover of: Multiply by:
50% of total cover: 0	20% c	of total cove	r: 0	$\overline{OBL \text{ species } 50} \qquad \overline{x_{1} = 50}$
Sapling/Shrub Stratum (Plot size: 30)				FACW species 0 $x 2 = 0$
/				FAC species 0 x 3 = 0
	·			FACU species 0 x 4 = 0
2	·			UPL species 0 x 5 = 0
3	·			Column Totals: <u>50</u> (A) <u>50</u> (B)
4				1
5				Prevalence Index = B/A = _1
6				Hydrophytic Vegetation Indicators:
Total Cove	r: 0			Rapid Test for Hydrophytic Vegetation
	000/		0	✓ Dominance Test is >50%
50% of total cover:	20% 0	t total cover		✓ Prevalence Index is $\leq 3.0^1$
Carex lacustris	50	Voc	OBI	Morphological Adaptations ¹ (Provide supporting
		165		data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation (Explain)
3	·			¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6.				
7				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
°	·			a breast height (bbh), regardless of height.
0	·			Sapling/shrub – Woody plants less than 3 in. DBH
9				
10	·			Herb – All herbaceous (non-woody) plants, regardless
11				
Total Cover	. 50			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: <u>25</u>	20% o	of total cove	<u>. 10 </u>	neight.
Woody Vine Stratum (Plot size: 30)				
1.				
2	·			
2	•			
3				Hydrophytic Vegetation
4				Present? Yes 🖌 No
Total Cove	r: <u>0</u>		•	
50% of total cover: <u>0</u>	20% o	f total cover	<u> 0 </u>	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

	Matrix	(Re	dox Feature	S	1 - 2	- Tavtura D	
		%	Color (moist)	%	Iype		_ <u>lexture</u> <u>Rem</u>	narks
1-15	101R3/1	100	<u> </u>					
5-22	10YR5/1	90	10YR5/8	10	<u>C</u>	<u>M</u>	Clay	
ype: C=Co	ncentration, D=D	Depletion, RN	/=Reduced Matrix,	CS=Covere	d or Coa	ted Sand (Grains. ² Location: PL=Pore Lir	ning, M=Matrix.
 Histosol (Histic Epi Black His Hydroger Stratified Depleted Thick Dai Sandy M Sandy Gi Sandy Re Stripped Dark Sur 	(A1) ipedon (A2) stic (A3) n Sulfide (A4) Layers (A5) I Below Dark Surf rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR F hydrophytic vege	face (A11)) R, MLRA 14	Polyvalue Be MLRA 149 Thin Dark Su Loamy Muck Depleted Mai Redox Dark S Depleted Dar Redox Depre	low Surface B) rface (S9) (y Mineral (F d Matrix (F3) Surface (F6 k Surface (ssions (F8) ust be pres	ent, unle	RR R, MLRA 149 K, L) ss disturbe	 2 cm Muck (A10) (LRR K, Coast Prairie Redox (A16) B) 5 cm Mucky Peat or Peat Dark Surface (S7) (LRR K Polyvalue Below Surface (Thin Dark Surface (S9) (L Iron-Manganese Masses (Piedmont Floodplain Soils Mesic Spodic (TA6) (MLR Red Parent Material (F21) Very Shallow Dark Surface Other (Explain in Remarks 	L, MLRA 149B)) (LRR K, L, R) (S3) (LRR K, L, R (S8) (LRR K, L) (F12) (LRR K, L) (F12) (LRR K, L, F 5 (F19) (MLRA 145 A 144A, 145, 149 e (TF12) 5)
Type: Cla	ayer (if observe ay (hoo): 15	d):					Hydric Soil Present? Yes	√ No
emarks:								

Project/Site: NW OHIO W	IND			Citv/County:	PAULDING	со	Sampling Date	e: 4/16/2013 7:27:50 PM
Applicant/Owner: WESTW	OOD			_ , ,		State: OH	Sampling Point:	Q-01 UPLAND
Investigator(s) MATTHEV	V VOLLB	RECHT	2115	Section Tow	vnshin Range	Sec 13 T1N R	2E	
Landform (billslone, terrace, e	to). Flat			_ 0000001, 101	ocal relief (conca	ave convex none	. Flat	
Elana $(0/1)$, $0-5\%$ Let	703210.	9962		454	5555.704		Deturn UTN	1 NAD 83Z13N
	tty silty cl	 av		_ Long:		NNA/1 1 12	_ Datum:	
Soil Map Unit Name:	ity Silty Of	ду			/	NVVI classifi	cation: Not Ma	apped
Are climatic / hydrologic condi	tions on the	site typica	I for this time of y	/ear?Yes 🔽	No	(If no, explain in I	Remarks.)	,
Are Vegetation, Soil	, or H	ydrology _	significantl	ly disturbed?	Are "Norma	al Circumstances"	present? Yes _	✓ No
Are Vegetation, Soil	, or H	ydrology _	naturally p	oroblematic?	(If needed,	explain any answ	ers in Remarks.)	
SUMMARY OF FINDIN	GS – Att	ach site	map showin	g sampling	g point locati	ons, transect	s, important	features, etc.
Hydrophytic Vegetation Pres	sent?	Yes	No ✓	Is the	e Sampled Area			
Hydric Soil Present?		Yes	No ✓	withi	n a Wetland?	Yes	No _ ✓	_
Wetland Hydrology Present?	>	Yes	No _✓	If yes	, optional Wetlan	_{d Site ID:} Uplar	nd Sample Po	pint Q-01
Remarks: (Explain alternativ	/e procedur	es here or	in a separate rep	ort.)	,			
HYDROLOGY								
Wetland Hydrology Indicat	ors.					Secondary Indic	ators (minimum	of two required)
Primary Indicators (minimum	of one is r	equired: ch	eck all that apply)		Surface Soi	I Cracks (B6)	<u>or two requiredy</u>
Surface Water (A1)		squirea, en	Water-Stainer	d Leaves (B9)		Drainage P	atterns (B10)	
High Water Table (A2)		-	Aquatic Fauna	a (B13)	(B13) Moss Trim Lines (B16)			
Saturation (A3)		-	Marl Deposits	s (B15)		Dry-Seasor	Water Table (C:	2)
Water Marks (B1)			Hydrogen Sul	lfide Odor (C1)	de Odor (C1) Crayfish Burrows (C			,
Sediment Deposits (B2)		_	Oxidized Rhiz	zospheres on L	iving Roots (C3)	Saturation	/isible on Aerial I	Imagery (C9)
Drift Deposits (B3)		_	Presence of F	Reduced Iron (C4)	Stunted or S	Stressed Plants ((D1)
Algal Mat or Crust (B4)		_	Recent Iron R	Reduction in Til	led Soils (C6)	Geomorphic	c Position (D2)	
Iron Deposits (B5)		-	Thin Muck Su	Irface (C7)		Shallow Aq	uitard (D3)	
Inundation Visible on Ae	erial Imager	y (B7) _	Other (Explain	n in Remarks)		Microtopogi	aphic Relief (D4))
Sparsely Vegetated Cor	ncave Surfa	ce (B8)				FAC-Neutra	il Test (D5)	
Surface Water Present?	Yes	No √	Depth (inche	<i>ic)</i> .				
Water Table Present?	Yes	No✓	Depth (inche	(s). (s).	—			
Saturation Present?	Yes	No✓	Depth (inche	(c):	Wetland	Hydrology Prese	ent? Yes	No √
(includes capillary fringe)								
Describe Recorded Data (str	ream gauge	, monitorin	g well, aerial pho	otos, previous i	nspections), if av	ailable:		
Remarks:								

Sampling Point: Q-01 UPL

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>50</u>)	<u>% Cover</u>	<u>Species?</u>	Status	Number of Dominant Species
1	·			That Are OBL, FACW, or FAC: (A)
2	·			Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: 0 (A/B)
6				
	0			Prevalence Index worksheet:
	r: <u> </u>		0	Total % Cover of: Multiply by:
50% of total cover: 0	20% c	of total cove	r: <u> </u>	OBL species 0 $x = 0$
Sapling/Shrub Stratum (Plot size: 30)				FACW species 0 $x 2 = 0$
1				FAC species 0 $x^3 = 0$
2				FACU species $\frac{75}{25}$ x 4 = $\frac{500}{125}$
3				$\begin{array}{c} \text{UPL species} & \underline{23} & x_5 = \underline{123} \\ 100 & (x_5) = \underline{425} $
4				Column Totals: 100 (A) 425 (B)
	·			Prevalence Index = $B/A = 4.25$
5	·			
6				Hydrophytic Vegetation Indicators:
Total Cove	r: <u>0</u>			Rapid Test for Hydrophytic Vegetation
50% of total cover: 0	20% o	f total cove	r: 0	Dominance Lest is >50%
Herb Stratum (Plot size: 5)				$- Prevalence index is \leq 3.0$
_{1.} Dactylis glomerata	75	Yes	FACU	data in Remarks or on a separate sheet)
2 Bromus inermis	25	Yes	UPL	Problematic Hydrophytic Vegetation ¹ (Explain)
2				
3	·			¹ Indicators of hydric soil and wetland hydrology must
4	·			be present, unless disturbed or problematic.
5	·			Definitions of Vegetation Strata:
6				Tree Woody plants 2 in (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8.				Septime / abruh Weady plants loss than 2 in DDL
9				and greater than 3.28 ft (1 m) tall.
10	·			
				ferb – All nerbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11	400			
Total Cover	. 100			Woody vines – All woody vines greater than 3.28 ft in height.
50% of total cover: <u>50</u>	20% o	of total cove	r: <u>20</u>	
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2.				
3				Underschutig
0	·			Vegetation
4	0			Present? Yes No 🖌
I otal Cove	r: 0		0	
50% of total cover: <u>0</u>	20% o	f total cove	r: <u>0</u>	
Remarks: (Include photo numbers here or on a separate s	heet.)			
	,			

Profile Desc	ription: (Describe	to the dept	th needed to docum	ent the in	dicator o	or confirm	n the absence of indicators.)
Depth	Matrix		Redox	<u>Features</u>	T and 1	1 - 2	Turken
(inches)		%	Color (moist)		Type		I exture Remarks
0-18	10YR4/3	100					Silty Clay
18-25	10YR4/2	100					Silty Clay
<u> </u>							
<u> </u>							
¹ Type: C=Co	oncentration, D=De	pletion, RM=	Reduced Matrix, CS	=Covered	or Coated	d Sand Gr	rains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Below	/ Surface (S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Ep	bipedon (A2)		MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)
Black Hi	STIC (A3)		Thin Dark Surface	CE (59) (LI linoral (E1)		.RA 149B	5) 5 cm Mucky Peat of Peat (53) (LRR K, L, R)
Stratified	1 avers (A5)		Loamy Gleved N	/atrix (F2)) (LKK K,	L)	Polyvalue Below Surface (S8) (I RR K. I.)
Depleted	d Below Dark Surfa	ce (A11)	Depleted Matrix	(F3)			Thin Dark Surface (S9) (LRR K, L)
Thick Da	ark Surface (A12)	(<i>,</i>	Redox Dark Sur	face (F6)			Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)		Depleted Dark S	Surface (F7	7)		Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy G	Bleyed Matrix (S4)		Redox Depressi	ons (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy R	Redox (S5)						Red Parent Material (F21)
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)
	$Hace(S^{\prime})(LKKK,$	WILKA 1490	•)				
³ Indicators of	f hvdrophvtic vegeta	ation and we	tland hvdrology must	be preser	nt. unless	disturbed	or problematic.
Restrictive I	Layer (if observed):	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		.,		
Type:							
Depth (in	chec).						Hvdric Soil Present? Yes No ✓
Bomorko:							
Remarks.							

Project/Site: NW OHIO WIND	City/County: PAULDING CO Sampling Date: 4/16/20	013 6:15:09 PM
Applicant/Owner: WESTWOOD	State: OH Sampling Point: Q-1 W	ETLAND
Investigator(s); MATTHEW VOLLBRECHT 2115	Section, Township, Range: Sec 13 T1N R2E	
Landform (hillslope, terrace, etc.); Flat	Local relief (concave, convex, none); Side slope of ditc	 h
Slope (%): 5-10% Lat. 703208.4077	Long: 4545553.683	83Z13N
Sill Man Linit Name: LC-Latty silty clay	NW/ elegitication: Not Mapped	
An align the Annual is an align of the site to be a first the site of the site		
Are climatic / hydrologic conditions on the site typical for this time of yo	ear? Yes V No (If no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Circumstances" present? Yes _▼	No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, explain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important featur	es, etc.
Hydrophytic Vegetation Present? Yes V	Is the Sampled Area	
Hydric Soil Present? Yes ✓ No	within a Wetland? Yes _ ✓ No	
Wetland Hydrology Present? Yes ✓ No	If yes, optional Wetland Site ID: Wetland Sample Point Q	-01
Remarks: (Explain alternative procedures here or in a separate repo	rt.)	
Wetland located in the bed of an agricultural ditch		
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two re	<u>aquired)</u>
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)	
Surface Water (A1) Water-Stained	Leaves (B9) Drainage Patterns (B10)	
✓ High Water Table (A2) Aquatic Fauna	(B13) Moss Trim Lines (B16)	
Veter Marke (B1)	(B15) Dry-Season Water Table (C2)	
Water Marks (BT) Hydrogen Sun Sediment Dependence (P2)	de Odol (C1) Clayisti Bullows (Co)	
Drift Deposits (B3)	aduced Iron (C4) Stunted or Stressed Plants (D1)	(09)
Algal Mat or Crust (B4)	eduction in Tilled Soils (C6) Geomorphic Position (D2)	
Iron Deposits (B5)	face (C7) Shallow Aguitard (D3)	
Inundation Visible on Aerial Imagery (B7) Other (Explain	in Remarks) Microtopographic Relief (D4)	
Sparsely Vegetated Concave Surface (B8)	✓ FAC-Neutral Test (D5)	
Field Observations:		
Surface Water Present? Yes No ✓ Depth (inches):	
Water Table Present? Yes 🖌 No Depth (inches): 5.0	
Saturation Present? Yes 🖌 No Depth (inches): 7.0 Wetland Hydrology Present? Yes ✓ No	
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:	
Remarks:		
		1

Sampling Point: Q-01 WET

Tree Stratum (Plot size: 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
		<u>Species</u> :	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
5				
6	0			Prevalence Index worksheet:
Total Cove	r: <u> </u>		0	Total % Cover of: Multiply by:
50% of total cover: 0	20% c	of total cove	r: <u> </u>	OBL species $\frac{70}{10}$ x 1 = $\frac{70}{10}$
Sapling/Shrub Stratum (Plot size: 50)				FACW species 0 $x_2 = 0$
1	·			FACU species 0 $x 4 = 0$
2				UPL species 0 $x_5 = 0$
3				Column Totals: 70 (A) 70 (B)
4				1
5				Prevalence Index = $B/A = \$
6				Hydrophytic Vegetation Indicators:
Total Cove	r: <u>0</u>			Rapid Test for Hydrophytic Vegetation
50% of total cover: 0	20% o	f total cover	0	$\frac{\checkmark}{\checkmark}$ Dominance Test is >50%
Herb Stratum (Plot size: 5)				✓ Prevalence Index is ≤3.0° Marshelenice Adaptations ¹ (Dravide currentia)
1. Carex lacustris	70	Yes	OBL	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
4.				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5.				Definitions of Venetation Strates
6.				Demitions of Vegetation Strata:
7				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
8				
9				Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
3 10	·			
				of size, and woody plants less than 3.28 ft tall.
Tatal Cause	70			Woody vines - All woody vines greater than 3.28 ft in
		<i></i>	1/	height.
50% of total cover: <u>55</u>	20% o	f total cover	: <u> </u>	
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2	·			
3				Hydrophytic
4				Present? Yes / No
Total Cove	r: 0			
50% of total cover: <u>0</u>	20% o	f total cover	0	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Instress Count morest 20 Lub Lub Remarks 1-11 10YR2/1 100 Muck Muck Muck 1-20 10YR6/1 90 10YR5/8 10 C M Clay	Depth (inches)	Matrix	X0/		dox Featur	es Turoc		- Toyturo Bomorko
1-20 10YR6/1 90 10YR5/8 10 C M Clay 1-20 10YR5/8 10 C M Class 10 10 1-20 10YR5/8 10	<u>(incries)</u> 0-11	10YR2/1	<u>%</u>					
1120 101 K0/1 90 101 K3/3 10 C M Clay 1120 110 101 K3/3 10 C M Clay 1120 111 101 K3/3 10 C M Clay 1120 101 K3/3 10 C M Clay Indicators Indicators for Problematic Hydric Soils ¹ : 1120 110 Jark Surface (S9) MLRA 1498) Coast Prairie Redox (A16) (LRR K, L) Dark Surface (S7) (LRR K, L) Thin Dark Surface (S7) (LRR K, L) Dark Surface (S7) (LRR K, L) Thin Dark Surface (S7) (LRR K, L) Dark Surface (S7) (LRR K, L) Dark Surface (S7) (LRR K, L) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Polyvalue Below Surface (S7) (LRR K, L) Mesic Spodic (TA6) (MLRA 1448, 145, 14 <td< td=""><td>11.00</td><td>10/R2/1</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	11.00	10/R2/1						
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 corn Muck (A10) (LRR K, L, RLRA 149B) Histosol (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (F6) Hydrogen Sulfide (A1) Depleted Matrix (F3) Thin Dark Surface (F6) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 1445, 144, 1445, 144, 50) Sandy Gleyed Matrix (S6) Redox Depressions (F8) Meed Parent Material (F21) Sandy Redox (S5) Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (T12) Dark Surface (S7) (LRR R, MLRA 1449B) Cother (Explain in Remarks) ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Layer (f observed): Type: Clay Popth (inches): 11 Hydric Soil Present? Yes / No	11-20	101R6/1	90	10185/8	10			
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils ² : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Sandy Mucky Mineral (S1) Depleted Matrix (F2) Sandy Redox (S5) Redox Dark Surface (F7) Striped Matrix (S4) Redox Depressions (F8) Striped Matrix (S6) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Layer (If observed): Type: Clay Depth (inches): 11								
Carbonic Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ³ Location: PL=Pore Lining, M=Matrix, Ydric Soils ¹ Ydric Soil Indicators: Indicators for Problematic Hydric Soils ² : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLCk (A19) (LRR K, L, MLRA 1498) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 1498) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Sandy Redox (S5) Redox Dark Surface (F7) Dark Surface (S7) (LRR R, MLRA 1449, 145, 14 Sandy Redox (S5) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Surface (S7) (LRR R, MLRA 149B) Sturface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. <t< td=""><td></td><td></td><td></td><td></td><td></td><td>_</td><td></td><td></td></t<>						_		
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ¹ Location: PL=Pore Lining, M=Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Location: PL=Pore Lining, M=Matrix. // Histos Epipedon (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Stripped Matrix (S4) Redox Depressions (F8) Stripped Matrix (S4) Redox Depressions (F8) Stripped Matrix (S6) Other (Explain in Remarks) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Layer (ff observed): Type: Type: Clay Depth (inches): Hydric Soil Present? Yes V No								
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, L, Dark Surface (S9) (LRR K, L) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Depleted Below Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 1445, 148, 148, 148, 148, 148, 148, 148, 148								
Type: C-Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils ² : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, Plyther Mucky Peat or Peat (S3) (LRR K, L, Depleted Batrix (F2) Polyvalue Below Surface (S7) (LRR K, L, Depleted Matrix (F2) Beloed Below Dark Surface (A11) Depleted Dark Surface (F7) Polyvalue Below Surface (S3) (LRR K, L, Depleted Dark Surface (F7) Sandy Redox (S5) Storped Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 148, 148, 145, 148, 144, 145, 144, 145, 144, 145, 148, 145, 144, 145								
Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R), Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Muck yPeat or Peat (S3) (LRR K, L, Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 14A Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 14A Sandy Gleyed Matrix (S6) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Polematic. estric								
Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Statified Layers (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Beleted Below Dark Surface (A11) Depleted Matrix (F2) Thin Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Stratified Cayres (A76) Wesic Spodic (TA6) (MLRA 144A, 145, 14E, 144A, 145, 14E, 144A, 145, 14E, 14E, 14E, 14E, 14E, 14E, 14E, 14E								
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Indicators for Problematic Hydric Soils ³ :								
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, P) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thick Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L) Stripped Matrix (S6) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 14 Sandy Redox (S5) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Layer (if observed): Type: Clay Depth (inches): Yes Y No						_	_	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Iydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2) MLRA 149B Coast Prairie Redox (A10) (LRR K, L, MLRA 149B Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, Dark Surface (S7) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Dark Surface (S9) (LRR K, L) Thick Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 14 Sandy Redox (S5) Stripped Matrix (S6) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 14 Red Parent Material (F21) Stripped Matrix (S6) Other (Explain in Remarks) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes / No Peth (inches): 11 Depth (inches): Hydric Soil Present? Yes / No								
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Iydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Black Histic (A3) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, P) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, P) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 14 Sandy Redox (S5) Mesic Spodic (TA6) (MLRA 144A, 145, 14 Stripped Matrix (S6) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Layer (if observed): Trype: Clay Type: Clay Depth (inches): 14 <								
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. tydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Indicators for Problematic Hydric Soils ³ :								
ydire son indicators:	Type: C=C	Concentration, D=D	Depletion, RM	M=Reduced Matrix,	CS=Covere	ed or Coa	ated Sand (Grains. ² Location: PL=Pore Lining, M=Matrix
Histosu (A1)	Iyaric Soli				Now Surface	o (CO) /I		and Cators for Problematic Hydric Solis :
Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, L) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 14 Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 14 Sandy Redox (S5) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Other (Explain in Remarks) ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Polyeent (in observed): Yes / No Type: Clay Depth (inches): 11 Hydric Soil Present? Yes // No	Histoso	Epipedon (A2)		Polyvalue Be MLRA 149	9 B)	e (So) (L	κκ κ ,	Coast Prairie Redox (A16) (LRR K, L, MLRA 148
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 1 Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 14 Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Other (Explain in Remarks) ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Meyric Soil Present? Yes ✓ No Type: Clay Depth (inches): 11	Black H	listic (A3)		Thin Dark Su	urface (S9)	(LRR R,	MLRA 149	BB) 5 cm Mucky Peat or Peat (S3) (LRR K,
Stratified Layers (A5)	_ Hydrog	en Sulfide (A4)		Loamy Muck	y Mineral (F	=1) (LRR	K , L)	Dark Surface (S7) (LRR K, L)
	_ Stratifie	ed Layers (A5) ad Below Dark Sur	face (A11)	Loamy Gleye	ed Matrix (F trix (F3)	2)		Polyvalue Below Surface (S8) (LRR K, Thin Dark Surface (S9) (LRR K L)
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 1 Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 14) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Layer (if observed): Type: Clay Depth (inches): 11 Hydric Soil Present? Yes ✓ No	Thick D	ark Surface (A12)		Redox Dark	Surface (F6	5)		Iron-Manganese Masses (F12) (LRR K,
	Sandy	Mucky Mineral (S1)	Depleted Da	rk Surface ((F7)		Piedmont Floodplain Soils (F19) (MLRA
	Sandy	Gleyed Matrix (S4))	Redox Depre	essions (F8))		Mesic Spodic (TA6) (MLRA 144A, 145,
	Sandy	Redox (S5) d Matrix (S6)						Red Parent Material (F21)
ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. testrictive Layer (if observed): Type: Clay Depth (inches): 11 Hydric Soil Present? Yes ✓ No	Dark S	urface (S7) (LRR F	R, MLRA 149	9B)				Other (Explain in Remarks)
ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Layer (if observed): Type: Clay Depth (inches): 11 Hydric Soil Present? Yes ✓ No								
Type: Clay Depth (inches): 11 Hydric Soil Present? Yes ✓ No	Indicators	of hydrophytic vege	etation and v	vetland hydrology n	nust be pres	sent, unle	ess disturbe	ed or problematic.
Depth (inches): 11 Hydric Soil Present? Yes ✓ No		Layer (if observe Clav	ea):					
	Donth (in	(11)						Hydric Soil Present? Yes ✓ No
		nches):						

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Project/Site: NW OHIO WIND	City/County: PAULDING	g co	Sampling Date: 4/16/2013 7:21:09 PM
Applicant/Owner: WESTWOOD	Only/Obdanky	State: OH	Sampling Point: R-01 UPLAND
Investigates(a), MATTHEW VOLLBRECHT 2115	Quatian Tanaahin Daama	Sec 18 T1N R?	Sampling Polint
	Section, Township, Range		Flat
Landform (hillslope, terrace, etc.):	Local relief (cor	icave, convex, none)	
Slope (%): 0-5% Lat: 705246.3722	Long: <u>4546964.047</u>		Datum: UTIVI NAD 832 T3N
Soil Map Unit Name: Lc-Latty silty clay		NWI classifie	cation: Not Mapped
Are climatic / hydrologic conditions on the site typical for this time	e of year? Yes 🗹 No	(If no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydrology signific	cantly disturbed? Are "Nor	mal Circumstances"	present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology natura	Ily problematic? (If neede	d, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	wing sampling point loca	itions, transects	s, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Are within a Wetland?	¥a Yes and Site ID: _Uplan	No _✓ d sample point R-01
Remarks: (Explain alternative procedures here or in a separate	e report.)		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that a	pply)	Surface Soil	Cracks (B6)
Surface Water (A1) Water-Sta	ained Leaves (B9)	Drainage Pa	atterns (B10)
High Water Table (A2) Aquatic F	auna (B13)	Moss Trim L	ines (B16)
Saturation (A3) Marl Dep	osits (B15)	Dry-Season	Water Table (C2)
Water Marks (B1) Hydroger	Sulfide Odor (C1)	Crayfish Bur	rrows (C8)
Sediment Deposits (B2) Oxidized	Rhizospheres on Living Roots (C	3) Saturation V	isible on Aerial Imagery (C9)
Drift Deposits (B3) Presence	of Reduced Iron (C4)	Stunted or S	Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Ir	on Reduction in Tilled Soils (C6)	Geomorphic	Position (D2)
Iron Deposits (B5) Thin Muc	k Surface (C7)	Shallow Aqu	uitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Ex	plain in Remarks)	Microtopogra	aphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		FAC-Neutra	Test (D5)
Field Observations:			
Surface Water Present? Yes No Comparison Depth (in	10nes):		
Vater Table Present? Yes No ✓ Depth (in	nches): Wetlar		nt? Vos No 🗸
(includes capillary fringe)		a nyarology Freser	
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if	available:	
Remarks:			

Sampling Point: R-01 UPL

	Absolute	Dominan	t Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>50</u>)	<u>% Cover</u>	<u>Species?</u>	Status	Number of Dominant Species
1	·			That Are OBL, FACW, or FAC: (A)
2	·			Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: 0 (A/B)
6				
Tatal Cause	0		·	Prevalence Index worksheet:
	r:		0	Total % Cover of: Multiply by:
50% of total cover: 0	20% o	of total cove	er: <u>U</u>	OBL species 0 $x_1 = 0$
Sapling/Shrub Stratum (Plot size: 50				FACW species 0 $x^2 = 0$
1				FAC species 0 $x_3 = 0$
2				FACO species $\frac{10}{30}$ $x 4 = \frac{200}{150}$
3				$\begin{array}{c} \text{OPL species} \underline{\text{OO}} x \text{ s} = \underline{\text{OO}} \\ \text{Column Tatalog} 100 (A) \underline{\text{430}} (B) \end{array}$
4.				Column Totals: 100 (A) 400 (B)
5				Prevalence Index = $B/A = 4.3$
o				Hydronhytic Vegetation Indicators:
0			·	Papid Test for Hydrophytic Vegetation
Total Cove	r: <u> </u>			Dominance Test is >50%
50% of total cover: 0	20% of	f total cove	r: <u>0</u>	$\frac{1}{2} = \frac{1}{2} $
Herb Stratum (Plot size: 5)				Morphological Adaptations ¹ (Provide supporting
1. Dactylis glomerata	55	Yes	FACU	data in Remarks or on a separate sheet)
2. Bromus inermis	30	Yes	UPL	Problematic Hydrophytic Vegetation ¹ (Explain)
3 Dipsacus fullonum	15	No	FACU	
				¹ Indicators of hydric soil and wetland hydrology must
4	·			be present, unless disturbed or problematic.
5	·			Definitions of Vegetation Strata:
6	·			Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11.				of size, and woody plants less than 3.28 ft tall.
Total Cover	. 100		·	Woody vines – All woody vines greater than 3.28 ft in
50		f to to 1		height.
	20% 0	i lotal cove	er. <u>20</u>	
Woody Vine Stratum (Plot size: <u>50</u>)				
1	·			
2				
3				Hydrophytic
4				Vegetation
Total Cove	_{r:} 0			
50% of total cover: 0	20% 0	f total cove	er 0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

color (moist) % Color (moist) % Type ' Loc' Texture Remarks -25 10YR5/3 100	(inches)	Matrix		Redox F	eatures		_	_
225 10YK5/3 100 Silty Clay Silty Clay Silty Clay		Color (moist)	%	Color (moist)	<u>%</u> Type'	_Loc ²	Texture	Remarks
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [?] Location: PL=Pore Lining, M=Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils [?] :	-25	101R5/3	100				Silty Clay	
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ?Location: PL=Pore Lining, M=Matrix. yrdric Soil Indicators: Indicators for Problematic Hydric Soils? Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histosol (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Loamy Gleyed Matrix (F3) Thick Dark Surface (A11) Depleted Matrix (F3) Sandy Mecky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Stratified Layers (A6) Stratified Layers (X5) Redox Depressions (F8) Sandy Redox (S5) Caster (T12) Dark Surface (S7) Piedmont Floodplain Solis (F12) (LRR K, L) Sandy Redox (S5) Striped Matrix (S4) Sandy Redox (S5) Caster Material (F21) Dark Surface (S7) User Matrix (C45) Depleted Selow Dark Surface (T51) Very Shallow Dark Surface (T512) Dark Surface (S7) Piedmont Floodplain Soils (F12) Dark Surface (S7) Hydric Soil Present? Yes								
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils ² : Histos Epipedon (A2) Polyvalue Below Surface (S8) (LRR R, MLRA 149B)								
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ydric Soil Indicators for Problematic Hydric Soils ³ : Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S9) (LRR R, Histosol (A2) Indicators for Problematic Hydric Soils ³ : Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Biack Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 orn Mucky Peat or Peat (S3) (LRR K, L) Papeleted Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Depleted Below Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 144, 145, 144) Sandy Gleyed Matrix (S6) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144, 145, 144) Sartipped Matrix (S6) Depleted Solver or problematic. Settrice Layer (if observed): Type:								
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ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : - Histosol (A1) Polyvalue Below Surface (S8) (LRR R, LRR A149B) - Histo Epipedon (A2) MLRA 149B) - Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) - Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) - Depleted Below Dark Surface (A11) Depleted Matrix (F2) - Thick Dark Surface (A12) Redox Dark Surface (F6) - Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) - Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) - Sandy Gleyed Matrix (S6) Redox Depressions (F8) - Sandy Redox (S5) - Very Shallow Dark Surface (T12) - Dark Surface (S7) (LRR R, MLRA 149B) - Very Shallow Dark Surface (T12) - Dark Surface (S7) (LRR R, MLRA 149B) - Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. satrictive Layer (if observed): - Popel Type:								
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3)								
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Indicators for Problematic Hydric Soils ³ : Histosol (A1) MLRA 149B) Coast Prairie Redox (A10) (LRR K, L, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, I Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S3) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Iron-Manganese Masses (F12) (MLRA 144A, 145, 143 Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 143 Sandy Redox (S5) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Performent Reserved): Type: Depth (inches): Hydric Soil Present? Yes No V <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
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ivpe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : - Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) - Histo Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) - Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, I) - Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) - Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) - Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) - Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 144 - Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) - Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Polytel Matrix (S6) - Dark Surface (S7) (LRR R, MLRA 149B) Hydric Soil Present? Yes No _/ Miccators of hydrophytic vegetation and wetland hydrol								
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ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : _ Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2)	ype: C=C	oncentration, D=Dep	pletion, RM=	=Reduced Matrix, CS=C	overed or Coate	d Sand Gr	ains. ² Loca	tion: PL=Pore Lining, M=Matrix.
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Inite Epipeoion (A2) Image: Mick A 149B)	_ Histosol	(A1)		Polyvalue Below S	urface (S8) (LRF	R,	2 cm Mu	ick (A10) (LRR K, L, MLRA 149B)
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 149) Sandy Redox (S5) Redox Depressions (F8) Redox Depressions (F8) Stripped Matrix (S6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Other (Explain in Remarks) mdicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No Type: Depth (inches): Yes No marks: Hydric Soil Present? Yes No	Black H	istic (A3)		Thin Dark Surface	(S9) (LRR R. M	RA 149B	5 cm Mu	ickv Peat or Peat (S3) (LRR K, L, R)
	 	en Sulfide (A4)		Loamy Mucky Mine	eral (F1) (LRR K	, L)	Dark Su	rface (S7) (LRR K, L)
	Stratifie	d Layers (A5)		Loamy Gleyed Mat	rix (F2)		Polyvalu	e Below Surface (S8) (LRR K, L)
Index Dark Sufface (R12) Index Dark Sufface (R12) Sandy Mucky Mineral (S1) Depleted Dark Sufface (F7) Piedmont Floodplain Soils (F19) (MLRA 14 Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Sufface (S7) (LRR R, MLRA 149B) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Layer (if observed): Type: Depth (inches): Mo	_ Deplete	d Below Dark Surfac	e (A11)	Depleted Matrix (Fi	3) 		Thin Dai	rk Surface (S9) (LRR K, L)
Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 144	Sandy N	Aucky Mineral (S1)		Depleted Dark Sur	face (F7)		Piedmor	nt Floodplain Soils (F19) (MLRA 149
Sandy Redox (S5)Red Parent Material (F21)Very Shallow Dark Surface (TF12)Other (Explain in Remarks)Other (Explain in Remarks)Other (Explain in Remarks)	_ Sandy C	Gleyed Matrix (S4)		Redox Depression	s (F8)		Mesic S	podic (TA6) (MLRA 144A, 145, 149
_ Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Depth (inches): Depth (inches): No Persent? Yes No Persent Persent No Persent Persent No Persent Persent Persent Persent Persent Persent	_ Sandy F	Redox (S5)					Red Par	ent Material (F21)
	_ Stripped	Matrix (S6)		2)			Very Sha	allow Dark Surface (TF12)
ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No ✓ emarks:				<i>,</i>				
estrictive Layer (if observed): Type: Depth (inches): No	ndicators o	f hydrophytic vegeta	tion and we	etland hydrology must be	e present, unless	disturbed	or problematic.	
Type:	estrictive	Layer (if observed)	:					
Depth (inches): Hydric Soil Present? Yes No ✓ emarks:	Туре:							
emarks:	Depth (in	ches):					Hydric Soil P	resent? Yes No _✓
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Project/Site: NW OHIO WIND	Citv/Countv:	City/County: PAULDING CO Sampling Date: 4/16/20				
Applicant/Owner: WESTWOOD			_{State:} OH	Sampling Point: R-01 WETLAND		
Investigator(s): MATTHEW VOLLBRECHT 2115	Section Tow	Section Township Range:		Sec 18 T1N R3E		
Landform (hillslope, terrace, etc.). Flat		nonip, realigo.		Side slope of road ditch		
Slope (v): 5-10% Let: 705245.8869	4546	6967.361		Datum: UTM NAD 83Z13N		
Slope (%) Lat Lat	Long:			Datum:Datum:		
Soil Map Unit Name: EC Latty Sitty Clay	/		NVVI clas	sification: <u>Not mapped</u>		
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes _	No	(If no, explain i	in Remarks.)		
Are Vegetation, Soil, or Hydrology signific	antly disturbed?	Are "Norn	nal Circumstance	s" present? Yes <u>✓</u> No		
Are Vegetation, Soil, or Hydrology natural	ly problematic?	(If needed	d, explain any ans	swers in Remarks.)		
SUMMARY OF FINDINGS – Attach site map show	ving sampling	point loca	tions, transe	cts, important features, etc.		
Hydrophytic Vegetation Present? Yes ✓ No	Is the	Sampled Are	a			
Hydric Soil Present? Yes ✓ No	within	a Wetland?	Yes _ v	/ No		
Wetland Hydrology Present? Yes <u>√</u> No	If yes,	optional Wetla	and Site ID: We	tland sample point R-01		
Remarks: (Explain alternative procedures here or in a separate	report.)					
Wetland located in the bed of a road ditch						
Wetland Hydrology Indicators:			Secondary In	dicators (minimum of two required)		
Primary Indicators (minimum of one is required: check all that on			Surface			
			Surface 3			
Surface Water (A1) Water-Sta	ined Leaves (B9)		Drainage	Patterns (B10)		
✓ High Water Table (A2) Aquatic Fa	auna (B13)			m Lines (B16)		
Mari Depo	Sulfido Odor (C1)		Dry-Seas	Son vvater Table (C2)		
Sediment Deposite (P2)	Sullide Odol (CT)	ving Poots (Ca		n Visible on Aerial Imagony (CO)		
Drift Deposits (B3)	of Reduced Iron (C	(UC) (UC) (UC) (UC) (UC) (UC) (UC) (UC)	Stunted of	or Stressed Plants (D1)		
Algal Mat or Crust (B4)	on Reduction in Till	ed Soils (C6)	Geomorn	bic Position (D2)		
Iron Deposits (B5)	Surface (C7)		Shallow A	Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7) Other (Ex	plain in Remarks)		Microtopo	pgraphic Relief (D4)		
Sparsely Vegetated Concave Surface (B8)	, i i i i i i i i i i i i i i i i i i i		✓ FAC-Neu	Itral Test (D5)		
Field Observations:						
Surface Water Present? Yes No ✓ Depth (in	ches):					
Water Table Present? Yes ✓ No Depth (in	ches): 11.0					
Saturation Present? Yes Ves No Depth (in	ches): 12.0	Wetland	d Hydrology Pre	sent? Yes <u>√</u> No		
(includes capillary fringe)	,					
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous in	spections), if a	vailable:			
Remarks:						
Nomerko.						
Sampling Point: R-01 WET

Trac Stratum (Distaires 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u></u>)	<u>% Cover</u>	<u>Species</u> ?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:(A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
Total Cove	r: <u>0</u>			Total % Cover of:Multiply by:
50% of total cover: 0	20% c	of total cove	er: 0	OBL species <u>70</u> x 1 = <u>70</u>
Sapling/Shrub Stratum (Plot size: <u>30</u>)				FACW species 0 $x 2 = 0$
1				FAC species 0 x 3 = 0
2.	_			FACU species 0 x 4 = 0
3				UPL species $\frac{0}{70}$ x 5 = $\frac{0}{70}$
0				Column Totals: <u>70</u> (A) <u>70</u> (B)
4				Prevalence Index = $B/A = 1$
5		·		
6			·	Hydrophytic Vegetation Indicators:
Total Cove	er: 0			Rapid Test for Hydrophytic Vegetation
50% of total cover: 0	20% o	f total cove	r: <u>0</u>	\checkmark Dominance rest is >50%
Herb Stratum (Plot size: 5)				Morphological Adaptations ¹ (Provide supporting
1. Carex lacustris	70	Yes	OBL	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed of problematic.
				Definitions of Vegetation Strata:
o				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
/			·	at breast height (DBH), regardless of height.
8			·	Sapling/shrub – Woody plants less than 3 in. DBH
9			·	and greater than 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cove	r: <u>70</u>			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: <u>35</u>	20% c	of total cove	r: <u>14</u>	neight.
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2.				
3				Hudronhutio
A				Vegetation
Tetal Cours				Present? Yes 🗸 No
			0	
50% of total cover: 0	20% o	f total cove	r: 0	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

	Redox Features	2	
%	<u>Color (moist)</u> <u>%</u> <u>Type'</u> Loc	<u> </u>	Remarks
100		Muck	
100		Silty Clay	
pletion, RM=	=Reduced Matrix, CS=Covered or Coated Sand	d Grains. ² Locatior	: PL=Pore Lining, M=Matrix.
		Indicators for F	Problematic Hydric Soils ³ :
	Polyvalue Below Surface (S8) (LRR R,	2 cm Muck	(A10) (LRR K, L, MLRA 149B)
	MLRA 149B)	Coast Prairi	e Redox (A16) (LRR K, L, R)
	Thin Dark Surface (S9) (LRR R, MLRA 14	49B) 5 cm Mucky	Peat or Peat (S3) (LRR K, L, R)
	Loamy Mucky Mineral (F1) (LRR K, L)	Dark Surfac	ce (S7) (LRR K, L)
ce (A11)	Depleted Matrix (F2)	Polyvalue E	Surface (S9) (LRR K, L)
	Redox Dark Surface (F6)	Iron-Manga	nese Masses (F12) (LRR K. L. R)
	 Redox Dark Surface (F6) Depleted Dark Surface (F7) 	Iron-Manga Piedmont F	nese Masses (F12) (LRR K, L, R) Ioodplain Soils (F19) (MLRA 149B)
	 Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) 	Iron-Manga Piedmont F Mesic Spod	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B)
	 Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) 	Iron-Manga Piedmont F Mesic Spoo Red Parent	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21)
	 Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) 	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12)
MLRA 149E	 Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) 3) 	Iron-Manga Piedmont F Mesic Spoo Red Parent Very Shallo Other (Expl	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)
MLRA 149E	 Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) 3) atland hydrology must be present, unless disturbation 	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo Other (Expl	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)
MLRA 149E ation and we	 Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) B) B) B) 	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo Other (Expl	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)
MLRA 149E ation and we	 Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) B) B) B) 	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo Other (Expl	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)
MLRA 149E ation and we	Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8)	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo Other (Expl bed or problematic.	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)
MLRA 149E ation and we	Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8)	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo Other (Expl bed or problematic.	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)
MLRA 149E ation and we	Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8)	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo Other (Expl bed or problematic.	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)
MLRA 149E ation and we	Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8)	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo Other (Expl bed or problematic. Hydric Soil Pres	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)
MLRA 149E ation and we	 Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) 3) atland hydrology must be present, unless distur 	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo Other (Expl rbed or problematic. 	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)
MLRA 149E ation and we ():	Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8)	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo Other (Expl bed or problematic. Hydric Soil Pres	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)
MLRA 149E ation and we	 Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) 3) atland hydrology must be present, unless distur 	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo Other (Expl bed or problematic. Hydric Soil Pres	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)
MLRA 149E ation and we	 Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) 3) atland hydrology must be present, unless distur 	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo Other (Expl bed or problematic. 	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)
MLRA 149E ation and we	 Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) 3) atland hydrology must be present, unless distur 	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo Other (Expl bed or problematic. 	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)
MLRA 149E ation and we):	 Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) 3) atland hydrology must be present, unless distur 	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo Other (Expl bed or problematic. 	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)
MLRA 149E ation and we	 Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) a) a) a) 	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo Other (Expl bed or problematic. Hydric Soil Pres	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)
MLRA 149E	Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) 3) etland hydrology must be present, unless distur	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo Other (Expl bed or problematic. 	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)
MLRA 149E ation and we):	 Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) 3) atland hydrology must be present, unless distur 	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo Other (Expl bed or problematic. 	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)
MLRA 149E	 Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) 3) etland hydrology must be present, unless distur 	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo Other (Expl bed or problematic. 	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)
MLRA 149E ation and we	Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) 3) etland hydrology must be present, unless distur	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo Other (Expl bed or problematic. 	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)
MLRA 149E ation and we ():	Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) 3) etland hydrology must be present, unless distur	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo Other (Expl bed or problematic. Hydric Soil Pres	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)
MLRA 149E	Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) 3) etland hydrology must be present, unless distur	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo Other (Expl bed or problematic. Hydric Soil Pres	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)
MLRA 149E	Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) 3) etland hydrology must be present, unless distur	Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo Other (Expl ////////////////////////////////////	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) lic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)
	% 100 100 	Redox Features % Color (moist) % Type ¹ Loc 100 100	Redox Features % Color (moist) % Type¹ Loc² Texture 100 Muck Muck 100 Silty Clay

I

Project/Site: NW OHIO WIND	City/Count	, PAULDING	CO	Sampling Date: 4/16/2013 7:15:39 PM
Applicant/Owner: WESTWOOD			State: OH	Sampling Point: S-01 UPLAND
Investigator(s): MATTHEW VOLLBRECHT 2115	Section To	ownship Range:	Sec 17, T1N	R3E
Landform (hillslope terrace etc.). Flat	00000000, 00	Local relief (con	cave convex nor	ne). Flat
Stopp (%): 0-5% Lat. 706019.5872	Long: 45	46297.347		Dotum: UTM NAD 83Z13N
Sold Man Unit Name: C- atty Silty Clay	Long			Datum
	<i>.</i>			
Are climatic / hydrologic conditions on the site typical for this t	me of year? Yes	▼ No	_ (If no, explain i	n Remarks.)
Are Vegetation, Soil, or Hydrology sig	nificantly disturbed?	Are "Norn	nal Circumstance	s" present? Yes <u>✓</u> No
Are Vegetation, Soil, or Hydrology nat	urally problematic?	(If needed	l, explain any ans	swers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sl	nowing samplir	ng point locat	tions, transed	cts, important features, etc.
Hydrophytic Vegetation Present? Yes No.	√ Is t	he Sampled Area	a	
Hydric Soil Present? Yes No	✓ witl	hin a Wetland?	Yes	No _ ✓
Wetland Hydrology Present? Yes No	✓ If ye	es, optional Wetla	Ind Site ID: Upla	and Sample Point S-01
Remarks: (Explain alternative procedures here or in a separ	ate report.)			
Upland sample point adjacent to wide, deep agri	cultural ditch			
Wetland Hydrology Indicators:			Secondary Inc	dicators (minimum of two required)
Primary Indicators (minimum of one is required: check all the	at apply)		Surface S	Soil Cracks (B6)
Surface Water (A1)	Stained Leaves (BC			Pattorns (B10)
High Water Table (A2)	c Fauna (B13)	')	Drainage Moss Trir	ralleris (B10)
Saturation (A3)	enosits (B15)			on Water Table (C2)
Water Marks (B1)	ren Sulfide Odor (C	1)	Cravfish I	Burrows (C8)
Sediment Deposits (B2)	ed Rhizospheres on	Living Roots (C3	Saturation	n Visible on Aerial Imagery (C9)
Drift Deposits (B3)	nce of Reduced Iron	(C4)	Stunted o	or Stressed Plants (D1)
Algal Mat or Crust (B4)	t Iron Reduction in T	Filled Soils (C6)	Geomorp	hic Position (D2)
I Iron Deposits (B5) Thin M	luck Surface (C7)		Shallow A	Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other	(Explain in Remarks	3)	Microtopo	ographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)			FAC-Neu	tral Test (D5)
Field Observations:				
Surface Water Present? Yes No ✓ Depth	n (inches):			
Water Table Present? Yes No ✓ Depth	n (inches):			
Saturation Present? Yes No _ ✓ Depth	n (inches):	Wetland	d Hydrology Pre	sent? Yes No _✓
(includes capillary fringe)	viel shetes and view	in an estimation of the		
Describe Recorded Data (stream gauge, monitoring well, ae	riai pnotos, previous	inspections), if a	vallable:	
Remarks:				
				I

Sampling Point: S-01 UPL

30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 50)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1	·			That Are OBL, FACW, or FAC: 0 (A)
2	·			Total Number of Dominant
3	·			Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6				Provalence Index workshoot:
Total Cove	. 0			Total % Cover of: Multiply by:
50% of total power: 0	20% c	of total cove	r: 0	$\begin{array}{c} \hline \hline \\ $
Sapling/Shrub Stratum (Plot size: 30	20780		1. <u> </u>	FACW species 0 $x^2 = 0$
				FAC species 0 $x_3 = 0$
1	·			FACU species $100 \times 4 = 400$
2	·			UPL species 0 $x_5 = 0$
3	·			Column Totals: 100 (A) 400 (B)
4				
5				Prevalence Index = B/A =
6.				Hydrophytic Vegetation Indicators:
Total Cove	0			Rapid Test for Hydrophytic Vegetation
	·		0	Dominance Test is >50%
50% of total cover: 0	20% o	f total cover	r: <u>0</u>	Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: <u>5</u>)	85	Ves	FACU	Morphological Adaptations ¹ (Provide supporting
	15	<u>No</u>	EACU	data in Remarks of on a separate sneet)
	15	INO	FACU	
3				¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				
7.				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height
8				a broad hoight (BBH), rogardiood or hoight.
0				Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3 28 ft (1 m) tall
9				
10				Herb – All herbaceous (non-woody) plants, regardless
11	400			
Total Cover	<u>100</u>			Woody vines – All woody vines greater than 3.28 ft in height
50% of total cover: <u>50</u>	20% c	f total cove	r: <u>20</u>	noight.
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2				
3				Underschade.
				Vegetation
4	0			Present? Yes No 🗸
Total Cove	r: <u>0</u>		0	
50% of total cover: <u>0</u>	20% o	f total cover	r: 0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

)-22	Color (mojet)	0/_	Color (moiet)	% Tv	$ne^1 loc^2$	Texture	Remarks
)-22		100		<u></u>		<u>Silty Clay</u>	Remarks
		100		·			
				·			
	-			·			
				·			
		-		·			
				·			
				·			
						2	
ype: C=Co	oncentration, D=Dep	pletion, RM	=Reduced Matrix, CS	S=Covered or C	Coated Sand G	rains. Locatio	n: PL=Pore Lining, M=Matrix.
yaric Soli I	ndicators:					Indicators for	
_ Histosol	(A1)		Polyvalue Belov	w Surface (S8)	(LRR R,	2 cm Mucł	(A10) (LRR K, L, MLRA 149B)
– HISTIC EP	A_{2}		Thin Dark Surfa) 200 (S0) (I PP		Coast Pra	rie Redox (A16) (LRR K, L, R)
Hydroge	n Sulfide (ΔA)			/ineral (E1) (LRK I	R, WILKA 1490	Dark Surfa	(37) (IRR K I)
_ Tryuroger Stratified	Lavers (A5)		Loamy Gleved	Matrix (F2)	((((((((((((((((((((Polyvalue	Below Surface (S8) (I RR K. I.)
_ Depleted	Below Dark Surfac	e (A11)	Depleted Matrix	(F3)		Thin Dark	Surface (S9) (LRR K. L)
Thick Da	rk Surface (A12)		Redox Dark Su	rface (F6)		Iron-Mang	anese Masses (F12) (LRR K, L, R
Sandy M	lucky Mineral (S1)		Depleted Dark	Surface (F7)		Piedmont	Floodplain Soils (F19) (MLRA 149
Sandy G	leyed Matrix (S4)		Redox Depress	ions (F8)		Mesic Spo	dic (TA6) (MLRA 144A, 145, 149E
_ Sandy R	edox (S5)					Red Parer	t Material (F21)
Stripped	Matrix (S6)					Very Shall	ow Dark Surface (TF12)
	face (S7) (LRR R, I	MLRA 1491	3)			Other (Exp	blain in Remarks)
_ Dark Sur							
_ Dark Sur			dense of the contract of the second second	t be present, u	nless disturbed	l or problematic.	
_ Dark Sur	hydrophytic vegeta	tion and we	etiand hydrology mus				
Dark Sur ndicators of estrictive L	hydrophytic vegeta .ayer (if observed)	tion and we	etiand hydrology mus				
_ Dark Sur ndicators of estrictive L Type:	hydrophytic vegeta .ayer (if observed)	tion and we	etiand hydrology mus				
_ Dark Sur ndicators of estrictive L Type: Depth (inc	hydrophytic vegeta ayer (if observed)	tion and we	etiand hydrology mus			Hydric Soil Pre	sent? Yes No_√
_ Dark Sur ndicators of estrictive L Type: Depth (inc	hydrophytic vegeta a yer (if observed) ches):	tion and we	etiand nydrology mus			Hydric Soil Pre	sent? Yes No_√
_ Dark Sur ndicators of estrictive L Type: Depth (inc emarks: No	hydrophytic vegeta ayer (if observed) ches): ot currently tilled	tion and we	petand hydrology mus	en tilled in th	ne past	Hydric Soil Pre	esent? Yes No_√
_ Dark Sur ndicators of estrictive L Type: Depth (inc emarks: No	hydrophytic vegeta ayer (if observed) ches): ot currently tilled	tion and we	Dears to have bee	en tilled in th	ne past	Hydric Soil Pre	sent? Yes No_√
_ Dark Sur ndicators of estrictive L Type: Depth (inc emarks: No	hydrophytic vegeta ayer (if observed) ches): ot currently tilled	tion and we	Dears to have bee	en tilled in th	ne past	Hydric Soil Pre	esent? Yes No_√
_ Dark Sur ndicators of estrictive L Type: Depth (inc emarks: No	hydrophytic vegeta .ayer (if observed) ches): ot currently tilled	tion and we	petand hydrology mus	en tilled in th	ne past	Hydric Soil Pre	esent? Yes No_√
_ Dark Sur ndicators of estrictive L Type: Depth (inc emarks: No	hydrophytic vegeta ayer (if observed) ches): ot currently tilled	tion and we	petand hydrology mus	en tilled in th	ne past	Hydric Soil Pre	esent? Yes No _∕
_ Dark Sur ndicators of estrictive L Type: Depth (inc emarks: No	hydrophytic vegeta ayer (if observed) ches): ot currently tilled	tion and we	petand hydrology mus	en tilled in th	ne past	Hydric Soil Pre	esent? Yes No_✓
_ Dark Sur ndicators of estrictive L Type: Depth (inc emarks: No	hydrophytic vegeta ayer (if observed) ches): ot currently tilled	tion and we	petand hydrology mus	en tilled in th	ne past	Hydric Soil Pre	esent? Yes No_✓
_ Dark Sur ndicators of estrictive L Type: Depth (inc emarks: No	hydrophytic vegeta ayer (if observed) ches): ot currently tilled	tion and we	pears to have be	en tilled in th	ne past	Hydric Soil Pre	esent? Yes <u>No √</u>
_ Dark Sur ndicators of estrictive L Type: Depth (inc emarks: No	hydrophytic vegeta ayer (if observed) ches): ot currently tilled	tion and we	pears to have be	en tilled in th	ne past	Hydric Soil Pre	esent? Yes No <u>√</u>
_ Dark Sur ndicators of estrictive L Type: Depth (inc emarks: No	hydrophytic vegeta ayer (if observed) ches): ot currently tilled	tion and we	pears to have be	en tilled in th	ne past	Hydric Soil Pre	esent? Yes No _✓
_ Dark Sur ndicators of estrictive L Type: Depth (inc emarks: No	hydrophytic vegeta ayer (if observed) ches): ot currently tilled	tion and we	pears to have be	en tilled in th	ne past	Hydric Soil Pre	esent? Yes No _∕
_ Dark Sur ndicators of estrictive L Type: Depth (inc emarks: No	hydrophytic vegeta ayer (if observed) ches): ot currently tilled	tion and we	pears to have be	en tilled in th	ne past	Hydric Soil Pre	esent? Yes No <u>√</u>
_ Dark Sur ndicators of estrictive L Type: Depth (inc emarks: No	hydrophytic vegeta ayer (if observed) ches): ot currently tilled	tion and we	pears to have be	en tilled in th	ne past	Hydric Soil Pre	esent? Yes No _✓
_ Dark Sur ndicators of estrictive L Type: Depth (inc emarks: No	hydrophytic vegeta ayer (if observed) ches): ot currently tilled	tion and we	pears to have be	en tilled in th	ne past	Hydric Soil Pre	esent? Yes No_✓
_ Dark Sur ndicators of estrictive L Type: Depth (inc emarks: No	hydrophytic vegeta ayer (if observed) ches): ot currently tilled	tion and we	pears to have be	en tilled in th	ne past	Hydric Soil Pre	esent? Yes No_✓
_ Dark Sur ndicators of estrictive L Type: Depth (inc emarks: No	hydrophytic vegeta ayer (if observed) ches): ot currently tilled	tion and we	pears to have be	en tilled in th	ne past	Hydric Soil Pre	esent? Yes <u>No √</u>
_ Dark Sur ndicators of estrictive L Type: Depth (inc emarks: No	hydrophytic vegeta ayer (if observed) ches): ot currently tilled	tion and we	pears to have be	en tilled in th	ne past	Hydric Soil Pre	esent? Yes No _∕

Project/Site: NW OHIO WIND	City/County: PAU	JLDING CO	Sampling Date: 4/16/2013 6:23:04 PM
Applicant/Owner: WESTWOOD		State: OH	Sampling Point: S-1 WETLAND
Investigator(s); MATTHEW VOLLBRECHT 2115	Section. Township	Range: Sec 17 T1N I	R3E
Landform (hillslope, terrace, etc.); Flat	Local r	elief (concave, convex, nor	he); Side slope of deep ditch
Slope (%): 10-20% Lat: 706022.6911	4546296	.578	Datum: UTM NAD 83Z13N
Sole Man Linit Name: LC-Latty Clay	Long		sitiation. Not Mapped
Are climatic / hydrologic conditions on the site typical for this tim	ne of year? Yes <u>v</u> I	No (If no, explain it	n Remarks.)
Are Vegetation, Soil, or Hydrology signi	ficantly disturbed?	Are "Normal Circumstance	s" present? Yes <u>✓</u> No
Are Vegetation, Soil, or Hydrology nature	rally problematic?	(If needed, explain any ans	wers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho	owing sampling poi	nt locations, transed	cts, important features, etc.
Hydrophytic Vegetation Present? Ves V	Is the Sam	pled Area	
Hydrophyde Vegetation resent? Yes ✓ No	within a W	etland? Yes _√	No
Wetland Hydrology Present? Yes V	If ves, optic	nal Wetland Site ID: Wet	land sample point S-01
Remarks: (Explain alternative procedures here or in a separa	te report.)		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Inc	dicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that	apply)	Surface S	Soil Cracks (B6)
Surface Water (A1) Water-S	Stained Leaves (B9)	Drainage	Patterns (B10)
High Water Table (A2) Aquatic	Fauna (B13)	Moss Trin	n Lines (B16)
Saturation (A3) Marl De	posits (B15)	Dry-Seas	on Water Table (C2)
✓ Water Marks (B1) Hydroge	en Sulfide Odor (C1)	Crayfish E	Burrows (C8)
✓ Sediment Deposits (B2) Oxidized	d Rhizospheres on Living	Roots (C3) Saturation	N Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence	ce of Reduced Iron (C4)	Stunted o	r Stressed Plants (D1)
Algal Mat or Crust (B4) Recent	Iron Reduction in Tilled So	Dils (C6) Geomorph	hic Position (D2)
Inundation Visible on Aerial Imagery (B7) Other (B	Explain in Remarks)	Shallow P	ographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		✓ FAC-Neut	tral Test (D5)
Field Observations:			
Surface Water Present? Yes No _ ✓ _ Depth ((inches):		
Water Table Present? Yes No ✓_ Depth ((inches):		
Saturation Present? Yes No ✓_ Depth ((inches):	Wetland Hydrology Pres	sent? Yes <u>√</u> No
(includes capillary fringe)		(and) if any lable (
Describe Recorded Data (stream gauge, monitoring well, aena	ai photos, previous inspec	lions), il avallable.	
Remarks:			

Sampling Point: S-01 WET

Trop Stratum (Plat size, 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
	% Cover	<u>Species</u> ?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
Total Cover	. 0			Total % Cover of: Multiply by:
50% of total cover: 0	20% 0	f total cove	r: 0	$\frac{1}{OBL \text{ species}} 70 \qquad \frac{1}{x_{1}} = 70$
Sapling/Shrub Stratum (Plot size: 30				FACW species 0 $x 2 = 0$
<u> </u>				FAC species 0 x 3 = 0
				FACU species 0 x 4 = 0
2				UPL species 0 x 5 = 0
3				Column Totals: <u>70</u> (A) <u>70</u> (B)
4				1
5				Prevalence Index = B/A = _1
6				Hydrophytic Vegetation Indicators:
Total Cover	. 0			Rapid Test for Hydrophytic Vegetation
	000/		0	✓ Dominance Test is >50%
50% of total cover: <u></u>	20% 01	r total cover		✓ Prevalence Index is $\leq 3.0^1$
Carex lacuetric	70	Voc	OBI	Morphological Adaptations ¹ (Provide supporting
	<u> 10</u>	165		data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation (Explain)
3				¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6.				
7				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
0				at breast height (bbh), regardless of height.
0				Sapling/shrub – Woody plants less than 3 in. DBH
9				
10				Herb – All herbaceous (non-woody) plants, regardless
11				or size, and woody plants less than 3.20 it tall.
Total Cover:	70			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: <u>35</u>	20% o	f total cove	r: <u>14</u>	neight.
Woody Vine Stratum (Plot size: <u>30</u>)				
1.				
2				
2				
3				Hydrophytic Vegetation
4				Present? Yes 🗸 No
Total Cover	<u> </u>			
50% of total cover: <u>0</u>	20% of	f total cover	<u> 0 </u>	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Profile Desc	cription: (Describe	to the de	oth needed to docu	ment the	indicator	or confiri	rm the absence of indicators.)	
Depth	Matrix		Redo	ox Feature	s	~	_	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks	
0-10	10YR3/1	100					Silt	
10-20	10YR5/1	90	10YR5/8	10	C	М	Clav	_
	1011(0/1		1011(0/0		<u> </u>			_
				_				_
——								—
								—
———								—
								—
					- <u> </u>			—
Type: C=C	oncentration, D=Dep	pletion, RN	Reduced Matrix, C	S=Covere	d or Coate	ed Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.	
Hydric Soll	Indicators:						Indicators for Problematic Hydric Solis :	
Histosol	(A1)		Polyvalue Belo	w Surface	e (S8) (LR	R R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)	
Histic Ep	pipedon (A2)		MLRA 149B)			Coast Prairie Redox (A16) (LRR K, L, R)	
Black Hi	stic (A3)		Thin Dark Surfa	ace (S9) (LRR R, M	LRA 149E	DB) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Mucky I	Mineral (F	1) (LRR M	λ, L)	Dark Surface (S7) (LRR K, L)	
Stratified	d Layers (A5)	()	Loamy Gleyed	Matrix (F2	2)		Polyvalue Below Surface (S8) (LRR K, L)	
	d Below Dark Surfac	ce (A11)	Depleted Matrix	X (F3)			I nin Dark Surface (S9) (LRR K, L)	•
	Ark Surface (A12)		Redox Dark St	Intace (F6)) 		Iron-Manganese Masses (F12) (LRR K, L, F	() ()
Sandy N	Aucky Mineral (S1)		Depleted Dark	Surface (I	-7)		Pleamont Floodplain Solis (F19) (MLRA 149	л В)
Sandy G	Bieyed Matrix (54)		Redox Depress	sions (F8)			Mesic Spoalc (TA6) (MILRA 144A, 145, 149) Red Derent Meterial (E21)	3)
Sandy P	(edux (SS)						Red Parenti Material (F21)	
Surpped	rfaaa (SZ) (LDD D		D)				Very Shallow Dark Surface (TFT2)	
Dark Su	nace (57) (LRR R,	WLRA 149	в)				Other (Explain in Remarks)	
³ Indiactora a	f hydrophytic ycacto	tion and w	otland bydralagy my	ot ha prog	ont unlog	a diaturba	ad ar problematic	
Restrictive			eliand nydrology mu	st be pres	ent, unies	sustuibe		
	Layer (ir observed)							
Type: O	iay i c							
Depth (in	ches): <u>10</u>						Hydric Soil Present? Yes <u>√</u> No	_
Remarks:								

Project/Site: NW OHIO WIND	Citv/County:	PAULDING	СО	Sampling Date: 4/16/2013 6:58:01 PM
Applicant/Owner: WESTWOOD			State: OH	Sampling Point: T-01 UPLAND
Investigator(s): MATTHEW VOLLBRECHT 2115	Section. Tow	/nship, Range:	Sec 16 T1N R3	E
Landform (hillslope, terrace, etc.): Flat		ocal relief (conc	ave. convex. none);	Side slope of creek
Slope (%): 10-20% Let: 708237.9357	4546	6545.939		Dotum: UTM NAD 83Z13N
Silpher (%) Lat Lat	long			Not Mapped
Son Map Onit Name. Os Caranas only olary loant, oscara		7		
Are climatic / hydrologic conditions on the site typical for this time (of year? Yes <u>v</u>	No	_ (If no, explain in F	.emarks.)
Are Vegetation, Soil, or Hydrology signification	antly disturbed?	Are "Norm	al Circumstances"	present? Yes <u>V</u> No
Are Vegetation, Soil, or Hydrology natural	y problematic?	(If needed	, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ing sampling	j point locat	ions, transects	, important features, etc.
Hydrophytic Vegetation Present? Ves No 🗸	Is the	Sampled Area	a	
Hydric Soil Present? Yes No ✓	withi	n a Wetland?	Yes	No _ ✓
Wetland Hydrology Present? Yes No 🗸		optional Wetla	nd Site ID: Uplan	d sample point T-01
Remarks: (Explain alternative procedures here or in a separate	report.)	, optional trotta		
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that ap	ply)		Surface Soil	Cracks (B6)
Surface Water (A1) Water-Stai	ned Leaves (B9)		Drainage Pa	tterns (B10)
High Water Table (A2) Aquatic Fa	una (B13)		Moss Trim L	ines (B16)
Saturation (A3) Marl Depos	sits (B15)		Dry-Season	Water Table (C2)
Water Marks (B1) Hydrogen Hydrogen Ordificad B	Sulfide Odor (C1)		Crayfish Bur	rows (C8)
Sealment Deposits (B2) Oxidized R Drift Deposits (B3) Processory	nizospheres on L	IVING ROOTS (U3) Saturation V	Isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	n Reduction in Til	led Soils (C6)	Geomorphic	Position (D2)
Iron Deposits (B5)	Surface (C7)		Shallow Aqu	itard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Exp	lain in Remarks)		Microtopogra	aphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)			FAC-Neutral	Test (D5)
Field Observations:				
Surface Water Present? Yes No ✓ Depth (inc	ches):	_		
Water Table Present? Yes No ✓ Depth (inc	ches):			
Saturation Present? Yes No ✓ Depth (inc	ches):	Wetland	I Hydrology Presei	1t? Yes No _✓
Describe Recorded Data (stream gauge, monitoring well, aerial c	photos, previous ir	Inspections), if a	vailable:	
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Descerta				
Remarks:				

Sampling Point: T-01 UPL

Trop Stratum (Diat size: 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
	% Cover	<u>Species</u> ?	Status	Number of Dominant Species
1	·	·		That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3	·	·		Species Across All Strata: (B)
4	·			Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
Total Cove	r: 0			Total % Cover of: Multiply by:
50% of total cover: 0	20% c	of total cove	r: 0	OBL species 0 $x_1 = 0$
Sapling/Shrub Stratum (Plot size: 30)				FACW species 0 $x 2 = 0$
1				FAC species 0 x 3 = 0
··	·			FACU species <u>85</u> x 4 = <u>340</u>
2	·			UPL species <u>0</u> x 5 = <u>0</u>
3	·			Column Totals: <u>85</u> (A) <u>340</u> (B)
4	·			1
5				Prevalence Index = B/A = _4
6				Hydrophytic Vegetation Indicators:
Total Cove	r: 0			Rapid Test for Hydrophytic Vegetation
	000/ -		0	Dominance Test is >50%
50% of total cover: 0	20% 0	t total covel		Prevalence Index is $≤3.0^1$
<u>Piero Stratum</u> (Piot size. <u>0</u>)	85	Voc	EACU	Morphological Adaptations ¹ (Provide supporting
	00	165	170	data in Remarks or on a separate sheet)
2	·	·		Problematic Hydrophytic Vegetation (Explain)
3				¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6.				Demittons of Vegetation offata.
7				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
0				at breast height (DBH), regardless of height.
o				Sapling/shrub – Woody plants less than 3 in. DBH
9				
10		. <u> </u>		Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.26 it tail.
Total Cover	. 85			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: <u>42.5</u>	20% c	of total cove	r: <u>17</u>	neight.
Woody Vine Stratum (Plot size: 30)				
, 1.				
2	·			
2	·		·	
3	·			Hydrophytic Vegetation
4	·			Present? Yes No 🗸
Total Cove	r: 0			
50% of total cover: <u>0</u>	20% o	f total cove	. <u>.</u> 0	
Remarks: (Include photo numbers here or on a separate s	heet.)			
	,			

Profile Desc	ription: (Describe	to the depth	needed to docur	nent the i	ndicator	or confirm	m the absence of indicators.)
Depth	Matrix		Redo	x Feature	s		
(inches)	Color (moist)		Color (moist)	%	Type'	Loc ²	Texture Remarks
0-20	10YR5/4	100					Silty Clay
				·			
				·			
				·			
				·			
	ī						·
¹ Type: C=Co	oncentration. D=Der	letion. RM=R	educed Matrix. CS	S=Covered	d or Coate	ed Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicators for Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Belov	v Surface	(S8) (I R I	R R.	2 cm Muck (A10) (I RR K. I. MI RA 149B)
Histic Ep	pipedon (A2)	-	MLRA 149B)	(00) (11	,	Coast Prairie Redox (A16) (LRR K, L, R)
Black His	stic (A3)	_	Thin Dark Surfa	ice (S9) (L	RR R, M	LRA 149B	B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	n Sulfide (A4)	_	Loamy Mucky N	/lineral (F	1) (LRR K	(, L)	Dark Surface (S7) (LRR K, L)
Stratified	Layers (A5)	_	Loamy Gleyed	Matrix (F2	2)		Polyvalue Below Surface (S8) (LRR K, L)
Depleted	Below Dark Surfac	e (A11)	_ Depleted Matrix	(F3)			Thin Dark Surface (S9) (LRR K, L)
Thick Da	ark Surface (A12)	_	_ Redox Dark Su	rface (F6)			Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)	_	_ Depleted Dark	Surface (F	7)		Piedmont Floodplain Soils (F19) (MLRA 149B
Sandy G	lleyed Matrix (S4)	_	_ Redox Depress	ions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy R	edox (S5)						Red Parent Material (F21)
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)
Dark Sur	rface (S7) (LRR R, I	MLRA 149B)					Other (Explain in Remarks)
31	the solution for the second second	den en dered				Paralla	d an analytic contin
Indicators of	nydropnytic vegeta	tion and wetla	and hydrology mus	t be prese	ent, uniess	s disturbed	d or problematic.
	_ayer (if observed)						
Type:			_				
Depth (inc	ches):						Hydric Soil Present? Yes No √
Remarks:							

Project/Site: NW OHIO WIND	City/County: PAUL	DING CO	Sampling Date: 4/16/2013 6:58:01 PM		
Applicant/Owner: WESTWOOD		State: OH S	ampling Point: U-01 UPLAND		
Investigator(s): MATTHEW VOLLBRECHT 2115	Section Township R	Sec 15 T1N R3E			
Londform (hillologo torroog ato): Flat			Flat		
ci (a) 0-5% 710480 5392		r (concave, convex, none).			
Slope (%): 0 0 77 Lat: 710400.0002	Long: <u>4040001.00</u>		Datum: OTMINAD 0021014		
Soil Map Unit Name: <u>NPA-Nappanee Sity Clay Ioant, 0-2</u>	% slopes	NWI classifica	ation: Not Mapped		
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes 🗹 No _	(If no, explain in Re	emarks.)		
Are Vegetation, Soil, or Hydrology signific	antly disturbed? Are	"Normal Circumstances" p	resent? Yes 🖌 No		
Are Vegetation, Soil, or Hydrology natural	y problematic? (If n	eeded, explain any answer	s in Remarks.)		
SUMMARY OF FINDINGS – Attach site map show	ving sampling point	locations, transects,	important features, etc.		
Hydrophytic Vegetation Present? Yes No _√	Is the Sample within a Wetla	d Area Ind? Yes	No √		
Wetland Hydrology Present?		Wetland Site ID. Upland	Sample Point U-01		
Remarks: (Evolain alternative procedures here or in a separate	If yes, optional	Wetland Site ID: Opland			
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicat	tors (minimum of two required)		
Primary Indicators (minimum of one is required; check all that ap	ply)	Surface Soil (Cracks (B6)		
Surface Water (A1)Water-Sta	ned Leaves (B9)	Drainage Pat	Drainage Patterns (B10)		
High Water Table (A2) Aquatic Fa	una (B13)	Moss Trim Li	nes (B16)		
Water Marks (B1)	Sils (D13) Sulfide Odor (C1)	Dry-Season v	$\frac{1}{2}$		
Sediment Deposits (B2) Oxidized E	billinge Odor (CT)	ts (C3) Saturation Vis	sible on Aerial Imagery (C9)		
Drift Deposits (B3)	of Reduced Iron (C4)	Stunted or St	ressed Plants (D1)		
Algal Mat or Crust (B4) Recent Iro	n Reduction in Tilled Soils	(C6) Geomorphic I	Position (D2)		
Iron Deposits (B5) Thin Muck	Surface (C7)	Shallow Aquit	tard (D3)		
Inundation Visible on Aerial Imagery (B7) Other (Exp	lain in Remarks)	Microtopogra	phic Relief (D4)		
Sparsely Vegetated Concave Surface (B8)		FAC-Neutral	Test (D5)		
Field Observations:					
Surface Water Present? Yes No ✓ Depth (in	ches):				
Water Table Present? Yes No ✓ Depth (in	ches):				
Saturation Present? Yes No ✓ Depth (includes capillary fringe)	ches): W	etland Hydrology Presen	t? Yes No_√		
Describe Recorded Data (stream gauge, monitoring well, aerial)	hotos, previous inspection	s), if available:			
Remarks:					

Sampling Point: U-01 UPL

Trace Objections (DL) 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 00	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6				Provalence Index workshoot:
Total Cover	. 0			Total % Cover of: Multiply by:
	20%	f total covo	r: 0	$\frac{1}{1} \frac{1}{1} \frac{1}$
Sono of Iotal Cover.	20780	i lotai cove		EACW species 0 $x^2 = 0$
				FAC species 0 $x_3 = 0$
1				FACU species 85 $x = 340$
2				$\frac{1}{100} \frac{1}{100} \frac{1}$
3				Column Totals: 85 (A) 340 (B)
4				
5				Prevalence Index = B/A = _4
6				Hydrophytic Vegetation Indicators:
Tatal Cause				Rapid Test for Hydrophytic Vegetation
l otal Cover			0	Dominance Test is >50%
50% of total cover: 0	20% of	f total cover	0	Prevalence Index is $\leq 3.0^1$
Herb Stratum (Plot size: 5)	05	Vee		Morphological Adaptations ¹ (Provide supporting
1. Pascopyrum smithii	85	res	FACU	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation (Explain)
3				¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				
7				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
8				a broast hoight (BBH), rogardioco or hoight.
0				Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3 28 ft (1 m) tall
9				
10				Herb – All herbaceous (non-woody) plants, regardless
11				
Total Cover:	85			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: <u>42.5</u>	20% o	f total cove	<u>:</u> 17	neight.
Woody Vine Stratum (Plot size: <u>30</u>)				
1.				
2				
2				
3				Hydrophytic Vegetation
4				Present? Yes No 🗸
Total Cover	<u> </u>			
50% of total cover: <u>0</u>	20% o	f total cover	<u> 0 </u>	
Remarks: (Include photo numbers here or on a separate s	heet.)			
	,			

Profile Desc	ription: (Describe	to the depth	needed to docum	nent the i	ndicator	or confirm	m the absence of indicators.)
Depth	Matrix		Redo	x Feature	S		-
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²	Texture Remarks
0-28	10YR4/6	100					Silty Loar
				·			
				·			
<u> </u>				·			
				·			
				·			
			aduced Matrix CS		d or Coate	d Sand C	Proince ² Location: PL-Pore Lining M-Matrix
	Indicators:					u Sanu G	Indicators for Problematic Hydric Soils ³
History	(A1)			v Surfago		סכ	2 om Muck (A10) (I PP K I MI PA 140P)
Histic Er	(A1)	_			(30) (L KI	х κ,	Coast Prairie Redox (A16) (LRR K I R)
Black Hi	stic (A3)		Thin Dark Surfa	, ICE (S9) (I		RA 1498	B) 5 cm Mucky Peat or Peat (S3) (IRR K I R)
Hvdroge	n Sulfide (A4)		Loamy Mucky M	/lineral (F	1) (LRR K	. L)	Dark Surface (S7) (LRR K. L)
Stratified	Lavers (A5)	_	Loamy Gleved	Matrix (F2)	, _/	Polyvalue Below Surface (S8) (LRR K. L)
Depleted	d Below Dark Surfac	.e (A11)	Depleted Matrix	(F3)	/		Thin Dark Surface (S9) (LRR K. L)
Thick Da	ark Surface (A12)		Redox Dark Su	rface (F6)			Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)		Depleted Dark \$	Surface (F	7)		Piedmont Floodplain Soils (F19) (MLRA 149B
Sandy G	leyed Matrix (S4)	_	Redox Depress	ions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy R	ledox (S5)						Red Parent Material (F21)
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)
Dark Su	rface (S7) (LRR R,	MLRA 149B)					Other (Explain in Remarks)
³ Indicators of	f hydrophytic vegeta	tion and wetla	and hydrology mus	t be prese	ent, unless	s disturbec	d or problematic.
Restrictive I	_ayer (if observed)	:					
Type:							
Depth (ind	ches):						Hydric Soil Present? Yes No _✓
Remarks:							
Remarks.							
1							

Project/Site: NW OHIO WIND	City/County: PAU	JLDING CO	Sampling Date: 4/16/2013 6:45:22 PM
Applicant/Owner: WESTWOOD	0.1,, 000.1.1,1	State [.] OH	Sampling Point: U-01 WETLAND
Investigator(s): MATTHEW VOLLBRECHT 2115	Section Townshin	Range ⁻ Sec 15 T1N	R3E
Landform (billslope terrace etc.). Flat	Local r	elief (concave, convex, no	ne). Side slope of road ditch
Slope (%): 5-8% Let: 710482.7080	4546002	.292	Dotum: UTM NAD 83Z13N
cit Man Unit Names NnA-Nannanee silty clay loam 0-	2% slopes		
Soli Map Unit Name:			
Are climatic / hydrologic conditions on the site typical for this time	e of year? Yes <u>v</u> I	No (If no, explain i	in Remarks.)
Are Vegetation, Soil, or Hydrology signifi	cantly disturbed?	Are "Normal Circumstance	es" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology natura	ally problematic?	(If needed, explain any ans	swers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho	wing sampling poi	nt locations, transe	cts, important features, etc.
Hydrophytic Vegetation Present? Yes 🗸 No	Is the Sam	pled Area	
Hydric Soil Present? Yes ✓ No	within a W	etland? Yes	/ No
Wetland Hydrology Present? Yes ✓ No	If ves, optic	nal Wetland Site ID: We	tland sample point U-01
Remarks: (Explain alternative procedures here or in a separate	e report.)		
Wetland located in the bed of a road ditch			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary In	dicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that a	ipply)	Surface S	Soil Cracks (B6)
Surface Water (A1) Water-St	ained Leaves (B9)	Drainage	Patterns (B10)
✓ High Water Table (A2) Aquatic F	Fauna (B13)	Moss Tri	m Lines (B16)
Saturation (A3)	osits (B15)	Dry-Seas	son Water Table (C2)
Water Marks (B1)	n Sulfide Odor (C1)	Crayfish	Burrows (C8)
Sediment Deposits (B2) Oxidized	Rhizospheres on Living	Roots (C3) Saturatio	n Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence	e of Reduced Iron (C4)	Stunted of	or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Ir	on Reduction in Tilled So	oils (C6) Geomorp	phic Position (D2)
Iron Deposits (B5) Thin Muc	k Surface (C7)	Shallow /	Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (E)	(plain in Remarks)	Microtop	ographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		✓ FAC-Neu	utral Test (D5)
Field Observations:			
Surface Water Present? Yes No ✓ Depth (ii	nches):		
Water Table Present? Yes <u>✓</u> No Depth (ii	nches): 7.0		
Saturation Present? Yes <u>✓</u> No Depth (in	nches): <u>8.0</u>	Wetland Hydrology Pre	esent? Yes <u>√</u> No
(Includes capillary fringe)	nhotos, previous inspec	tions) if available:	
bescher Resoluted Bala (stream gaage, mentening weil, achai			
Remarks:			

Sampling Point: U-01 WET

Tana Stratum (Distaine 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>00</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
Total Cove	r: <u>0</u>			Total % Cover of: Multiply by:
50% of total cover: 0	20% c	f total cove	r: 0	OBL species 85 x 1 = 85
Sapling/Shrub Stratum (Plot size: 30)				FACW species <u>0</u> x 2 = <u>0</u>
1.				FAC species 0 $x 3 = 0$
2				FACU species 0 $x 4 = 0$
2				UPL species <u>0</u> x 5 = <u>0</u>
3				Column Totals: <u>85</u> (A) <u>85</u> (B)
4				Prevalence index $= R/\Delta = 1$
5				
6				Hydrophytic Vegetation Indicators:
Total Cove	er: 0			Rapid Test for Hydrophytic Vegetation
50% of total cover: 0	20% of	f total cove	r: 0	Dominance Test is >50%
Herb Stratum (Plot size: 5)				✓ Prevalence index is ≤3.0 Merobalogical Adaptations ¹ (Provide supporting
1. Carex lacustris	85	Yes	OBL	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
4				¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed of problematic.
5				Definitions of Vegetation Strata:
0				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cove	r: 85			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: <u>42.5</u>	20% o	f total cove	r: <u>17</u>	neight.
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2.				
3				Ludronhutio
0				Vegetation
Tetel Cour				Present? Yes 🖌 No
			0	
50% of total cover: 0	20% o	t total cove	r: <u> </u>	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Initiality Control 0-11 10YR 11-19 10YR Initiality Initiality Initiality Initiality	23/1 2 25/1 8 25/1 8 	70 100 35 1 - - - - - - - - - - - - -	IOYR5/8				Itexture Muck Silty Clay	
J-11 101F 11-19 10YR 11-19 10YR II-19 III II-19 III III III III III III III III III III IIII III IIII III IIII III IIII III IIII III IIII III IIIII IIII IIIIII IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	25/1 8 25/1 8 	35	IOYR5/8			M	Silty Clay	
I1-19 10YR I1-19 10YR IIII IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	25/1 8	35 1	IOYR5/8			M	Silty Clay	
Type: C=Concentra Histosol (A1) Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfid	ation, D=Deplet		Reduced Matrix, CS					
Type: C=Concentra ydric Soil Indicato Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfid	ation, D=Deplet		Reduced Matrix, CS					
Type: C=Concentra ydric Soil Indicato Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfid	ation, D=Deplet		Reduced Matrix, CS					
Type: C=Concentra ydric Soil Indicato Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfid	ation, D=Deplet		Reduced Matrix, CS					
Type: C=Concentra ydric Soil Indicato Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfid	ation, D=Deplet	ion, RM=F	Reduced Matrix, CS					
Type: C=Concentra ydric Soil Indicato Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfid	ation, D=Deplet	ion, RM=F	Reduced Matrix, CS					
Type: C=Concentra ydric Soil Indicato Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfid	ation, D=Deplet	ion, RM=F	Reduced Matrix, CS					
Type: C=Concentra ydric Soil Indicato Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfid	ation, D=Deplet	ion, RM=F	Reduced Matrix, CS					
Type: C=Concentra ydric Soil Justosol (A1) Histic Epipedon Black Histic Histogen Sulfid	ation, D=Deplet	ion, RM=F	Reduced Matrix, CS					
Type: C=Concentra ydric Soil Indicato Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfid	ation, D=Deplet	ion, RM=F	Reduced Matrix, CS					
Type: C=Concentra ydric Soil Indicato Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfid	ation, D=Deplet	ion, RM=F	Reduced Matrix, CS					
Type: C=Concentra lydric Soil Indicato Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfid	ation, D=Deplet	ion, RM=F	Reduced Matrix, CS	-Covered				
Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfid	(AO)				or Coate	d Sand Gra	ains. ² Location	n: PL=Pore Lining, M=Matrix.
 Histosol (AT) Histic Epipedon Black Histic (A3) Hydrogen Sulfid 	(40)			v Surface			Indicators for I	Problematic Hydric Soils":
Black Histic (A3)	(AZ)	_	MLRA 149B)	v Sunace	(30) (LK r	К.К.,	Coast Prair	rie Redox (A16) (LRR K, L, R)
_ Hydrogen Sulfid)	_	Thin Dark Surfa	ice (S9) (L	RR R, MI	RA 149B)	5 cm Muck	y Peat or Peat (S3) (LRR K, L, R)
01 11	le (A4)	-	Loamy Mucky M	/lineral (F1) (LRR K	, L)	Dark Surfa	ce (S7) (LRR K, L)
Stratified Layers	8 (A5) Dark Surface (Loamy Gleyed I Depleted Matrix	Matrix (F2)			Polyvalue E	Below Surface (S8) (LRR K, L)
Depleted Below Thick Dark Surface	ace (A12)		Redox Dark Sur	rface (F6)			Iron-Manga	anese Masses (F12) (LRR K, L, R
Sandy Mucky M	lineral (S1)	_	Depleted Dark S	Surface (F	7)		Piedmont F	Floodplain Soils (F19) (MLRA 149
Sandy Gleyed M	Aatrix (S4)	_	Redox Depress	ions (F8)			Mesic Spoo	dic (TA6) (MLRA 144A, 145, 149
Sandy Redox (S Stripped Metrix)	S5)						Red Parent	t Material (F21)
Dark Surface (S	(30) (LRR R, ML	RA 149B)					Other (Exp	Jw Dark Surface (TFT2)
		,						,
ndicators of hydrop	hytic vegetation	n and wetl	and hydrology mus	t be prese	nt, unless	disturbed	or problematic.	
Type: Clay	i observeu).							
Depth (inches):	11						Hydric Soil Pres	sent? Yes _∕ No
emarks:								

Project/Site: NW OHIO WIND	City/County: PAULDING	CO	Sampling Date: 4/16/2013 7:07:22 PM
Applicant/Owner: WESTWOOD		State [.] OH	Sampling Point: U-02 UPLAND
Investigator(c): MATTHEW VOLLBRECHT 2115	Section Township Banga:	Sec 15 T1N R	3E
Leasterne (Filleleas terress stat). Flat			. Flat
Landrorm (nillslope, terrace, etc.): -1 dc		cave, convex, none	
Slope (%): Lat: Lat:	Long: 4040920.209		_ Datum: OTMINAD 0021010
Soil Map Unit Name:SD-Salanac Silly Clay IOam, Occasiona		NWI classi	ification: Not Mapped
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🖌 No	(If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrology significantly	v disturbed? Are "Norr	nal Circumstances	" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed	d, explain any ansv	vers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point loca	tions, transec	ts, important features, etc.
Hydrophytic Vegetation Present? Yes No _✓ Hydric Soil Present? Yes No _✓ Wetland Hydrology Present? Yes No _✓ Permarks: (Explain alternative procedures here or in a separate report	Is the Sampled Are within a Wetland? If yes, optional Wetla	a Yes and Site ID: Upla	No _ ✓ Ind Sample Point U-02
Upland sample point adjacent to a creek with fringe we	tlands		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indi	icators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface So	bil Cracks (B6)
Surface Water (A1) Water-Stained	Leaves (B9)	Drainage F	Patterns (B10)
High Water Table (A2)	(B13)	Moss Trim	Lines (B16)
Saturation (A3) Marl Deposits	(B15)	Dry-Seaso	n Water Table (C2)
Water Marks (B1) Hydrogen Sulf	ide Odor (C1)	Crayfish B	urrows (C8)
Sediment Deposits (B2) Oxidized Rhize	ospheres on Living Roots (C3	B) Saturation	Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of R	educed Iron (C4)	Stunted or	Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Re Lion Dependent (B5)	face (CZ)	Geomorph	nic Position (D2)
Iron Deposits (B5) Thin Muck Sur	in Romarka)	Shallow Ad	quitard (D3)
Sparsely Vegetated Conceive Surface (B8)	in Remarks)	EAC-Neut	ral Test (D5)
Field Observations:			
Surface Water Present? Yes No ✓ Depth (inches	3).		
Water Table Present? Yes No ✓ Depth (inches	s):		
Saturation Present? Yes No ✓ Depth (inches	s): Wetlan	d Hvdroloav Pres	ent? Yes No √
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if a	vailable:	
Remarks:			

Sampling Point: U-02 UPL

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 50)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1	·			That Are OBL, FACW, or FAC: (A)
2	·			Total Number of Dominant
3				Species Across All Strata: 1 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				
Total Cove	r. 0			Tetal % Cover of: Multiply by:
			0	$\begin{array}{c c} \hline 101a1 \% \text{ Cover of.} \\ \hline 001 \text{ species} \\ \hline 0 \text{ species} \\ \hline 0 \text{ species} \\ \hline 1 = 0 \\ \hline 1 =$
50% of total cover: <u>50%</u>	20% 0	or total cove	r: <u> </u>	EACW species 0 $x_2 = 0$
Sapling/Shrub Stratum (Plot size:)				FAC species 0 $x_3 = 0$
1	·			FACIL species 15 $x_4 = 60$
2				$\frac{1100 \text{ species}}{100} = \frac{100 \text{ species}}{100} = 100 \text{ specie$
3				Column Totals: 100 (A) 485 (B)
4				
5.				Prevalence Index = $B/A = 4.85$
6				Hydrophytic Vegetation Indicators:
	0			Rapid Test for Hydrophytic Vegetation
Total Cove	r: <u> </u>			Dominance Test is >50%
50% of total cover: <u>0</u>	20% 0	f total cover	0	$\frac{1}{2} = \frac{1}{2} $
Herb Stratum (Plot size: 5)				Morphological Adaptations ¹ (Provide supporting
1. Bromus inermis	85	Yes	UPL	data in Remarks or on a separate sheet)
2. Dipsacus fullonum	15	No	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
A	·			¹ Indicators of hydric soil and wetland hydrology must
4	·			be present, unless disturbed or problematic.
5	·			Definitions of Vegetation Strata:
6	·			Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10.				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cover	. 100			Woody vines – All woody vines greater than 3 28 ft in
		() . (.)	20	height.
50% of total cover: <u>50</u>	20% 0	of total cove	r: <u>20</u>	
Woody Vine Stratum (Plot size: 30)				
1	·			
2				
3				Hydrophytic
4.				Vegetation
Total Cove	r: 0			Present? TesNo
EQ% of total anyor: 0	20% 0	f total cove	. 0	
50% of total cover	2078.0			
Remarks: (Include photo numbers here or on a separate s	heet.)			

0-15	Color (moist)	%	Color (moist)	% Tvne	1 Loc ²	Texture	Remarks
	10YR4/3	100				Silty Loar	
15-22	10YR5/2	100				Silty Clay	
lydric Soil	Indicators:		=Reduced Mainx, Co		aleu Sanu G	Indicators	for Problematic Hydric Soils ³ :
_ Histoso	l (A1)		Polyvalue Belo	w Surface (S8) (L	.RR R,	2 cm N	/luck (A10) (LRR K, L, MLRA 149B)
_ Histic E	pipedon (A2)		MLRA 149B)		Coast	Prairie Redox (A16) (LRR K, L, R)
Black H Hydrog	istic (A3) en Sulfide (A4)		Thin Dark Surfa	ace (S9) (LRR R, Mineral (F1) (I RF	MLRA 1498 8 K I)	5 cm N Dark S	/lucky Peat or Peat (S3) (LRR K, L, R) Surface (S7) (LRR K L)
Stratifie	d Layers (A5)		Loamy Gleyed	Matrix (F2)	(I (, L)	Polyva	lue Below Surface (S8) (LRR K, L)
Deplete	d Below Dark Surfac	e (A11)	Depleted Matrix	x (F3)		Thin D	ark Surface (S9) (LRR K, L)
Thick D	ark Surface (A12)		Redox Dark Su	Irface (F6)		Iron-M	anganese Masses (F12) (LRR K, L, R
Sandy N	Mucky Mineral (S1)		Depleted Dark	Surface (F7)		Piedmo Mesic	ont Floodplain Soils (F19) (MLRA 149 Spodic (TA6) (MI RA 144A 145 1496
Sandy F	Redox (S5)					Red Pa	arent Material (F21)
Stripped	d Matrix (S6)					Very S	hallow Dark Surface (TF12)
Dark Su	Irface (S7) (LRR R, I	MLRA 149E	3)			Other ((Explain in Remarks)
	A harada a harata a sa a sa a	tion and we	etland hydrology mus	st be present, unl	ess disturbed	d or problematic	2.
ndicators o	or nydropnytic vegeta						
Indicators c	Layer (if observed)						
Indicators c Restrictive Type:	Layer (if observed)						
ndicators c estrictive Type: Depth (in	Layer (if observed)					Hydric Soil	Present? Yes No _✓
ndicators c estrictive Type: Depth (in .emarks:	iches):					Hydric Soil	Present? Yes No _✓
Indicators c estrictive Type: Depth (in emarks:	ches):					Hydric Soil	Present? Yes No _✓
Indicators c Restrictive Type: Depth (in Remarks:	iches):					Hydric Soil	Present? Yes No _✓
Indicators c Restrictive Type: Depth (in Remarks:	ches):					Hydric Soil	Present? Yes No _✓
Indicators c Restrictive Type: Depth (in Remarks:	ches):					Hydric Soil	Present? Yes No _✓
Indicators c Restrictive Type: Depth (in Remarks:	ches):					Hydric Soil	Present? Yes No _✓
Indicators c Restrictive Type: Depth (in Remarks:	ches):					Hydric Soil	Present? Yes No _✓
Indicators c Restrictive Type: Depth (in Remarks:	In hydrophytic vegeta Layer (if observed) Iches):					Hydric Soil	Present? Yes <u>No √</u>
Indicators c Restrictive Type: Depth (in Remarks:	Iches):					Hydric Soil	Present? Yes No _✓
Indicators c Restrictive Type: Depth (in Remarks:	Iches):					Hydric Soil	Present? Yes <u>No √</u>
Indicators c Restrictive Type: Depth (in Remarks:	ches):					Hydric Soil	Present? Yes <u>No √</u>
Indicators c Restrictive Type: Depth (in Remarks:	Iches):					Hydric Soil	Present? Yes No _✓
Indicators c Restrictive Type: Depth (in Remarks:	ches):					Hydric Soil	Present? Yes <u>No √</u>
Indicators c Restrictive Type: Depth (in Remarks:	iches):					Hydric Soil	Present? Yes No _✓

I

Project/Site: NW OHIO WIND	(Citv/County:	PAULDING	СО	Sampling Date: 4/16/2013 6:45:22 PM
Applicant/Owner: WESTWOOD				State [.] OH	Sampling Point: U-02 WETLAND
Investigator(s) MATTHEW VOLLBRECH	HT 2115	Section Town	shin Range	Sec 15 T1N	R3E
Landform (hillologo, torrage, etc.); Flat	`		ol roliof (conc		Side slope of creek
ci (11) 5-10%		L00		ave, convex, noi	
Slope (%): Lat: Lat:	l	_ong:	20.400		Datum: Net Managed
Soil Map Unit Name: SD-Sarahac Silly Cla	y, occasionally noo	ueu		NWI clas	sification: NOT Mapped
Are climatic / hydrologic conditions on the site ty	pical for this time of yea	ar?Yes 🖌	No	(If no, explain i	n Remarks.)
Are Vegetation, Soil, or Hydrolo	gy significantly of	disturbed?	Are "Norm	al Circumstance	s" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrolo	gy naturally prol	olematic?	(If needed,	explain any ans	swers in Remarks.)
SUMMARY OF FINDINGS – Attach	site map showing	sampling	point locati	ons, transe	cts, important features, etc.
Hudrophytic Vagetation Propert?		Is the s	Sampled Area		
Hydric Soil Present? Yes	<u> </u>	within	a Wetland?	Yes _ 🗸	′ No
Wetland Hydrology Present? Yes	✓ No	If yes	ntional Wetlar	We	tland sample point U-02
Remarks: (Explain alternative procedures her	e or in a separate report	;)			<u>·</u>
Wetland fringe of creek Most of the	wetlands were belo	w Top of B	ank of the c	reek butas	mall area extending into the
adjoining crop field was delineated as	s wetland				
······································					
HYDROLOGY					
Wetland Hydrology Indicators:				Secondary Inc	dicators (minimum of two required)
Primary Indicators (minimum of one is required	d; check all that apply)			Surface S	Soil Cracks (B6)
Surface Water (A1)	Water-Stained L	.eaves (B9)		Drainage	Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trir	n Lines (B16)
✓ Saturation (A3)	Marl Deposits (E	315)		Dry-Seas	on Water Table (C2)
Water Marks (B1)	Hydrogen Sulfid	e Odor (C1)		Crayfish	Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizos	pheres on Liv	ing Roots (C3)	Saturatio	n Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Rec	duced Iron (C4	4)	Stunted of	or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Rec	luction in Tille	d Soils (C6)	Geomorp	hic Position (D2)
Iron Deposits (B5)	Thin Muck Surfa	ice (C7)		Shallow A	Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in the second secon	n Remarks)		Microtopo	ographic Relief (D4)
Sparsely Vegetated Concave Surface (B8	3)			✓ FAC-Neu	tral Test (D5)
Field Observations:					
Surface Water Present? Yes No	Depth (inches):		_		
Water Table Present? Yes <u>✓</u> No	Depth (inches):	8.0	_		
Saturation Present? Yes <u>✓</u> No	Depth (inches):	9.0	_ Wetland	Hydrology Pre	sent? Yes <u>√</u> No
(Includes capillary fringe) Describe Recorded Data (stream gauge, mon	itoring well, aerial photos	s, previous ins	pections), if av	ailable:	
	ioning tron, conci priotoc	, protiouo inc	poolio110), ii ai		
Remarks:					
					1

Sampling Point: U-02 WET

Tana Stratum (Distaine 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>00</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
Total Cove	r: <u>0</u>			Total % Cover of: Multiply by:
50% of total cover: 0	20% c	f total cove	r: 0	OBL species 85 x 1 = 85
Sapling/Shrub Stratum (Plot size: 30)				FACW species <u>0</u> x 2 = <u>0</u>
1.				FAC species 0 $x 3 = 0$
2				FACU species 0 $x 4 = 0$
2				UPL species <u>0</u> x 5 = <u>0</u>
3				Column Totals: <u>85</u> (A) <u>85</u> (B)
4				Prevalence index $= R/\Delta = 1$
5				
6				Hydrophytic Vegetation Indicators:
Total Cove	er: 0			Rapid Test for Hydrophytic Vegetation
50% of total cover: 0	20% of	f total cove	r: 0	Dominance Test is >50%
Herb Stratum (Plot size: 5)				✓ Prevalence index is ≤3.0 Merobalogical Adaptations ¹ (Provide supporting
1. Carex lacustris	85	Yes	OBL	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
4				¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed of problematic.
5				Definitions of Vegetation Strata:
0				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cove	r: 85			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: <u>42.5</u>	20% o	f total cove	r: <u>17</u>	neight.
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2.				
3				Ludronhutio
0				Vegetation
Tetel Cour				Present? Yes 🖌 No
			0	
50% of total cover: 0	20% o	t total cove	r: <u> </u>	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Profile Desc	ription: (Describe	e to the dep	th needed to docun	nent the in	dicator	or confirm	m the absence of indicators.)
Depth	Matrix		Redo	K Features	1	2	
(inches)	Color (moist)	%	Color (moist)		Type'	_Loc ²	Texture Remarks
0-10	10YR3/1	100					Silty Clay
10-20	10YR6/1	100					Clay
				·			
				<u> </u>			·
							· ·
							·
				·			
							· ·
1							2
Type: C=Co	oncentration, D=De	pletion, RM:	=Reduced Matrix, CS	=Covered	or Coate	d Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soli I	indicators:			~ ~ ~ ~			Indicators for Problematic Hydric Solis :
Histosol	(A1)		Polyvalue Belov	v Surface (58) (LR F	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Black Hi	stic (Λ 2)		Thin Dark Surfa	co (S0) (L		DA 140B	Coast Prairie Redox (A16) (LRR N, L, R)
	suc (A3) (ΔA)			lineral (F1)		LKA 1490	Dark Surface (S7) (IRR K I)
Stratified	Lavers (A5)		Loamy Gleved	Matrix (F2)		, ⊑)	Polyvalue Below Surface (S8) (LRR K, L)
✓ Depleted	d Below Dark Surfa	ce (A11)	Depleted Matrix	(F3)			Thin Dark Surface (S9) (LRR K. L)
Thick Da	ark Surface (A12)	,	Redox Dark Sur	face (F6)			Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)		Depleted Dark S	Surface (F7)		Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy G	Bleyed Matrix (S4)		Redox Depress	ons (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy R	edox (S5)						Red Parent Material (F21)
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)
Dark Sui	rface (S7) (LRR R,	MLRA 1498	3)				Other (Explain in Remarks)
³ Indicators of	f hydrophytic vegeta	ation and we	etland hydrology mus	t be preser	it, unless	disturbed	d or problematic.
Restrictive L	_ayer (if observed):					
Type: CI	ау						
Depth (inc	_{ches):} <u>10.0</u>						Hydric Soil Present? Yes <u>✓</u> No
Remarks:	,						

Project/Site: NW OHIO WIND	City/County: PAULDING CO Sampling Date: 4/15/2013 7:35:41 PM
Applicapt/Quiper: WESTWOOD	State: OH Sampling Date:
Investigator(a): MATTHEW VOLLBRECHT 2115	Castier Teurskie Deserv Sec 21 T1N B2F
	Section, Township, Range: Elat
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none):
Slope (%): 0-5% Lat: 099191.1669	Long: 4543626.379 Datum: UTWINAD 63213N
Soil Map Unit Name: <u>HtA-HOytVIIIe SIIty Clay U-1% SIOPES</u>	NWI classification: Not Mapped
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	v disturbed? Are "Normal Circumstances" present? Yes _✓ No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No ✓	
Wetland Hydrology Present? Yes No	If yes, optional Wetland Site ID: Option Sample point W-01
Remarks: (Explain alternative procedures here of in a separate repo	/ft.)
Upland sample point adjacent to wetland in bed of road	laich
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained	Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna	(B13) Moss Trim Lines (B16)
Saturation (A3)	(B15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfi	ide Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhize	ospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Re	educed Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Re	eduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Sur	face (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain	in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No ✓ Depth (inches):
Water Table Present? Yes No ✓ Depth (inches	.):
Saturation Present? Yes No ✓ Depth (inches	a): Wetland Hydrology Present? Yes No _✓
Describe Recorded Data (stream gauge, monitoring well, aerial phote	os, previous inspections), if available:
Remarks:	

Sampling Point: W-01 UPL

Ture Oliverture (D. 1. 1. 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 00	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>2</u> (B)
4.				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
3				
6				Prevalence Index worksheet:
Total Cover	. 0			Total % Cover of:Multiply by:
50% of total cover: 0	20% o	f total cove	r: <u>0</u>	OBL species 0 $x_1 = 0$
Sapling/Shrub Stratum (Plot size: <u>30</u>)				FACW species 0 $x_2 = 0$
1.				FAC species 0 $x 3 = 0$
··				FACU species <u>35</u> x 4 = <u>140</u>
2				UPL species <u>20</u> x 5 = <u>100</u>
3				Column Totals: <u>55</u> (A) <u>240</u> (B)
4				4.26
5				Prevalence Index = B/A = 4.30
6.				Hydrophytic Vegetation Indicators:
Total Cover				Rapid Test for Hydrophytic Vegetation
	·		0	Dominance Test is >50%
50% of total cover: 0	20% of	total cover		Prevalence Index is $\leq 3.0^{1}$
Herb Stratum (Plot size: 5)				Morphological Adaptations ¹ (Provide supporting
1. Dactylis glomerata	35	Yes	FACU	data in Remarks or on a separate sheet)
2. Glycine spp	20	Yes	UPL	Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
				¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in, DBH
9				and greater than 3.28 ft (1 m) tall.
10.				Herb - All berbaceous (non-woody) plants, regardless
44				of size, and woody plants less than 3.28 ft tall.
· · · · · · · · · · · · · · · · · · ·	55			
Total Cover:				height.
50% of total cover: <u>27.5</u>	20% o	f total cove	r: <u>11</u>	
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2				
2				
3				Hydrophytic Vegetation
4				Present? Yes No 🗸
Total Cover	<u> 0 </u>			
50% of total cover: 0	20% of	f total cover	<u>r: 0</u>	
Remarks: (Include photo numbers here or on a separate s	hoot)			
	neet.)			

Profile Desc	ription: (Describe	to the depth	n needed to docur	nent the i	ndicator	or confirm	m the absence of indicators.)
Depth	Matrix		Redo	x Features	S		_
(inches)	Color (moist)	%	Color (moist)	%	_Type ¹	Loc ²	Texture Remarks
0-27	10YR3/5	100					Loamy Cl
				·			
				·			
				·			
				·			
				·			
				·			
¹ Type: C=Co	oncentration, D=Dep	pletion, RM=F	Reduced Matrix, CS	S=Covered	d or Coate	d Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	ndicators:		· · ·				Indicators for Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Belov	N Surface	(S8) (I RI	R	2 cm Muck (A10) (I RR K I MI RA 149B)
Histic Er	vinedon (A2)	_	MI RA 1498			· · · · ,	Coast Prairie Redox (A16) (I RR K I R)
Black Hi	etic (A3)		Thin Dark Surfs	/ 200 (SQ) (I		PA 1/08	B) 5 cm Mucky Peat or Peat (S3) (IPP K I P)
	n Sulfido (A4)	-		linoral (E			Dork Surface (S7) (I PP K I)
Hyuroge		_		Motrix (F2	$(\mathbf{LKK}\mathbf{N})$.,∟)	Dark Surface (S7) (LRR K, L)
Stratilied	l Layers (Ab)	-	_ Loany Gleyed		.)		Polyvalue Below Sufface (So) (LRR R, L)
	Below Dark Surrad	e (A11) _	Depleted Matrix	((F3)			
Thick Da	ark Surface (A12)	-	_ Redox Dark Su	rface (F6)			Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)	-	Depleted Dark	Surface (F	.7)		Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy G	ileyed Matrix (S4)	-	Redox Depress	ions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy R	edox (S5)						Red Parent Material (F21)
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, I	MLRA 149B)					Other (Explain in Remarks)
³ Indicators of	hydrophytic vegeta	tion and wetl	and hydrology mus	st be prese	ent, unless	s disturbed	d or problematic.
Restrictive I	_ayer (if observed)	:					
Type:							
							Hydric Soil Prosent? Vos No /
Depth (ind	ches):						
Remarks:							

Project/Site: NW OHIO WIND	City/County: PAULDING CO Sampling Date: 4/15/2013 7:32:57 PM					
Applicant/Owner: WESTWOOD	State: OH Sampling Point: W-01 WETLAND					
Investigator(s): MATTHEW VOLLBRECHT 2115	Section, Township, Range: Sec 21 T1N R2E					
Landform (billslope, terrace, etc.): Flat	l ocal relief (concave, convex, none). Side slope of road ditch					
Slope (%): 5-10% Let: 699196.7866	Long: 4543827.105					
Sible (%). <u>HtA-Hovtville silty clay 0-1% slopes</u>						
Soli Map Unit Name:						
Are climatic / hydrologic conditions on the site typical for this time of y	'ear? Yes _✔ No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Normal Circumstances" present? Yes <u>✓</u> No					
Are Vegetation, Soil, or Hydrology naturally pr	roblematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Ves V	Is the Sampled Area					
Hydric Soil Present? Yes ✓ No	within a Wetland? Yes _ ✓ No					
Wetland Hvdrology Present? Yes ✓ No	If yes, optional Wetland Site ID. Wetland sample Point W-01					
Remarks: (Explain alternative procedures here or in a separate repo	ort.)					
Wetland located in the bed of a road ditch						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)) Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained	Leaves (B9) Drainage Patterns (B10)					
High Water Table (A2)	(B13) Moss Trim Lines (B16)					
✓ Saturation (A3) Marl Deposits	(B15) Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulf	fide Odor (C1) Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhize	cospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3) Presence of R	Reduced Iron (C4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Iron Re	eduction in Tilled Soils (C6) Geomorphic Position (D2)					
Iron Deposits (B5) Thin Muck Sui	rface (C7) Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain	n in Remarks) Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	✓ FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present? Yes No ✓ Depth (inches	s):					
Water Table Present? Yes <u>✓</u> No Depth (inches	s): <u>9.0</u>					
Saturation Present? Yes <u>✓</u> No Depth (inches	s): 10.0 Wetland Hydrology Present? Yes ✓ No					
(Includes capillary fringe) Describe Recorded Data (stream gauge monitoring well aerial phot	tos previous inspections) if available:					
Describe Recorded Data (circuin gauge, monitoring weil, denai priot						
Remarks:						

Sampling Point: W-01 WET

Tere Oliverture (DL () 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 00)	% Cover	Species?	Status	Number of Dominant Species
1	·			That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: 100 (A/B)
6				
	0			Prevalence Index worksheet:
l otal Cove	r: <u> </u>		0	Total % Cover of: Multiply by:
50% of total cover: 0	20% o	of total cove	r: <u>0</u>	OBL species 10 $x_1 = 10$
Sapling/Shrub Stratum (Plot size: 30)				FACW species $\frac{45}{2}$ $x_2 = \frac{90}{2}$
1				FAC species 0 $x 3 = 0$
2				FACU species 0 $x 4 = 0$
3.				UPL species 0 $x 5 = 0$
A	·			Column Totals: <u>55</u> (A) <u>100</u> (B)
				Prevalence Index = $B/A = 1.82$
5				
6	·			Hydrophytic Vegetation Indicators:
Total Cove	r: <u>0</u>			Rapid Test for Hydrophytic Vegetation
50% of total cover: 0	20% of	f total cove	. 0	$\frac{\checkmark}{4}$ Dominance Test is >50%
Herb Stratum (Plot size: 5				Prevalence Index is ≤3.0'
1 Phalaris arundinacea	45	Yes	FACW	Morphological Adaptations' (Provide supporting
 Schoenonlectus fluviatilis 	10	No	OBI	Problematic Hydrophytic Vegetation ¹ (Explain)
3				¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6.				
7				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
0				at bleast height (bbh), regardless of height.
o	·			Sapling/shrub – Woody plants less than 3 in. DBH
9	·			
10	·			Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cover	55			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: 27.5	20% o	of total cove	_{r:} 11	height.
Woody Vine Stratum (Plot size: 30				
(1 lot 3/20)				
l				
2	·			
3	·			Hydrophytic
4				Vegetation Present? Yes V No
Total Cove	r: 0			
50% of total cover: 0	20% 0	f total cove	. 0	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Profile Desc	ription: (Describe	to the de	pth needed to docu	ment the	indicator	or confir	rm the absence of indicators.)
Depth	Matrix		Redo	ox Feature	es		_
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²	Texture Remarks
0-11	10YR3/1	100					Silt
11-22	10YR6/1	85	10YR5/8	15	<u>с</u>	М	Clav
			1011(0/0		- <u> </u>		
		-		-			
——							
<u> </u>							
¹ Type: C=Co	oncentration, D=Dep	oletion, RM	I=Reduced Matrix, CS	S=Covere	d or Coate	ed Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Belo	w Surface	e (S8) (LR	R R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Ep	pipedon (A2)		MLRA 149B)			Coast Prairie Redox (A16) (LRR K, L, R)
Black Hi	stic (A3)		Thin Dark Surfa	ace (S9) (LRR R, M	LRA 1498	B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Mucky I	Mineral (F	1) (LRR K	Χ, L)	Dark Surface (S7) (LRR K, L)
Stratified	d Layers (A5)		Loamy Gleyed	Matrix (F2	2)		Polyvalue Below Surface (S8) (LRR K, L)
Depleted	d Below Dark Surfac	e (A11)	Depleted Matrix	x (F3)			Thin Dark Surface (S9) (LRR K, L)
Thick Da	ark Surface (A12)		Redox Dark Su	Irface (F6)		Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy N	lucky Mineral (S1)		Depleted Dark	Surface (I	-7)		Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy G	Bieyed Matrix (S4)		Redox Depress	sions (F8)			Mesic Spoaic (TA6) (MLRA 144A, 145, 149B)
Sandy R	(edox (S5)						Red Parent Material (F21)
Surpped	rfaaa (87) (IPPP I		D)				Very Shallow Dark Surface (TFT2)
	$(\mathbf{LKK}\mathbf{K},\mathbf{I})$	VILKA 145	D)				
³ Indicators of	f hvdrophytic vegeta	tion and w	etland hydrology mus	st be pres	ent. unles	s disturbe	ed or problematic.
Restrictive I	Laver (if observed)	:			,		
Type Cl	lay	-					
Type	· · 11.0						Hudric Soil Present? Vos 🗸 No
Depth (ind	ches):						
Remarks:							

Project/Site: NW OHIO WIND	City/County: PAUL	DING CO Sampling Date: 4/15/2013 7:42:25 F					
Applicant/Owner: WESTWOOD	0.1,, 000.11,1	State: OH Sampling Point: W-02 UPLAND					
Investigator(s): MATTHEW VOLLBRECHT 2115	Section Township R	Sec 21 T1N R2E					
Landform (hillolono, terroso, etc.); Flat		st (concerve, conver, conc). Flat					
ou (a) 0-5% (698832 0727	Local Telle	$\frac{1}{100} = 100000000000000000000000000000000$					
		Datum: OTMITICO 002 TOR					
Soil Map Unit Name: NPA- Napanee Sitty Clay Ioam 0-29	siopes	NWI classification: NOT Mapped					
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes 🖌 No	(If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology signific	antly disturbed? Are						
Are Vegetation, Soil, or Hydrology natural	y problematic? (If	needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map show	ving sampling point	locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No 🗸	Is the Sample	ed Area					
Hydric Soil Present? Yes No ✓	within a Wetl	and? Yes No_✓					
Wetland Hydrology Present? Yes No 🗸	If yes, optiona	Wetland Site ID: Upland Sample Point W-02					
Remarks: (Explain alternative procedures here or in a separate	report.)						
Upland sample point adjacent to large creek with fri	nge wetlands						
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that ap	ply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Sta	ned Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fa	una (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Depo	sits (B15)	(B15) Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen	Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized F	hizospheres on Living Ro	ots (C3) Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3) Presence	of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Irc	n Reduction in Tilled Soils	(C6) Geomorphic Position (D2)					
Iron Deposits (B5)	Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Ex)	iain in Remarks)	Microtopographic Relief (D4)					
Sparsely vegetated Concave Sunace (Bo)		FAC-Neutral Test (D5)					
Surface Water Present? Ves No 🗸 Denth (in	hes).						
Water Table Present? Yes No ✓ Depth (in	thes):						
Saturation Present? Ves No ✓ Depth (in	whes):	Vetland Hydrology Present? Yes No. √					
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial	hotos, previous inspection	ns), if available:					
Remarks:							

Sampling Point: W-02 UPL

Tree Stratum (Plot size: 30	Absolute % Cover	Dominant	Indicator Status	Dominance Test worksheet:
1 Robinia pseudoacacia	40	Yes	FACU	Number of Dominant Species
o Carva ovata	35	Yes	FACU	That Are OBL, FACW, or FAC: (A)
				Total Number of Dominant
3				Species Across All Strata:(B)
4				Percent of Dominant Species
5				That Are OBE, FACW, of FAC (A/B)
6				Prevalence Index worksheet:
Total Cover	. 75			Total % Cover of:Multiply by:
50% of total cover: <u>37.5</u>	20% c	of total cove	r <u>: 15</u>	OBL species <u>0</u> x 1 = <u>0</u>
Sapling/Shrub Stratum (Plot size: <u>30</u>)				FACW species 0 x 2 = 0
1				FAC species 0 $x 3 = 0$
2				FACU species 100 $x = 400$
3.				UPL species 0 $x = 0$
4.				$\begin{bmatrix} Column Totals: 100 \\ (A) \\ 400 \\ (B) \end{bmatrix}$
5				Prevalence Index = $B/A = 4$
6				Hydronhytic Vegetation Indicators:
0	0			Rapid Test for Hydrophytic Vegetation
l Iotal Cover			0	Dominance Test is >50%
50% of total cover: 0	20% o	f total cover	0	Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: 5)	0-		FAOL	Morphological Adaptations ¹ (Provide supporting
1. Erythronium albidum	25	Yes	FACU	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				
7.				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8.				
9				and greater than 3.28 ft (1 m) tall.
10				
				of size, and woody plants less than 3.28 ft tall.
	25			Weedy vince All weedy vince greater than 2.29 ft in
l otal Cover:	20		F	height.
50% of total cover: <u>12.5</u>	20% o	f total cover	<u>.</u> 5	
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2				
3				Hydrophytic
4				Vegetation Present? Yes No 🗸
Total Cover	<u> 0 </u>			
50% of total cover: 0	20% o	f total cover	0	
Demarka: (Include photo numbero haro er en e concrete el	haat)			
Remarks. (Include photo numbers here of on a separate si	neet.)			

Profile Desc	ription: (Describe	to the depth	n needed to docun	nent the i	ndicator	or confirn	m the absence of indicators.)
Depth	Matrix		Redo	x Features	3	0	_
(inches)	Color (moist)	%	Color (moist)		Type'	<u>Loc</u> [∠]	Texture Remarks
0-28	10YR 4/3	100					Silty Loar
——							
				_	_	_	
1							
'Type: C=Co	oncentration, D=Dep	oletion, RM=F	Reduced Matrix, CS	=Covered	or Coate	ed Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	Indicators:						Indicators for Problematic Hydric Soils':
Histosol	(A1)	-	Polyvalue Belov	v Surface	(S8) (LR I	RR,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Ep	pipedon (A2)		MLRA 149B)	(Coast Prairie Redox (A16) (LRR K, L, R)
Black Hi	stic (A3)	_	_ Thin Dark Surfa	ce (S9) (L	RR R, M	LRA 149B	B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	n Sulfide (A4)	_	_ Loamy Mucky M	lineral (F1) (LRR K	., L)	Dark Surface (S7) (LRR K, L)
Stratified	Layers (A5)		_ Loamy Gleyed I	Matrix (F2)		Polyvalue Below Surface (S8) (LRR K, L)
Depleted	Below Dark Surfac	ce (A11)	Depleted Matrix	(F3)			Thin Dark Surface (S9) (LRR K, L)
Thick Da	ark Surface (A12)	-	_ Redox Dark Sui	face (F6)			Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)	_	_ Depleted Dark S	Surface (F	()		Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy G	bleyed Matrix (S4)	-	_ Redox Depress	ions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy R	edox (S5)						Red Parent Material (F21)
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)
Dark Su	rrace (S7) (LRR R,	MLRA 149B)					Other (Explain in Remarks)
³ Indiactors of	f hydrophytic ycacto	tion and wat	and hydrology mus	the proof	nt unloc	diaturbas	ad ar problematic
Destrictive			and hydrology mus	t be prese	nt, unies:	saisturbed	
-	_ayer (il observed)	-					
l ype:							
Depth (ind	ches):						Hydric Soil Present? Yes No _✓
Remarks:							

Project/Site: NW OHIO WIND	Citv/County:	PAULDING	CO	Sampling Date: 4/15/2013 7:39:20 PM			
Applicant/Owner: WESTWOOD			State: OH	Sampling Point: W-02 WETLAND			
Investigator(s): MATTHEW VOLLBRECHT 2115	Section. Tow	nship. Range:	Sec 21 T1N R	22E			
Landform (hillslope terrace etc.). Flat		ocal relief (con	cave convex none	Side slope of creek bank			
Slope (%): 5-10% Let: 698828.5312	4543	3902.893		Dotum: UTM NAD 83Z13N			
Sible (%) Lat Lat	sionally flooded		NNA/1 - 1				
Soll Map Unit Name: Sol Caranac Sity Stay Ioann, Soca							
Are climatic / hydrologic conditions on the site typical for this tin	ne of year? Yes <u></u>	No	(If no, explain in	Remarks.)			
Are Vegetation, Soil, or Hydrology signi	ficantly disturbed?	Are "Norn	nal Circumstances	" present? Yes 🖌 No			
Are Vegetation, Soil, or Hydrology natu	rally problematic?	(If needed	l, explain any ansv	vers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map she	owing sampling	point loca	tions, transec	ts, important features, etc.			
Hydrophytic Vegetation Present? Ves V	Is the	Sampled Are	a				
Hydric Soil Present? Yes ✓ No	withir	n a Wetland?	Yes_√	No			
Wetland Hydrology Present?	If ves	ontional Wetla	und Site ID. Wetl	and sample point W-02			
Remarks: (Explain alternative procedures here or in a separa	te report.)						
Wetland Hydrology Indicators:			Secondary Indi	cators (minimum of two required)			
Primary Indicators (minimum of one is required; check all that	apply)		Surface So	bil Cracks (B6)			
Surface Water (A1) Water-S	Stained Leaves (B9)	Leaves (B9) Drainage Patterns (B10)					
✓ High Water Table (A2) Aqualic	rauna (B13)	(B13) Moss Trim Lines (B16) (B15) Dry Season Water Table (C2)					
Water Marks (B1)	en Sulfide Odor (C1)	ide Odor (C1) Cravfish Burrows (C8)					
Sediment Deposits (B2) Oxidize	d Rhizospheres on Li	ving Roots (C3	B) Saturation	Visible on Aerial Imagery (C9)			
Drift Deposits (B3)	ce of Reduced Iron (0	24)	Stunted or	Stressed Plants (D1)			
Algal Mat or Crust (B4) Recent	Iron Reduction in Till	ed Soils (C6)	Geomorph	ic Position (D2)			
Iron Deposits (B5) Thin Mu	ick Surface (C7)		Shallow Ad	quitard (D3)			
Inundation Visible on Aerial Imagery (B7) Other (B	Explain in Remarks)		Microtopog	graphic Relief (D4)			
Sparsely Vegetated Concave Surface (B8)			✓ FAC-Neutr	al Test (D5)			
Field Observations:	<i>//</i>						
Surface Water Present? Yes No Depth	(inches):	—					
Water Table Present? Yes ✓ No Deptn	(inches): <u>7.0</u>	—					
(includes capillary fringe)	(Inches): 0.0		a Hydrology Pres	ent? Yes <u>v</u> No			
Describe Recorded Data (stream gauge, monitoring well, aeri	al photos, previous ir	spections), if a	vailable:				
Remarks:							
Nemarks.							

Sampling Point: W-02 WET

Tree Stratum (Plot size: 30	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1	<u>/// 00/01</u>	000000	Oldido	Number of Dominant Species
2				
3				Total Number of Dominant Species Across All Strata: 1 (B)
0				
4				That Are OBL, FACW, or FAC: 100 (A/B)
5				
0	0			Prevalence Index worksheet:
l otal Cover:	<u> </u>		0	Total % Cover of: Multiply by:
50% of total cover: 0	20% of	f total cove	r: <u> </u>	OBL species 0 $x_1 = 0$
Sapling/Shrub Stratum (Plot size: 50)				FAC species 0 $x_2 = 0$
1				FACU species 0 $x 4 = 0$
2				UPL species 0 $x_5 = 0$
3				Column Totals: 25 (A) 50 (B)
4				
5				Prevalence Index = $B/A = 2$
6				Hydrophytic Vegetation Indicators:
Total Cover:	0			Rapid Test for Hydrophytic Vegetation
50% of total cover: 0	20% of	total cover	0	$\frac{\checkmark}{4}$ Dominance Test is >50%
Herb Stratum (Plot size: 5)				✓ Prevalence Index is ≤3.0'
1. Phalaris arundinacea	25	Yes	FACW	Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)
2.				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
5				
				Definitions of Vegetation Strata:
o				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				
10				Herb – All herbaceous (non-woody) plants, regardless
11				
Total Cover:	25		_	Woody vines – All woody vines greater than 3.28 ft in height.
50% of total cover: <u>12.5</u>	20% of	f total cove	r: <u>5</u>	
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2				
3				Hydrophytic
4				Vegetation Prospet2 Vos V No
Total Cover:	0			
50% of total cover: 0	20% of	f total cover	. 0	
Pamarks: (Include photo numbers here or on a separate sh	poet)			

Profile Des	cription: (Describ	e to the de	pth needed to docu	ment the	indicator	or confir	rm the absence of indicators.)		
Depth	Matrix		Rede	ox Feature	es	. 0			
(inches)	Color (moist)	%	Color (moist)	%	Type'		Texture Remarks		
0-13	10YR2/1	100					Muck		
13-21	10YR7/1	90	10YR5/8	10	С	Μ	Clay		
——						·			
						·			
						·			
———						·			
						·			
					_				
——						·			
¹ Type: C=C	oncentration, D=De	epletion, RN	I=Reduced Matrix, C	S=Covere	d or Coate	ed Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.		
Hydric Soil	Indicators:						Indicators for Problematic Hydric Soils ³ :		
Histosol	(A1)		Polyvalue Belo	w Surface	e (S8) (LR	R R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)		
HISTIC E	pipedon (A2)		MLRA 1498 Thin Dark Surf	i) 200 (SD) (Coast Prairie Redox (A16) (LRR K, L, R)		
Hvdroge	en Sulfide (A4)		Loamy Mucky	ACE (39) (Mineral (F			Dark Surface (S7) (I RR K I)		
Stratifie	d Layers (A5)		Loamy Gleyed	Matrix (F2	2)	-, _/	Polyvalue Below Surface (S8) (LRR K, L)		
Deplete	d Below Dark Surfa	ace (A11)	Depleted Matri	x (F3)	,		Thin Dark Surface (S9) (LRR K, L)		
Thick D	ark Surface (A12)		Redox Dark Su	urface (F6)		Iron-Manganese Masses (F12) (LRR K, L, R)		
Sandy M	Aucky Mineral (S1)		Depleted Dark	Surface (F7)		Piedmont Floodplain Soils (F19) (MLRA 1498		
Sandy C	Gleyed Matrix (S4)		Redox Depres	sions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B		
Stripper	(55) Matrix (S6)						Red Parent Material (F21)		
Dark Su	Inface (S7) (I RR R	MI RA 149	B)				Other (Explain in Remarks)		
			(2)						
³ Indicators o	f hydrophytic vege	tation and v	etland hydrology mu	st be pres	ent, unles	s disturbe	ed or problematic.		
Restrictive	Layer (if observed	d):							
Type: C	lay								
Depth (in	ches): <u>13</u>						Hydric Soil Present? Yes <u>✓</u> No		
Remarks:	,								

I

Project/Site: NW OHIO W	IND			City/County:	PAULDING	G CO	Sampling Date: 4/18/2013 2:49:01 PM	
Applicant/Owner: WESTW	OOD			. , ,		_{State:} OH	Sampling Point: W-03 UPLAND	
Investigator(s): MATTHEW	/ VOLLBF	RECHT 2	115	Section. To	vnship. Range:	Sec 21, T1N	R2E	
Landform (hillslope, terrace, e	_{tc.):} Flat			, , .	ocal relief (con	cave. convex. nor	_{e):} Flat	
Slope (%): 0-5% Lat:	697993.0	591		Long. 454	4438.220	,,,	Datum: UTM NAD 83Z13N	
Sold Map Linit Name: LC-Latty silty clay					NWI class	sification: PF01B		
Are climatic / hydrologic condi	tions on the	site typical	for this time of v	rear? Yes ¥	No	(If no, explain i	n Remarks)	
Are Vegetation Soil	or H	drology	significantly	v disturbed?	Are "Norr	(II IIO, explain II	s" present? Ves 🖌 No	
Are Vegetation, Soil	, 0i Hy	/drology	Significanti		Ale Non			
		arology	naturally p					
	<u> 35 – Atta</u>	ach site	map snowin	g sampling	g point loca	tions, transed	tts, important features, etc.	
Hydrophytic Vegetation Pres	ent?	Yes	No	- Is the	e Sampled Are	ea Vee	No	
Hydric Soil Present?		Yes	No	- with	n a wetiand?	res		
Wetland Hydrology Present?		Yes	No	_ If yes	s, optional Wetla	and Site ID:	and Sample Point W-03	
Remarks: (Explain alternativ	e procedure	es here or II	n a separate repo	ort.)				
HYDROLOGY								
Wetland Hydrology Indicat	ors:					Secondary Inc	licators (minimum of two required)	
Primary Indicators (minimum	of one is re	quired; che	ck all that apply))		Surface S	oil Cracks (B6)	
Surface Water (A1)			_ Water-Stained	d Leaves (B9)		Drainage	Patterns (B10)	
High Water Table (A2)			_ Aquatic Fauna	a (B13)		Moss Trin	n Lines (B16)	
Saturation (A3)			_ Marl Deposits	(B15) Dry-Season Water Table (C2)				
Water Marks (B1)			_ Hydrogen Sulf	fide Odor (C1)	Crayfish E	Burrows (C8)	
Sediment Deposits (B2)			_ Oxidized Rhiz	ospheres on l	Living Roots (C	3) <u>Saturatior</u>	Visible on Aerial Imagery (C9)	
Drift Deposits (B3)			Presence of R	educed Iron (Stunted o	r Stressed Plants (D1)	
Iron Deposits (B5)			_ Recent from R	rface (C7)		Geomorp	auitard (D3)	
Inundation Visible on Ae	rial Imagen	(B7)	_ Thin Muck Su Other (Explain	in Remarks)		Shallow P	graphic Relief (D4)	
Sparsely Vegetated Cor	Icave Surface	(B7)		r in Kontarkoj		FAC-Neu	tral Test (D5)	
Field Observations:		- (-)						
Surface Water Present?	Yes	No _✓	Depth (inche	s):				
Water Table Present?	Yes	No _∕	Depth (inches	s):				
Saturation Present?	Yes	No _∕	Depth (inches	s):	Wetlan	d Hydrology Pre	sent? Yes No _✓	
(includes capillary fringe) Describe Recorded Data (str	eam gauge	monitoring	well, aerial phot	tos. previous i	nspections), if a	available:		
	<u>-</u>		,,	····, p······				
Remarks:								
Sampling Point: W-03 UPL

Tree Stratum (Plot size: 30	Absolute %	Dominant	Indicator Status	Dominance Test worksheet:
Carva ovata	40	Yes	FACU	Number of Dominant Species
Celtis occidentalis	25	Yes	FAC	That Are OBL, FACW, or FAC: (A)
2. Quercus palustris	15	No	FACW	Total Number of Dominant
3				
4				Percent of Dominant Species That Are OBL_EACW or EAC: 20 (A/B)
5				
6	<u> </u>			Prevalence Index worksheet:
Total Cover	. 00			Total % Cover of: Multiply by:
50% of total cover: <u>40</u>	20% c	of total cove	r: <u>16</u>	OBL species $\frac{0}{45}$ x 1 = $\frac{0}{20}$
Sapling/Shrub Stratum (Plot size: 30)				FACW species $\frac{15}{20}$ x 2 = $\frac{30}{00}$
1. Zanthoxylum americanum	30	Yes	FACU	FAC species 30 $x_3 = 90$
2. Celtis occidentalis	5	No	FAC	FACU species 113 $x 4 = 400$
3				$\begin{array}{c} \text{OPL species} \underline{0} \\ \text{Column Totals:} \underline{160} \\ \text{Column Totals:} \underline{160} \\ \text{Column Totals:} \underline{160} \\ \text{Column Totals:} \\ \ \text{Column Totals:} \\ $
4				$\begin{bmatrix} \text{Column rotals.} & \underline{-100} & (\text{A}) & \underline{-000} & (\text{B}) \end{bmatrix}$
5.				Prevalence Index = $B/A = 3.62$
6.				Hydrophytic Vegetation Indicators:
Total Cover	. 35			Rapid Test for Hydrophytic Vegetation
17.5	·		7	Dominance Test is >50%
50% of total cover: <u>17.5</u>	20% of	f total cover		Prevalence Index is ≤3.0 ¹
Trillium cossile	25	Voo	EACU	Morphological Adaptations ¹ (Provide supporting
1. Initiani sessile	30	Vee		data in Remarks or on a separate sheet)
	10	res	FACU	
3				¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree Weady plants 2 in (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sanling/shrub - Woody plants less than 3 in DBH
9				and greater than 3.28 ft (1 m) tall.
10.				Herb – All berbaceous (non-woody) plants, regardless
11.				of size, and woody plants less than 3.28 ft tall.
Total Cover	45			Woody vines – All woody vines greater than 3.28 ft in
50% of total envir	20%	of total covo	9	height.
Weady Vine Stratum (Diet aize: 30	20780			
(Plot size. <u></u>)				
1				
2				
3				Hydrophytic
4				Present? Yes No
Total Cover	<u> 0 </u>		_	
50% of total cover: <u>0</u>	20% o	f total cover	<u>.</u> 0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Depth	Matrix	0/	Rei	dox Featur	<u>es</u>	12	Touture	Domestre
		%	Color (moist)	%_	iype	LOC [_]		Kemarks
-15	10YR3/2	100					Loam	
5-23	10YR5/2	80	10YR5/8	20	<u> </u>	<u>M</u>	Silty Clay	
ydric Soil Histoso Histic E Black H Hydrog Stratifie Deplete Thick D Sandy f Sandy f Sandy f Sandy f Dark Su	Indicators: I (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surfa ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R,	ace (A11) , MLRA 14 9	 Polyvalue Be MLRA 149 Thin Dark Su Loamy Mucky Loamy Gleye Depleted Mate Redox Dark S Depleted Dar Redox Deprese 	low Surfac JB) y Mineral (l ed Matrix (F trix (F3) Surface (F6 rk Surface essions (F8	e (S8) (LI (LRR R, I F1) (LRR 22) 6) (F7))	RR R, MLRA 1498 K, L)	Indicators for 2 cm Mucl Coast Pra 5 cm Mucl Dark Surfa Polyvalue Thin Dark Iron-Mang Piedmont Mesic Spo Red Parer Very Shall Other (Exp	Problematic Hydric Soils ³ : k (A10) (LRR K, L, MLRA 149B) irie Redox (A16) (LRR K, L, R) ky Peat or Peat (S3) (LRR K, L, R ace (S7) (LRR K, L) Below Surface (S8) (LRR K, L) Surface (S9) (LRR K, L) janese Masses (F12) (LRR K, L, F Floodplain Soils (F19) (MLRA 149 odic (TA6) (MLRA 144A, 145, 149) nt Material (F21) low Dark Surface (TF12) plain in Remarks)
ndicators o estrictive	of hydrophytic veget Layer (if observed	tation and v I):	vetland hydrology m	ust be pre	sent, unle	ss disturbe	d or problematic.	
Type: Depth (in	iches):						Hydric Soil Pre	esent? Yes No_√
emarks:	,							

Project/Site: NW OHIO WIND	City/County: PAUL	DING CO	Sampling Date: 4/18/2013 2:55:34 PM
Applicant/Owner: WESTWOOD		_{State:} OH	Sampling Point: W-03 WETLAND
Investigator(s): MATTHEW VOLLBRECHT 2115	Section, Township, R	ange: Sec 21 T1N	R2E
Landform (hillslope, terrace, etc.): Flat	Local relie	f (concave, convex, no	_{ne):} _Flat
Slope (%): 0-5% Lat: 698005.3139	Lona: 4544451.29	91	Datum: UTM NAD 83Z13N
Soil Map Unit Name: Lc-Latty silty clat		NWI clas	sification: PF01B
Are climatic / hydrologic conditions on the site typical for this time c	f year? Yes 🖌 No	(If no, explain	in Remarks.)
Are Vegetation , Soil , or Hydrology significa	ntly disturbed? Are	"Normal Circumstance	es" present? Yes ✔ No
Are Vegetation, Soil, or Hydrology naturally	/ problematic? (If r	needed, explain any an	swers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ing sampling point	locations, transe	cts. important features. etc.
	Is the Sample	d Aroa	
Hydrophytic Vegetation Present? Yes <u>V</u> No <u>Vegetation</u>	within a Wetla	and? Yes_	✓ No
Wetland Hydrology Present? Yes ✓ No		Wetland Site ID: We	etland Sample Point W-03
Remarks: (Explain alternative procedures here or in a separate r	eport.)		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary In	dicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	bly)	Surface	Soil Cracks (B6)
Surface Water (A1) Water-Stair	ned Leaves (B9)	Drainage	e Patterns (B10)
✓ High Water Table (A2)	una (B13)	Moss Tri	m Lines (B16)
✓ Saturation (A3) Marl Depos	sits (B15)	Dry-Seas	son Water Table (C2)
Water Marks (B1) Hydrogen S	Sulfide Odor (C1)	Crayfish	Burrows (C8)
Drift Deposits (B3)	f Reduced Iron (C4)	Stunted	or Stressed Plants (D1)
Algal Mat or Crust (B4)	Reduction in Tilled Soils	(C6) Geomorr	phic Position (D2)
Iron Deposits (B5)	Surface (C7)	Shallow	Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Expl	ain in Remarks)	Microtop	ographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	,	FAC-Net	utral Test (D5)
Field Observations:			
Surface Water Present? Yes No ✓ Depth (inc	hes):		
Water Table Present? Yes <u>✓</u> No Depth (inc	hes): <u>4.0</u>		
Saturation Present? Yes <u>✓</u> No Depth (inc	hes): <u>5.0</u> W	etland Hydrology Pre	esent? Yes <u>√</u> No
Describe Recorded Data (stream gauge, monitoring well, aerial p	hotos, previous inspection	s), if available:	
Remarks:			
Standing water in portions of the wetland at the time	of delineation		
	or defineation		

Sampling Point: W-03 WET

Tree Stratum (Plot size: 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
1 Carva ovata	40	Yes	FACU	Number of Dominant Species
2 Celtis occidentalis	25	Yes	FAC	That Are OBL, FACW, or FAC: (A)
2. Quercus palustris	15	No	FACW	Total Number of Dominant
				(B)
4	·			Percent of Dominant Species That Are OBL_EACW_or_EAC: 75 (A/B)
5				
6	80			Prevalence Index worksheet:
Total Cove	r: <u>00</u>		4.0	Total % Cover of: Multiply by:
50% of total cover: 40	20% c	of total cove	r: 16	OBL species $0 x 1 = 0$
Sapling/Shrub Stratum (Plot size: 30)	_			FACW species 15 $x_2 = 50$
1. Celtis occidentalis	5	Yes	FAC	FAC species $\frac{30}{40}$ $x_3 = \frac{240}{160}$
2				FACO species 40 $x = 100$
3				Column Totals: 135 (A) 430 (B)
4				
5				Prevalence Index = $B/A = 3.19$
6.				Hydrophytic Vegetation Indicators:
Total Cove	. 5			Rapid Test for Hydrophytic Vegetation
25			1	✓ Dominance Test is >50%
50% of total cover: <u>2.5</u>	20% o	f total cover	:	Prevalence Index is ≤3.0 ¹
(Carex blanda	50	Ves	FAC	Morphological Adaptations ¹ (Provide supporting
		163		data In Remarks of on a separate sneet)
2				
3	·			¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sanling/shrub – Woody plants less than 3 in DBH
9				and greater than 3.28 ft (1 m) tall.
10.				Herb – All herbaceous (non-woody) plants, regardless
11.				of size, and woody plants less than 3.28 ft tall.
Total Cover	. 50			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: 25	20% c	of total cover	- 10	height.
Weader) (in a Stratum (Dist size: 30	20/80			
(Plot size. <u></u>)				
	·			
2	·			
3				Hydrophytic
4	·			Present? Yes V
Total Cove	r: 0		_	
50% of total cover: <u>0</u>	20% o	f total cover	<u>.</u> 0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Depth	<u>Matrix</u> <u>Redox Features</u> Color (moist) % Type ¹ Loc ²				- Touture	Domestic		
(incnes)		<u>%</u>		%	<u> </u>		_ <u>lexture</u>	Remarks
44.00								
14-20	10YR6/1	90	10YR5/8	10	<u> </u>	M	Silty Clay	
	·							
	·							
			<u> </u>					
¹ Type: C=C	concentration, D=D	Depletion, RI	A=Reduced Matrix,	CS=Covere	ed or Coa	ated Sand (Grains. ² Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:				(a -) (a		Indicators for Pro	blematic Hydric Soils':
Histoso Histic F	l (A1) ninedon (A2)		Polyvalue Be	elow Surface	e (S8) (L	RR R,	2 cm Muck (A	.10) (LRR K, L, MLRA 149B) Redox (A16) (LRR K L R)
Black H	listic (A3)		Thin Dark Su	urface (S9) (LRR R,	MLRA 149	B) 5 cm Mucky F	Peat or Peat (S3) (LRR K, L, R)
Hydrog	en Sulfide (A4)		Loamy Muck	ky Mineral (F	1) (LRR	K , L)	Dark Surface	(S7) (LRR K, L)
Stratifie	d Layers (A5)	face (A11)	Loamy Gleye	ed Matrix (F	2)		Polyvalue Be	ow Surface (S8) (LRR K, L)
Thick D	ark Surface (A12)	lace (ATT)	Depieted Ma	Surface (F6)		Iron-Mangane	ese Masses (F12) (LRR K. L. R)
Sandy I	Mucky Mineral (S1)	Depleted Da	rk Surface (, F7)		Piedmont Flo	odplain Soils (F19) (MLRA 149B)
Sandy (Gleyed Matrix (S4))	Redox Depre	essions (F8)			Mesic Spodic	(TA6) (MLRA 144A, 145, 149B)
Sandy I	Redox (S5)						Red Parent M	laterial (F21)
Stripped Dark Si	urface (S7) (LRR F	R. MLRA 14	B)				Other (Explain	n in Remarks)
		-,						· · · · · · · · · · · · · · · · · · ·
³ Indicators of	of hydrophytic vege	etation and v	vetland hydrology n	nust be pres	ent, unle	ess disturbe	ed or problematic.	
Restrictive	Layer (if observe	ed):						
Type:								
Depth (in	iches):						Hydric Soll Prese	nt? Yes <u>*</u> No
Remarks:								

Applicant/Owner: WESTWOOD State: OH Sampling Point: W-04A UPLAND Investigator(s): MATTHEW VOLLBRECHT 2115 Section, Township, Range: Sec 21 T1N R2E Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Concave Solipe (%): 5-10% Lat: 698761.2631 Long: 4544000.425 Datum: UTM NAD 83Z13N Soil Map Unit Name: Sb-Saranac silty clay loam, occasionally flooded NWI classification: PF01C Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.) Are Vegetation
Investigator(s): MATTHEW VOLLBRECHT 2115 Section, Township, Range: Sec 21 T1N R2E Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Concave Slope (%): 5-10% Lat: 698761.2631 Long: 4544000.425 Datum: UTM NAD 83Z13N Soil Map Unit Name: Sb-Saranac silty clay loam, occasionally flooded NWI classification: PF01C Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No (If no, explain in Remarks.) Are Vegetation , Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No Are Vegetation
Landform (hillslope, terrace, etc.): FlatLocal relief (concave, convex, none): Concave
Solope (%): 5-10% Lat: 698761.2631 Long: 4544000.425 Datum: UTM NAD 83Z13N Soil Map Unit Name: Sb-Saranac silty clay loam, occasionally flooded NWI classification: PF01C Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No (If no, explain in Remarks.) Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area within a Wetland? Yes No No Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No If yes, optional Wetland Site ID: Upland sample point W-04A Remarks: (Explain alternative procedures here or in a separate report.) Upland sample point adjacent to Type 7 wooded wetland with a small portion Type 5 oxbow channel within the Type 7
Single (%)
Are climatic / hydrologic conditions on the site typical for this time of year? Yes \checkmark No (If no, explain in Remarks.) Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes \checkmark No Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No \checkmark Hydrophytic Vegetation Present? Yes No \checkmark Wetland Hydrology Present? Yes No \checkmark Remarks: (Explain alternative procedures here or in a separate report.) Upland sample point adjacent to Type 7 wooded wetland with a small portion Type 5 oxbow channel within the Type 7 Wetland
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.) Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No _ ✓ Hydrology Present? Yes No _ ✓ Wetland Hydrology Present? Yes No _ ✓ Is the Sampled Area within a Wetland? Remarks: (Explain alternative procedures here or in a separate report.) If yes, optional Wetland Site ID: Upland sample point W-04A Upland sample point adjacent to Type 7 wooded wetland with a small portion Type 5 oxbow channel within the Type 7 Wetland
Are Vegetation, Soil, or Hydrologysignificantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation, Soil, or Hydrologynaturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Hydrophytic Vegetation Present? Yes No Wetland Hydrology Present? Yes No Remarks: (Explain alternative procedures here or in a separate report.) Upland sample point adjacent to Type 7 wooded wetland with a small portion Type 5 oxbow channel within the Type 7 Wetland
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No _ Hydrology Present? Yes No _ Wetland Hydrology Present? Yes No _ Remarks: (Explain alternative procedures here or in a separate report.) Upland sample point adjacent to Type 7 wooded wetland with a small portion Type 5 oxbow channel within the Type 7
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No ✓ Hydrology Present? Yes No ✓ If yes, optional Wetland Site ID: Upland sample point W-04A Remarks: (Explain alternative procedures here or in a separate report.) Upland sample point adjacent to Type 7 wooded wetland with a small portion Type 5 oxbow channel within the Type 7 Wetland
Hydrophytic Vegetation Present? Yes No ✓ Is the Sampled Area within a Wetland? Yes No ✓ Hydric Soil Present? Yes No ✓ If yes, optional Wetland? Yes No ✓ Wetland Hydrology Present? Yes No ✓ If yes, optional Wetland Site ID: Upland sample point W-04A Remarks: (Explain alternative procedures here or in a separate report.) Upland sample point adjacent to Type 7 wooded wetland with a small portion Type 5 oxbow channel within the Type 7 Wetland Wetland Yes Yes Yes Upland sample point adjacent to Type 7 wooded wetland with a small portion Type 5 oxbow channel within the Type 7 Yes
Hydrophytic Vegetation Hosent? Hosent? Hosent? Wetland Pydrology Present? Yesent? Nosent If yes, optional Wetland? Yesent? Nosent If yes, optional Wetland Site ID: Upland sample point W-04A Remarks: (Explain alternative procedures here or in a separate report.) Upland sample point adjacent to Type 7 wooded wetland with a small portion Type 5 oxbow channel within the Type 7 Wetland
Wetland Hydrology Present? Yes No ✓ If yes, optional Wetland Site ID: Upland sample point W-04A Remarks: (Explain alternative procedures here or in a separate report.) Upland sample point adjacent to Type 7 wooded wetland with a small portion Type 5 oxbow channel within the Type 7 Wetland
Remarks: (Explain alternative procedures here or in a separate report.) Upland sample point adjacent to Type 7 wooded wetland with a small portion Type 5 oxbow channel within the Type 7 Wetland
Upland sample point adjacent to Type 7 wooded wetland with a small portion Type 5 oxbow channel within the Type 7 Wetland
HYDROLOGY
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5)
Field Observations:
Water Table Present? Yes No C Depth (inches):
Saturation Brocont? Voc. No. / Depth (inches): Wetland Hydrology Brocont? Voc. No. /
(includes capillary fringe)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Pomarka
Remarks.

Sampling Point: W-04A UP

Tree Stratum (Plot size: 30	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 Carya ovata	40	Yes	FACU	Number of Dominant Species That Are OPL EACIVL or EAC: 2 (A)
2 Populus deltoides	20	Yes	FAC	$\begin{array}{c} \text{That Are OBL, FACW, of FAC.} \\ \underline{-} \\ (A) \end{array}$
3 Celtis occidentalis	15	No	FAC	Total Number of Dominant Species Across All Strata: 5 (B)
4 Quercus rubra	15	No	FACU	Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: <u>40</u> (A/B)
6				
Total Cover	. 90			Prevalence Index worksheet:
		ftatal anna	18	$\begin{array}{c c} \hline 1 \text{ otal } \% \text{ Cover ot:} \\ \hline 0 \text{ PL spacies} \\ \hline 0 \text{ PL spacies} \\ \hline 0 \text{ PL space} \\ \hline 1 = 0 \\ \hline 1 $
50% of total cover:	20% 0	or total cove	r <u>: 10</u>	EACW species 0 $x_2 = 0$
<u>Celtis occidentalis</u>	10	Yes	FAC	FAC species 45 $x_3 = 135$
1. <u></u>		100	17.0	FACU species $90 \times 4 = 360$
2				UPL species 0 $x_5 = 0$
3				Column Totals: 135 (A) 495 (B)
4				
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
Total Cover	<u>. 10</u>			Rapid Test for Hydrophytic Vegetation
50% of total cover: 5	20% of	f total cover	2	Dominance Test is >50%
Herb Stratum (Plot size: 5)			·	Prevalence Index is ≤3.0'
Trillium sessile	25	Yes	FACU	Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)
2. Dactylis glomerata	10	Yes	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed of problematic.
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
8.				
9.				and greater than 3.28 ft (1 m) tall.
10.				Herb – All herbaceous (non-woody) plants, regardless
11.				of size, and woody plants less than 3.28 ft tall.
Total Cover:	35			Woody vines – All woody vines greater than 3.28 ft in
50% of total covor: 17.5	20% 0	f total cover	7	height.
Weady Vine Stratum (Diet size: 30	20780			
(Plot size. <u>00</u>)				
1				
2				
3				Hydrophytic
4				Present? Yes No
Total Cover	<u>: 0</u>			
50% of total cover: <u>0</u>	20% o	f total cover	<u>.</u> 0	
Remarks: (Include photo numbers here or on a separate sl	heet.)			

Profile Desc	ription: (Describe	e to the dept	th needed to docun	nent the indic	ator or confirm	m the absence of indicators.)
Depth	Matrix		Redo	x Features	1 . 2	
	10VP5/2		Color (moist)	<u>_%</u>	pe Loc	Silty Clay
	101K3/3	100				
13-22	10YR6/2	100				Silty Clay
				·		
			Poducod Motive CC		Contrad Cond C	Proince ² Location: DL_Dara Lining M. Matrix
Hydric Soil	Indicators:	pielion, KIVI=	Reduced Matrix, CS	-covered or (Jualed Sand G	Indicators for Problematic Hvdric Soils ³ :
Histosol	(A1)		Polvvalue Belov	v Surface (S8)	(LRR R.	2 cm Muck (A10) (LRR K. L. MLRA 149B)
Histic Ep	pipedon (A2)		MLRA 149B)	(,		Coast Prairie Redox (A16) (LRR K, L, R)
Black Hi	stic (A3)		Thin Dark Surfa	ce (S9) (LRR	R, MLRA 149B	B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Mucky N	Aineral (F1) (L	RR K, L)	Dark Surface (S7) (LRR K, L)
Depleted	d Below Dark Surfa	ce (A11)	Loarny Greyed I Depleted Matrix	(F3)		Thin Dark Surface (S9) (LRR K, L)
Thick Da	ark Surface (A12)		Redox Dark Su	rface (F6)		Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)		Depleted Dark S	Surface (F7)		Piedmont Floodplain Soils (F19) (MLRA 1498
Sandy G	Bleyed Matrix (S4)		Redox Depress	ions (F8)		Mesic Spodic (TA6) (MLRA 144A, 145, 149B
Stripped	(edox (S5) Matrix (S6)					Red Parent Material (F21)
Dark Su	rface (S7) (LRR R.	MLRA 149B	5)			Other (Explain in Remarks)
			,			
³ Indicators o	f hydrophytic vegeta	ation and we	tland hydrology mus	t be present, ι	inless disturbed	d or problematic.
Restrictive I	Layer (if observed):				
Type:						
Depth (in	ches):					Hydric Soil Present? Yes No _✓
Remarks:						

I

Project/Site: NW OHIO WIND	City/County:	PAULDING	CO	Sampling Date: 4/18/2013 2:59:25 PM
Applicant/Owner: WESTWOOD			State: OH	Sampling Point: W-04A WETLAN
Investigator(s): MATTHEW VOLLBRECHT 2115	Section Tow	nship Range	Sec 21 T1N F	R2E
Landform (hillslope terrace etc.). Flat		ncal relief (conc	ave convex non	e). Concave
Slope (v): 5-8%	4544	1009.686		Datum: UTM NAD 83Z13N
Siope (%): Lat: Lat: Lat: Lat:	Long: <u></u>			Datum:PF01C
Soli Map Unit Name:				
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes <u>v</u>	No	_ (If no, explain ii	n Remarks.)
Are Vegetation, Soil, or Hydrology signific	antly disturbed?	Are "Norm	nal Circumstances	s" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology natural	ly problematic?	(If needed	l, explain any ans	wers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ving sampling	point locat	ions, transed	ets, important features, etc.
Hydrophytic Vegetation Present? Ves V	Is the	Sampled Area	a	
Hydric Soil Present? Yes ✓ No	within	n a Wetland?	Yes _ ✓	No
Wetland Hydrology Present? Yes Ves	If ves.	optional Wetla	nd Site ID: Wet	land sample point W-04A
Remarks: (Explain alternative procedures here or in a separate	report.)			
project corridor.	be 5 wetland in	а сгеек охо	ow channel e:	Rtending north from the
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Inc	licators (minimum of two required)
Primary Indicators (minimum of one is required; check all that ap	oply)		Surface S	oil Cracks (B6)
Surface Water (A1) Water-Sta	ined Leaves (B9)		Drainage	Patterns (B10)
High Water Table (A2)	auna (B13)		Moss Trin	n Lines (B16)
✓ Saturation (A3) Marl Depo	sits (B15)		Dry-Sease	on Water Table (C2)
Water Marks (B1) Hydrogen	Sulfide Odor (C1)		Crayfish E	Burrows (C8)
Sediment Deposits (B2) Oxidized F	Rhizospheres on Li	iving Roots (C3) Saturation	Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence	of Reduced Iron (C	24)	Stunted o	r Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iro	n Reduction in Till	ed Soils (C6)	Geomorpl	nic Position (D2)
Iron Deposits (B5) Thin Muck	Surface (C7)		Shallow A	quitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Exp	plain in Remarks)		Microtopo	graphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)			FAC-Neut	rral Test (D5)
Field Observations:				
Surface Water Present? Yes No _ Depth (in	cnes):	—		
Water Table Present? Yes <u>V</u> No Depth (in	cnes): <u>5.0</u>	—		
Saturation Present? Yes V No Depth (in (includes capillary fringe)	ches): 0.0	Wetland	Hydrology Pres	sent? Yes <u>v</u> No
Describe Recorded Data (stream gauge, monitoring well, aerial Remarks:	photos, previous in	ispections), if a	vailable:	

Sampling Point: W-04AWE

T	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>50</u>)	<u>% Cover</u>	Species?		Number of Dominant Species
1. Caltie accidentalie		Voc		That Are OBL, FACW, or FAC: _4(A)
2. Cents occidentails	- 20	Voc		Total Number of Dominant
3. Populas denoides		No		Species Across All Strata: (B)
4. Quercus palustris	15	INO	FACW	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
Total Cove	r: <u>100</u>			Total % Cover of:Multiply by:
50% of total cover: <u>50</u>	20% c	of total cove	r: <u>20</u>	OBL species 0 x 1 = 0
Sapling/Shrub Stratum (Plot size: <u>30</u>)				FACW species 15 x 2 = 30
1. Celtis occidentalis	5	Yes	FAC	FAC species $\frac{60}{40}$ x 3 = $\frac{180}{400}$
2				FACU species 40 x 4 = 160
3.				UPL species 0 $x_5 = 0$
4				Column Totals: 113 (A) 370 (B)
5				Prevalence Index = $B/A = 3.22$
				Hydronhytic Vegetation Indicators:
o	5			Rapid Test for Hydrophytic Vegetation
Total Cove	r: <u> </u>			$\overline{\checkmark}$ Dominance Test is >50%
50% of total cover: 2.5	20% o	f total cover	<u>. 1</u>	Prevalence Index is $\leq 3.0^1$
Herb Stratum (Plot size: 5)	10			Morphological Adaptations ¹ (Provide supporting
1. Carex blanda	10	Yes	FAC	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation (Explain)
3				¹ Indicators of hydric soil and watland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				
7.				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH) regardless of height
8				
Q				and greater than 3.28 ft (1 m) tall.
10				
				of size, and woody plants less than 3.28 ft tall.
11	10			Weady vince All weady vince greater than 2.29 ft in
l otal Cover			2	height.
50% of total cover: <u>5</u>	20% c	of total cove	: <u>Z</u>	
Woody Vine Stratum (Plot size: 30)				
1				
2				
3				Hydrophytic
4				Vegetation Present? Yes V
Total Cove	r: 0			
50% of total cover: 0	20% o	f total cover	0	
Demarka: (Indude abote numbers bare er en e constate s	aboot)			
Remarks. (include photo numbers here of on a separate s	sneet.)			

Profile Desc	ription: (Describe	to the dept	th needed to docun	nent the i	ndicator	or confirm	m the absence of indicators.)	
Depth	Matrix		Redo	x Feature	s		_	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks	
0-13	10YR3/1	100					Loam	
13-22	10YR6/1	100					Silty Loar	
				·				_
								_
				·				_
				·				_
				·				_
				·				
								_
1							2	_
Type: C=Co	oncentration, D=Dep	pletion, RM=	Reduced Matrix, CS	S=Covered	d or Coate	d Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.	
Hydric Soil I	Indicators:						Indicators for Problematic Hydric Soils :	
Histosol	(A1)		Polyvalue Below	v Surface	(S8) (LR	RR,	2 cm Muck (A10) (LRR K, L, MLRA 149B)	
Block Li	orpedon (AZ)		Thin Dark Surfa			DA 1405	Coast Prairie Redox (A16) (LRR K, L, R)	
	SIIC (AS) on Sulfide (ΔA)			lice (39) (L /lineral (F	1) (I RR K	LKA 1496	Dark Surface (S7) (IRR K I))
Nydroge Stratified	1 avers (A5)		Loamy Gleved I	Matrix (F2		,∟)	Polyvalue Below Surface (S8) (LRR K, L)	
✓ Depleted	d Below Dark Surfac	e (A11)	Depleted Matrix	(F3)			Thin Dark Surface (S9) (LRR K, L)	
Thick Da	ark Surface (A12)	()	Redox Dark Su	rface (F6)			Iron-Manganese Masses (F12) (LRR K, L, R	2)
Sandy M	lucky Mineral (S1)		Depleted Dark \$	Surface (F	7)		Piedmont Floodplain Soils (F19) (MLRA 149	B)
Sandy G	Bleyed Matrix (S4)		Redox Depress	ions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149E	3)
Sandy R	Redox (S5)						Red Parent Material (F21)	
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)	
Dark Su	rface (S7) (LRR R, I	MLRA 149B	5)				Other (Explain in Remarks)	
3								
Indicators of	f hydrophytic vegeta	tion and we	tland hydrology mus	t be prese	ent, unless	s disturbed	d or problematic.	
Restrictive I	Layer (if observed)							
Type:							,	
Depth (ind	ches):						Hydric Soil Present? Yes <u>✓</u> No	_
Remarks:								

Project/Site: NW OHIO W	/IND			City/County:	PAULDING	CO	Sampling	Data: '	4/18/2013 3:16:01 PM	
Applicant/Ourper: WESTW	OOD			City/County.		Stata: OH	Sampling	Date.	-04B UPLAND	
Applicativowner. <u>MATTHEV</u>		RECHT 2	115	Oction Tour	nakia Danan	Sec 21 T1N	Sampling P J R2F	0int. <u></u>		
Investigator(s): <u>www.rrricv</u>	Flat		110	Section, I ow	nship, Range:	00021111				
Landform (hillslope, terrace, e	tc.): <u>Flat</u>	2700		Lo	ocal relief (con	cave, convex, n	ione): <u>Fiat</u>			
Slope (%): 0-5% Lat:		3789		Long: 4543	919.023		Datum: _		AD 83213N	
Soil Map Unit Name: Sb-Sa	Iranac sil	ty clay loa	m, occasiona	ally flooded		NWI cla	assification: PF	·01C		
Are climatic / hydrologic cond	tions on the	e site typical	for this time of y	ear? Yes 🖌	No	(If no, explain	n in Remarks.)			
Are Vegetation, Soil _	, or H	lydrology	significantl	y disturbed?	Are "Norn	nal Circumstan	ces" present?	res 🖌	No	
Are Vegetation, Soil	, or H	lydrology	naturally p	roblematic?	(If needed	l, explain any a	nswers in Rema	arks.)		
SUMMARY OF FINDIN	GS – At	tach site r	nap showing	g sampling	point loca	tions, trans	ects, import	ant fea	atures, etc.	
Hydrophytic Vegetation Pres Hydric Soil Present? Wetland Hydrology Present?	sent?	Yes Yes Yes	No✓ No✓ No✓	Is the within	Sampled Area a Wetland?	a Yes_ Ind Site ID: U	No	✓ e point	W-04B	
Remarks: (Explain alternation	ve procedu	es here or in	a separate repo	ort.)			•	<u> </u>		
HYDROLOGY										
Wetland Hydrology Indica	ors:					Secondary	Indicators (minin	num of t	<u>wo required)</u>	
Primary Indicators (minimum	1 of one is r	equirea; che	Watar Staines			Surface	e Soll Cracks (Be	2)))		
High Water Table (Δ2)			_ water-Stained	(B13)		Drainaç Moss T	je Patterns (B10 rim Lines (B16)))		
Saturation (A3)			Marl Deposits	(B15)		Dry-Season Water Table (C2)				
Water Marks (B1)			Hydrogen Sulf	fide Odor (C1)		Crayfis	h Burrows (C8)	- (-)		
Sediment Deposits (B2)	1	_	Oxidized Rhiz	ospheres on Li	ving Roots (C3	3) Saturat	ion Visible on A	erial Ima	gery (C9)	
Drift Deposits (B3)			Presence of R	educed Iron (C	24)	Stunted	l or Stressed Pla	ants (D1)	
Algal Mat or Crust (B4)			Recent Iron R	eduction in Tille	ed Soils (C6)	Geomo	rphic Position (E)2)		
Iron Deposits (B5)			_ Thin Muck Su	rface (C7)		Shallov	v Aquitard (D3)			
Inundation Visible on A	rial Imager	y (B7)	Other (Explain	n in Remarks)		Microto	pographic Relie	f (D4)		
Sparsely Vegetated Col	icave Surfa	ice (B8)				FAC-Ne	eutral Test (D5)			
Surface Water Present?	Voc	No 🗸	Dopth (inchor	c).						
Water Table Present?	Yes	<u>No_</u> √	Depth (inches	s)	—					
Saturation Present? (includes capillary fringe)	Yes	No∕	_ Depth (inches	s):	Wetland	d Hydrology P	resent? Yes		No	
Describe Recorded Data (st	ream gauge	e, monitoring	well, aerial phot	tos, previous in	spections), if a	vailable:				
Demokra										
Remarks:										

Sampling Point: W-04B UP

Tree Stratum (Plot size: 30	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 Carya ovata	40	Yes	FACU	Number of Dominant Species That Are OBL EACIVL or EAC: 2 (A)
2 Quercus rubra	30	Yes	FACU	$\begin{bmatrix} \text{Hat Ale OBL, FACW, OF FAC.} & _ & _ & (A) \end{bmatrix}$
3 Celtis occidentalis	25	Yes	FAC	Total Number of Dominant Species Across All Strata: 6 (B)
0				
5				That Are OBL, FACW, or FAC: <u>33.33</u> (A/B)
	. 95			Prevalence Index worksheet:
	:		10	Total % Cover of:Multiply by:
50% of total cover: 47.5	20% c	of total cove	r: <u>19</u>	$\begin{array}{c c} \text{OBL species} & 0 \\ \text{EACW species} & 0 \\ \text{V} & 2 = 0 \end{array}$
<u>Sapling/Shrub Stratum</u> (Plot size: <u></u>)	5	Ves	FAC	FAC species 30 $x_3 = 90$
	<u> </u>	103		FACU species 105 $x_4 = 420$
2				UPL species 0 $x_5 = 0$
3				Column Totals: 135 (A) 510 (B)
4				Dravelance lades D/A 3.78
5				Prevalence index = B/A = 0.70
6				Hydrophytic Vegetation Indicators:
Total Cover	5			Rapid Test for Hydrophytic Vegetation
50% of total cover: <u>2.5</u>	20% o	f total cover	. <u>.</u> 1	Dominance Test is >50%
Herb Stratum (Plot size: 5)				$\frac{1}{2} = \frac{1}{2} $
1. Trillium sessile	25	Yes	FACU	data in Remarks or on a separate sheet)
2. Dactylis glomerata	10	Yes	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5.				Definitions of Vegetation Strate:
6.				Definitions of Vegetation Strata.
7.				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast beight (DBH) regardless of beight
8.				
9				and greater than 3.28 ft (1 m) tall.
10				Herb All herbaccous (non woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cover	35			Woody vines – All woody vines greater than 3.28 ft in
		ftatal anus	7	height.
50% of total cover: <u>17.3</u>	20% 0	r total cove	r: <u>/</u>	
Woody Vine Stratum (Plot size: <u>50</u>)				
1				
2				
3				Hydrophytic Vegetation
4				Present? Yes No 🗸
Total Cover	. 0			
50% of total cover: <u>0</u>	20% o	f total cover	r <u>:</u> 0	
Remarks: (Include photo numbers here or on a separate sl	heet.)			1

Profile Desc	ription: (Describe	to the dep	th needed to docur	nent the i	ndicator	or confirm	m the absence of indicators.)
Depth	Matrix		Redo	x Features	s		_
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Remarks
0-23	10YR5/3	100					Silty Loar
				·			
——				·			
				·			
				·			
				·			
				·			
			-Poducod Motrix CC			d Sand C	 Projection: PL_Pore Lining M_Metrix
	ndicators		-Reduced Matrix, Co			iu Saliu G	Indicators for Problematic Hydric Soile ³ .
	(14)				(00) (1 -		
Histosol	(A1)		Polyvalue Belov	w Surface	(S8) (LRI	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
HISTIC Ep	alia (AQ)		MLRA 149B)			Coast Prairie Redox (A16) (LRR K, L, R)
	stic (A3)		Thin Dark Surfa	ice (S9) (L		LRA 1498	B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	n Sulfide (A4)		Loamy Mucky N	/lineral (F1) (LRR K	, L)	Dark Surface (S7) (LRR K, L)
Stratified	Layers (A5)	()	Loamy Gleyed	Matrix (F2)		Polyvalue Below Surface (S8) (LRR K, L)
	Below Dark Surfac	ce (A11)	Depleted Matrix	(F3)			Thin Dark Surface (S9) (LRR K, L)
Thick Da	ark Sufface (A12)		Redox Dark Su	rface (F6)			Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)		Depleted Dark	Surface (F	()		Piedmont Floodplain Soils (F19) (MLRA 149E
Sandy G	leyed Matrix (S4)		Redox Depress	ions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy R	edox (S5)						Red Parent Material (F21)
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)
Dark Sui	rface (S7) (LRR R,	MLRA 149E	3)				Other (Explain in Remarks)
3							
Indicators of	hydrophytic vegeta	ition and we	tland hydrology mus	t be prese	ent, unless	s disturbed	ed or problematic.
Restrictive L	_ayer (if observed)	:					
Type:							
Depth (ind	ches):						Hydric Soil Present? Yes No _✓
Remarks:							
Remarks.							

I

Project/Site: NW OHIO WI	ND			City/Cou	Inty: PAU	LDING C	Ö	Sampling Dat	4/18/2013 3:02:42 PM
Applicant/Owner: WESTWC	OD					Sta	_{ate:} OH	Sampling Point:	W-04B WETLAN
Investigator(s): MATTHEW	VOLLBREC	HT 21	15	Section.	Township.	Range: S	EC 21 T1N	R2E	
Landform (hillslope, terrace, etc	:): Flat			,	l ocal rel	lief (concav	e. convex. no	_{ne):} Flat	
Slope (%): 0-5% Lat:	698729.579	9		Long: 4	1543908.3	300	o, com o, no	Datum: UTN	M NAD 83Z13N
Soil Map Unit Name Sb-Saranac silty clay loam, occasiona			n. occasiona	ally flood	led		NIM/L class	Datum:	С
And alignetic (hudrale size and it)						- /			
Are climatic / nydrologic conditi	ons on the site i	typical to	or this time of ye	ear? Yes	NO	o (if no, explain	In Remarks.)	
Are Vegetation, Soil	, or Hydrold	ogy	significantly	y disturbe	d? A	re "Normal	Circumstance	es" present? Yes	No
Are Vegetation, Soil	, or Hydrold	ogy	naturally pr	roblematic	;? (li	f needed, e	xplain any an	swers in Remarks.)
SUMMARY OF FINDING	S – Attach	site m	nap showing	g samp	ling poin	t locatio	ns, transe	cts, important	features, etc.
Hydrophytic Vegetation Prese	nt? Yes	s_√	No	. Is	s the Samp	led Area			
Hydric Soil Present?	Yes	3_√	No	. "	vithin a We	tland?	Yes <u></u>	/ No	<u> </u>
Wetland Hydrology Present?	Yes	3_√	No	. If	yes, option	al Wetland	Site ID: We	tland sample p	oint W-04B
Remarks: (Explain alternative	procedures he	re or in	a separate repo	ort.)					
two wetlands.									
HYDROLOGY									
Wetland Hydrology Indicato	rs:						Secondary In	dicators (minimum	of two required)
Primary Indicators (minimum	of one is require	ed; chec	k all that apply)				Surface \$	Soil Cracks (B6)	
Surface Water (A1)			Water-Stained	Leaves (B9)		Drainage	Patterns (B10)	
\checkmark High Water Table (A2)		_	Aquatic Fauna	a (B13)			Moss Tri	m Lines (B16)	
Saturation (A3)			Marl Deposits	(B15) Eda Odar	(01)		Dry-Seas	son Water Table (C	;2)
Sediment Deposits (B2)			Ovidized Rhize		(CT) on Living R	oots (C3)	Clayiisii Saturatio	Dullows (Co) In Visible on Aerial	Imagery (C9)
Drift Deposits (B3)			Presence of R	educed Ir	on (C4)	0010 (00)	Stunted of	or Stressed Plants	(D1)
Algal Mat or Crust (B4)		_	Recent Iron Re	eduction in	n Tilled Soil	s (C6)	Geomorp	phic Position (D2)	
Iron Deposits (B5)			Thin Muck Sur	rface (C7)			Shallow	Aquitard (D3)	
Inundation Visible on Aer	ial Imagery (B7))	Other (Explain	in Remai	rks)		Microtop	ographic Relief (D4	4)
Sparsely Vegetated Conc	ave Surface (B	8)					FAC-Neu	utral Test (D5)	
Field Observations:		,							
Surface Water Present?	Yes N	0_✓	_ Depth (inches	s):					
Water Table Present?	Yes <u>✓</u> N	0	Depth (inches	s): <u>9.0</u>				,	
Saturation Present? (includes capillary fringe)	Yes <u>✓</u> N		_ Depth (inches	s): <u>11.0</u>		Wetland H	ydrology Pre	esent? Yes <u>√</u>	No
	am gauge, mor	intoring v	weii, aeriai priot	los, previo	ius inspectio	5115 <i>)</i> , 11 avai			
Remarks:									

Sampling Point: W-04BWE

Trop Stratum (Plot size: 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Carva ovata	<u>40</u>	Yes	FACU	Number of Dominant Species
Celtis occidentalis	25	Yes	FAC	That Are OBL, FACW, or FAC: (A)
 Populus deltoides 	20	Yes	FAC	Total Number of Dominant
<u>A</u> Quercus palustris	15	No	FACW	Species Across All Strata (B)
4. <u>autorous parastris</u>				Percent of Dominant Species That Are OBL_FACW_or_FAC: 80 (A/B)
5				
6	100			Prevalence Index worksheet:
Total Cove	r:			Total % Cover of: Multiply by:
50% of total cover: <u>50</u>	20% c	of total cove	r: <u>20</u>	OBL species 0 $x_1 = 0$
Sapling/Shrub Stratum (Plot size: <u>30</u>)	-	Maa	F A O	FACW species 15 $x_2 = 50$
	5	Yes	FAC	FACt species 40 $x = 160$
2	·			$\frac{1}{100} \text{ species } \frac{1}{100} species$
3				Column Totals: 115 (A) 370 (B)
4	·			
5				Prevalence Index = B/A = <u>3.22</u>
6				Hydrophytic Vegetation Indicators:
Total Cove	r: <u>5</u>			Rapid Test for Hydrophytic Vegetation
50% of total cover: 2.5	20% o	f total cover	1	✓ Dominance Test is >50%
Herb Stratum (Plot size: 5)				Prevalence Index is ≤3.0 [°]
1. Carex blanda	10	Yes	FAC	data in Remarks or on a separate sheet)
2.				Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
4.				¹ Indicators of hydric soil and wetland hydrology must
5				
6	·			Definitions of Vegetation Strata:
7				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
8				at breast height (DDH), regardless of height.
0	·			Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
10	·			
10	·			of size, and woody plants less than 3.28 ft tall.
Tatal Quart	10			Woody vines - All woody vines greater than 3.28 ft in
		() - (-)	2	height.
50% of total cover: <u>3</u>	20% c	of total cove	r: <u>∠</u>	
Woody Vine Stratum (Plot size: 30)				
1	·			
2	·			
3				Hydrophytic
4	·			Present? Yes <u>V</u> No
Total Cove	r: 0			
50% of total cover: <u>0</u>	20% o	f total cover	r <u>:</u> 0	
Remarks: (Include photo numbers here or on a separate s	heet.)			1

Profile Desc	ription: (Describe	to the de	pth needed to docur	nent the	indicator	or confirm	m the absence of indicators.)
Depth	Matrix		Redo	x Feature	S	0	-
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²	Texture Remarks
0-12	10YR5/2	100					Loam
12-19	10YR6/1	90	10YR5/8	10	<u> </u>	М	Silty Clay
	101110/1		1011(0/0		· —		
	-		-				
·					·		
					·		
		_					
				_			
					·		
¹ Type: C=Co	oncentration. D=Dec	letion. RM	l=Reduced Matrix. CS	S=Covere	d or Coate	d Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:		,				Indicators for Problematic Hydric Soils ³ :
Histosol	(A1)		Polvvalue Belo	w Surface	(S8) (LRI	R.	2 cm Muck (A10) (LRR K. L. MLRA 149B)
Histic Ep	pipedon (A2)		MLRA 149B)	(,	Coast Prairie Redox (A16) (LRR K, L, R)
Black His	stic (A3)		Thin Dark Surfa	, ace (S9) (LRR R, M	LRA 149E	B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	n Sulfide (A4)		Loamy Mucky I	Mineral (F	1) (LRR K	, L)	Dark Surface (S7) (LRR K, L)
Stratified	I Layers (A5)		Loamy Gleyed	Matrix (F2	2)		Polyvalue Below Surface (S8) (LRR K, L)
✓ Depleted	Below Dark Surfac	e (A11)	Depleted Matrix	k (F3)			Thin Dark Surface (S9) (LRR K, L)
Thick Da	rk Surface (A12)		Redox Dark Su	rface (F6))		Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)		Depleted Dark	Surface (I	=7)		Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy G	ileyed Matrix (S4)		Redox Depress	sions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy R	edox (S5)						Red Parent Material (F21)
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)
Dark Sur	face (S7) (LRR R, I	MLRA 149	B)				Other (Explain in Remarks)
31	the set of					Particular	d en much le me d'a
Indicators of	nydropnytic vegeta	tion and w	etiand hydrology mus	st be pres	ent, uniess	s disturbed	o or problematic.
	ayer (if observed)						
Type:							,
Depth (inc	ches):						Hydric Soil Present? Yes <u>✓</u> No
Remarks:							

Project/Site: NW OHIO WIND	Citv/	County: PAULDING (00	Sampling Date: 4/15/2013 7:49:51 PM
Applicant/Owner: WESTWOOD	0.0,	Soundy:S	itate: OH	Sampling Point: X-01 UPLAND
Investigator(s) MATTHEW VOLLBRECHT	2115 Sect	ion Townshin Range:	Sec 22 T1N R2	E
Landform (billslope terrace etc.). Flat		Local relief (conca	ve convex none):	Flat
Slope (%): 0-5% Lat: 700805.0396	Lon	. 4544142.559		Datum: UTM NAD 83Z13N
Soil Map Unit Name: LC-Latty silty clay		j	NI/// clossific	ention: Not Mapped
Are elimetic / hydrologic conditions on the site turi	ad for this time of year?			
Are climatic / hydrologic conditions on the site typic	cal for this time of year?		(If no, explain in R	
Are Vegetation, Soil, or Hydrology	significantly distu	irbed? Are "Norma	Il Circumstances" p	oresent? Yes <u>v</u> No
Are Vegetation, Soil, or Hydrology	naturally problen	natic? (If needed,	explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach sit	e map showing sa	mpling point locatio	ons, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes	No	Is the Sampled Area		
Hydric Soil Present? Yes	No	within a Wetland?	Yes	No✓
Wetland Hydrology Present? Yes	No	If yes, optional Wetland	d Site ID: Uplan	d Sample Point X-01
Remarks: (Explain alternative procedures here c	or in a separate report.)	•		
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)	Water-Stained Leav	es (B9)	Drainage Pa	tterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim L	ines (B16)
Saturation (A3)	Marl Deposits (B15)		Dry-Season	Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide O	dor (C1)	Crayfish Bur	rows (C8)
Sediment Deposits (B2)	Oxidized Rhizosphe	res on Living Roots (C3)	Saturation V	sible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduce	ed Iron (C4)	Stunted or S	tressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reducti	on in Tilled Soils (C6)	Geomorphic	Position (D2)
Iron Deposits (B5)	Thin Muck Surface ((C7)	Shallow Aqu	ntard (D3)
Sparsely Vegetated Concave Surface (B8)		(IIIdiks)	FAC-Neutral	Test (D5)
Field Observations:				
Surface Water Present? Yes No	Depth (inches):			
Water Table Present? Yes No	Depth (inches):			
Saturation Present? Yes No (includes capillary fringe)	✓ Depth (inches):	Wetland I	Hydrology Preser	nt? Yes No_✓
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, pr	evious inspections), if ava	ailable:	
Remarks:				

Sampling Point: X-01 UPL

30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 50)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1	·			That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: 1 (B)
4.				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
o	·			
0	0			Prevalence Index worksheet:
Total Cove	r: <u>0</u>		_	Total % Cover of:Multiply by:
50% of total cover: 0	20% c	of total cove	r: <u>0</u>	OBL species 0 $x = 0$
Sapling/Shrub Stratum (Plot size: 30)				FACW species 0 $x 2 = 0$
1				FAC species 0 $x 3 = 0$
2.				FACU species 0 $x 4 = 0$
3	·			UPL species 40 x 5 = 200
3	·			Column Totals: <u>40</u> (A) <u>200</u> (B)
4	·			$Provolonoo Index = P/\Lambda = 5$
5	·			
6				Hydrophytic Vegetation Indicators:
Total Cove	r: 0			Rapid Test for Hydrophytic Vegetation
EQ% of total cover: 0	20%	f total covor	. 0	Dominance Test is >50%
Herb Stratum (Plot size: 5	20 % 0	i lotal covel		Prevalence Index is ≤3.0 ¹
1. Glycine spp	40	Yes	UPL	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
	·			¹ Indicators of hydric soil and wetland hydrology must
	·			be present, unless disturbed of problematic.
5	·			Definitions of Vegetation Strata:
6	·			Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10.				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cauca	. 40			Woody vines – All woody vines greater than 3.28 ft in
			0	height.
50% of total cover: 20	20% c	of total cove	r: <u>0</u>	
Woody Vine Stratum (Plot size: 30)				
1				
2				
3.				Hydrophytic
4				Vegetation
Tatal Caus				Present? Yes No 🖌
	r: <u> </u>		0	
50% of total cover: 0	20% o	f total cover		
Remarks: (Include photo numbers here or on a separate s	heet.)			

Depth	Matriv	to the dept		Features	comm the	ausence of	muicators.)
(inches)	Color (moist)	%	Color (moist)	% Type ¹	Loc ²	Texture _	Remarks
0-28	10YR6/2	100			Si	lt Clay	
			·				
			·				
			·				
¹ Type: C=Ce	oncentration, D=Dep	letion, RM=	Reduced Matrix, CS=	Covered or Coated S	Sand Grains	s. ² Locat	ion: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:		,			Indicators fo	r Problematic Hydric Soils ³ :
Histosol	(A1)	-	Polyvalue Below	Surface (S8) (LRR R	l, .	2 cm Mu	ck (A10) (LRR K, L, MLRA 149B)
Histic Ep	oipedon (A2)		MLRA 149B)			Coast Pr	airie Redox (A16) (LRR K, L, R)
Black Hi	stic (A3)	-	Thin Dark Surface	e (S9) (LRR R, MLR)	A 149B).	5 cm Mu	cky Peat or Peat (S3) (LRR K, L, R)
Hydroge Stratified	d Lavers (A5)	-	Loamy Gleved M	atrix (F2)) .	Dark Sur Polyvalu	e Below Surface (S8) (I RR K. I.)
Depleted	d Below Dark Surfac	e (A11)	Depleted Matrix (F3)	•	Thin Dar	k Surface (S9) (LRR K, L)
Thick Da	ark Surface (A12)	-	Redox Dark Surfa	ace (F6)		Iron-Mar	iganese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)	-	Depleted Dark Su	urface (F7)	-	Piedmon	t Floodplain Soils (F19) (MLRA 149B)
Sandy G	Bleyed Matrix (S4)	-	Redox Depressio	ns (F8)		Mesic Sp	bodic (TA6) (MLRA 144A, 145, 149B)
Sandy R	(edox (S5)					Red Pare	ent Material (F21)
Supped Dark Su	rface (S7) (I RR R . I	MI RA 1498)			Other (F	$\frac{1}{2}$
					-		
³ Indicators o	f hydrophytic vegeta	tion and wet	land hydrology must l	be present, unless di	sturbed or p	oroblematic.	
Restrictive I	Layer (if observed)	:					
Type:							
Depth (in	ches):				H	lydric Soil P	resent? Yes No _∕
Remarks:	illed agricultural	field					
	med agricultural	neiu					

Project/Site: NW OHIO WIND	City/County: PAUL	DING CO	Sampling Date: 4/15/2013 7:46:35 PM
Applicant/Owner: WESTWOOD		State [.] OH	Sampling Point: X-01 WETLAND
Investigator(s): MATTHEW VOLLBRECHT 2115	Section Township F	Sec 22 T1N R2	E
Landform (hillologo, torraco, atc.); Flat		of (conceve, convex, none):	Side slope of road ditch
Plane (%) 5-10% Let 700809.3102	4544146 8	n6	Datum UTM NAD 83713N
Slope (%): Lat: Lat:	Long: <u>4044140.0</u>	00	Datum: OTHER ADD COL TOTA
Soil Map Unit Name:Silly Silly Clay		NWI classific	ation: Not Mapped
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes 🖌 No	(If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology significantl	y disturbed? Are	e "Normal Circumstances" p	oresent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If	needed, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling point	locations, transects	, important features, etc.
Hudrophytic Vocatation Bracent? Voc. / No	Is the Sample	ed Area	
Hydric Soil Present? Yes ✓ No	within a Wet	and? Yes_√_	No
Wetland Hydrology Present? Yes ✓ No	If ves optiona	Wetland Site ID. Wetlar	nd sample point X-01
Remarks: (Explain alternative procedures here or in a separate rep	ort.)		
Wetland located in the bed of a road ditch	,		
		2	
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply		Surface Soil	Cracks (B6)
Surface Water (A1) Water-Stained	Leaves (B9)	Drainage Pa	tterns (B10)
I <u>✓</u> High Water Table (A2) Aquatic Fauna	a (B13)	Moss Trim L	ines (B16)
✓ Saturation (A3) Mari Deposits	(B15) (ida Odan (O4)	Dry-Season	Water Table (C2)
Water Marks (B1) Hydrogen Sul Ouidiaed Deie	ride Odor (C1)	Crayfish Bur	rows (C8)
Sediment Deposits (B2) Oxidized Rhiz	ospheres on Living Ro	Stupted or S	traced Planta (D1)
Algal Mat or Crust (B4)	eduction in Tilled Soils	(C6) Geomorphic	Position (D2)
Iron Deposits (B5)	rface (C7)	Shallow Agu	itard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain	in Remarks)	Microtopogra	aphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	in Remarkey	✓ FAC-Neutral	Test (D5)
Field Observations:			
Surface Water Present? Yes No ✓ Depth (inche	s):		
Water Table Present? Yes ✓ No Depth (inche	s): 9.0		
Saturation Present? Yes ✓ No Depth (inche	s)· 11.0	Vetland Hydrology Preser	nt? Yes √ No
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspectio	ns), if available:	
Remarks:			
Nomerko.			

Sampling Point: X-01 WET

Tana Stratum (Distaine 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>I free Stratum</u> (Plot size: <u>00</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
Total Cove	r: <u>0</u>			Total % Cover of: Multiply by:
50% of total cover: 0	20% c	of total cove	r: 0	OBL species _65 x 1 = _65
Sapling/Shrub Stratum (Plot size: 30				FACW species 0 x 2 = 0
1.				FAC species 0 $x 3 = 0$
2				FACU species 0 $x 4 = 0$
2				UPL species 0 x 5 = 0
S				Column Totals: <u>65</u> (A) <u>65</u> (B)
4				Prevalence Index = $B/A = 1$
5				
6				Hydrophytic Vegetation Indicators:
Total Cove	er: 0			Rapid Test for Hydrophytic Vegetation
50% of total cover: 0	20% o	f total cove	r <u>: 0</u>	Dominance lest is >50%
Herb Stratum (Plot size: 5)				✓ Prevalence index is ≤3.0 Merobalogical Adaptations ¹ (Provide supporting
1. Carex lacustris	65	Yes	OBL	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
4				¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed of problematic.
5				Definitions of Vegetation Strata:
0				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cove	r: 65			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: <u>32.5</u>	20% o	of total cove	_{r:} 13	neight.
Woody Vine Stratum (Plot size: <u>30</u>)				
1.				
2				
3				Hadavahada.
				Vegetation
4	0			Present? Yes 🖌 No
l otal Cove	er: 0		0	
50% of total cover: <u>0</u>	20% o	f total cove	r: <u> </u>	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

uncrease Coor (moist) % Locr Lexture Kemarks 0-11 10YR3/1 100 Muck Muck Muck 11-18 10YR7/1 90 10YR5/8 10 C M Clay 11-18 10YR7/1 90 10YR5/8 10 C M Clay	time of the set	Matrix	67		dox Featur	es	2	- Tautum	Deers
Init Itor (KS) / 100 MULK 11-18 10 YR7/1 90 10 YR5/8 10 C M Clay 11-18 10 YR7/1 90 10 YR5/8 10 C M Clay 11-18 10 YR7/1 90 10 YR5/8 10 C M Clay 11-18 10 YR7/1 90 10 YR5/8 10 C M Clay 11-18 10 YR5/8 10 C M Clay Introduction (Clay) Introduction (Clay) <th></th> <th></th> <th>%</th> <th>Color (moist)</th> <th>%</th> <th>Iype</th> <th></th> <th>lexture</th> <th>Remarks</th>			%	Color (moist)	%	Iype		lexture	Remarks
11-18 10YR7/1 90 10YR5/8 10 C M Clay Image: Section of the se	0-11	101R3/1	100						
**Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. **Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils*: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) ✓ Histic Epipedon (A2) MLRA 149B) Black Histo (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (A11) Depleted Matrix (F3) Stratified Layers (A5) Loamy Mucky Mineral (F1) Sandy Mucky Mineral (S1) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Depleted Matrix (F3) Stripped Matrix (S4) Redox Dark Surface (F7) Stripped Matrix (S4) Redox Depressions (F8) Sandy Mucky Mineral (S1) Depleted Delow Surface (T46) (MLRA 144A, 145, 149B) Stripped Matrix (S4) Redox Depressions (F8) Stripped Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144B) Stripped Matrix (S4) Red Parent Material (F12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Stripped Matrix (S6) Other (Explain in	11-18	10YR7/1	90	10YR5/8	10	<u>C</u>	M	Clay	
Image:									
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils?: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR K, L) Depleted Below Dark Surface (A12) Redox Depleted Matrix (F2) Depleted Below Dark Surface (A12) Redox Depleted Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Matrix (S6) Redox Depressions (F8) Stripped Matrix (S6) Very Shallow Dark Surface (S7) (LRR R, I445, 149B) Stripped Matrix (S6) Other (Explain in Remarks) ³ Indicators of hydrophylic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Type: Clay Depletion (inches): 11.0 Petro Hydric Soil Present? Yes / No				-			_		
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Zoast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR K, L) Black Histic (A3) Coast) Prairie Redox (A16) (LRR K, L, R) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A12) Redox Dark Surface (F6) Stratified Layers (A12) Redox Dark Surface (F7) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S6) Redox Depressions (F8) Sandy Mackx (S6) Redox Depressions (F8) Stripped Matrix (S6) Very Shallow Dark Surface (T12) Other (Explain in Remarks) Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (fl observed): T1.0 Type: Llay Depletion (inches): 11.0 Remarks: Hydro Soil Present? Yes / No									
**Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. **Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils*: Histic Epipedon (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Sandy Medox (S5) Depleted Dark Surface (F7) Sandy Medox (S6) Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Sandy Redox (S5) Other (Explain in Remarks) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Clay Depti (Inches): 11.0 Merric Marks: Hydric Soil Present? Yes / No				·					
'Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S9) (LRR K, L) Thick Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L, P) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Shiriped Matrix (S6) Bark Surface (S7) Problematic Problematic Remarks: Hydric Soil Present? Yes / No									
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histic Epipedon (A2) MLRA 149B) Black Histic (A3)									
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) ✓ Histic Epipedon (A2) MLRA 149B) Black Histic (A3)									
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ² : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Z ocast Prairie Redox (A16) (LRR K, L, RLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Depleted Below Dark Surface (A12) Redox Dark Surface (F6) Thick Dark Surface (S1) Depleted Matrix (F2) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Sandy Redox (S5) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Type: Clay Deplet (inches): 11.0 Remarks: Hydric Soil Present? Yes Yes No									
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ :									
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ :									
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Histosol (A1)Polyvalue Below Surface (S8) (LRR R,2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2)MLRA 149B)S cm Muck (A10) (LRR K, L, MLRA 149B) Black Histic (A3)Thin Dark Surface (S9) (LRR R, MLRA 149B)S cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4)Loamy Mucky Mineral (F1) (LRR K, L)Dark Surface (S7) (LRR K, L) Stratified Layers (A5)Loamy Gleyed Matrix (F2)Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11)Depleted Matrix (F3)Thin Dark Surface (S9) (LRR K, L, R) Sandy Mucky Mineral (S1)Depleted Dark Surface (F6)Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4)Redox Depressions (F8)Nesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5)Other Matrix (S6)Nerdex Surface (S7) (LRR R, MLRA 149B)Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Remarks:									
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thic Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Sandy Gleyed Matrix (S6) Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Clay Depth (inches): 11.0 Remarks: Hydrology must be present, unless disturbed or problematic.									
Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) S cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Thin Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Aripper (If observed): Type: Clay Depth (inches): 11.0 Hydric Soil Present? Yes <u>√</u> No Remarks: Remarks: 	¹ Type: C=C	oncentration D=D	enletion RM	 /=Reduced Matrix	CS=Cover	ed or Coa	ted Sand (Grains ² Location	PI =Pore Lining M=Matrix
Histosol (A1) Polyvalue Below Surface (S8) (LRR R,	Hydric Soil	Indicators:			00-00101			Indicators for Pro	blematic Hydric Soils ³ :
✓ Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) S cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyalue Below Surface (S9) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B)	Histosol	(A1)		Polyvalue Be	low Surfac	e (S8) (L	RR R,	2 cm Muck (A	10) (LRR K, L, MLRA 149B)
	✓ Histic Ep	oipedon (A2)		MLRA 149	9B)			Coast Prairie	Redox (A16) (LRR K, L, R)
	Black Hi	istic (A3)		Thin Dark Su	Irface (S9)	(LRR R,	MLRA 149	B) 5 cm Mucky F	Peat or Peat (S3) (LRR K, L, R)
	Hydroge Stratified	d Lavers (A5)		Loamy Muck	y Mineral (i ed Matrix (F	2) (LRR	r , L)	Polyvalue Bel	(S7) (LKR K, L) ow Surface (S8) (I RR K, I)
	Depleter	d Below Dark Surf	ace (A11)	Depleted Ma	trix (F3)	_)		Thin Dark Su	face (S9) (LRR K, L)
	Thick Da	ark Surface (A12)		Redox Dark	Surface (F6	i)		Iron-Mangane	ese Masses (F12) (LRR K, L, R)
	Sandy M	Nucky Mineral (S1))	Depleted Dat	rk Surface	F7)		Piedmont Flo	odplain Soils (F19) (MLRA 149B)
	Sandy G	Bleyed Matrix (S4)		Redox Depre	essions (F8)		Mesic Spodic	(TA6) (MLRA 144A, 145, 149B)
								Verv Shallow	Dark Surface (TF12)
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Hydric Soil Present? Yes _ ✓ No Depth (inches): 11.0 Hydric Soil Present? Yes _ ✓ No Remarks: Remarks: Remarks: Remarks: Remarks:	Sanuy R	Matrix (S6)		9B)				Other (Explain	n in Remarks)
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Clay Depth (inches): 11.0 Remarks: Hydric Soil Present? Yes ✓ No	Stripped Dark Su	l Matrix (S6) Irface (S7) (LRR R	, MLRA 149	- /					
Restrictive Layer (if observed): Type: Clay Depth (inches): 11.0 Remarks: Hydric Soil Present? Yes ✓ No	Stripped Dark Su	l Matrix (S6) rface (S7) (LRR R	, MLRA 149	- /					
Type: Ordy Depth (inches): 11.0 Remarks: Hydric Soil Present? Yes ✓	Stripped Dark Su ³ Indicators of	l Matrix (S6) rface (S7) (LRR R f hydrophytic vege	tation and v	vetland hydrology m	nust be pres	sent, unle	ss disturbe	ed or problematic.	
Depth (inches): Item (inches	Sandy F Stripped Dark Su ³ Indicators of Restrictive I	l Matrix (S6) rface (S7) (LRR R f hydrophytic vege Layer (if observe d	tation and v	vetland hydrology m	nust be pres	sent, unle	ss disturbe	ed or problematic.	
Remarks:	Stripped Dark Su ³ Indicators of Restrictive I Type: <u>CI</u>	l Matrix (S6) rface (S7) (LRR R f hydrophytic vege Layer (if observe lay	tation and v	vetland hydrology m	nust be pres	sent, unle	ss disturbe	ed or problematic.	
	 Sandy F Stripped Dark Su ³Indicators of Restrictive I Type: Cl Depth (indicators) 	l Matrix (S6) rface (S7) (LRR R f hydrophytic vege Layer (if observe lay ches): <u>11.0</u>	tation and v	vetland hydrology m	nust be pres	sent, unle	ss disturbe	ed or problematic.	nt? Yes_✓ No
	Stripped Dark Su ³ Indicators or Restrictive I Type: <u>CI</u> Depth (ind Remarks:	l Matrix (S6) rface (S7) (LRR R f hydrophytic vege Layer (if observe lay ches): <u>11.0</u>	tation and v	vetland hydrology m	nust be pres	sent, unle	ss disturbe	ed or problematic.	nt? Yes_✓ No
	Stripped Dark Su ³ Indicators o Restrictive I Type: <u>Cl</u> Depth (ind Remarks:	l Matrix (S6) rface (S7) (LRR R f hydrophytic vege Layer (if observe lay ches): <u>11.0</u>	tation and v	vetland hydrology m	nust be pres	sent, unle	ss disturbe	ed or problematic.	nt? Yes_✓ No
	Stripped Stripped Dark Su ³ Indicators o Restrictive I Type: <u>CI</u> Depth (ind Remarks:	l Matrix (S6) rface (S7) (LRR R f hydrophytic vege Layer (if observe lay ches): <u>11.0</u>	tation and v	vetland hydrology m	nust be pres	sent, unle	ss disturbe	ed or problematic.	nt? Yes_✓_ No
	Stripped Dark Su ³ Indicators o Restrictive I Type: <u>CI</u> Depth (ind Remarks:	l Matrix (S6) rface (S7) (LRR R f hydrophytic vege Layer (if observe lay ches): <u>11.0</u>	tation and v	vetland hydrology m	nust be pres	sent, unle	ss disturbe	ed or problematic. Hydric Soil Preser	nt? Yes_✓_ No
	Stripped Dark Su ³ Indicators o Restrictive I Type: <u>C</u> Depth (ind Remarks:	l Matrix (S6) rface (S7) (LRR R f hydrophytic vege Layer (if observe lay ches): <u>11.0</u>	tation and v	vetland hydrology m	nust be pres	sent, unle	ss disturbe	ed or problematic.	nt? Yes <u>√</u> No
	Stripped Dark Su ³ Indicators or Restrictive I Type: <u>CI</u> Depth (int Remarks:	l Matrix (S6) rface (S7) (LRR R f hydrophytic vege Layer (if observe lay ches): <u>11.0</u>	tation and v	vetland hydrology m	nust be pres	sent, unle	ss disturbe	ed or problematic. Hydric Soil Prese	nt? Yes <u>√</u> No
	Stripped Dark Su ³ Indicators o Restrictive I Type: <u>Cl</u> Depth (ind Remarks:	l Matrix (S6) rface (S7) (LRR R f hydrophytic vege Layer (if observe lay ches): <u>11.0</u>	tation and v d):	vetland hydrology m	nust be pres	sent, unle	ss disturbe	ed or problematic. Hydric Soil Prese	nt? Yes <u>√</u> No
	Stripped Stripped Dark Su ³ Indicators or Restrictive I Type: <u>CI</u> Depth (ind Remarks:	l Matrix (S6) rface (S7) (LRR R f hydrophytic vege Layer (if observe r lay ches): <u>11.0</u>	tation and v d):	vetland hydrology m	nust be pres	sent, unle	ss disturbe	ed or problematic. Hydric Soil Prese	nt? Yes <u>√</u> No
	Sandy F Stripped Dark Su ³ Indicators or Restrictive I Type: <u>CI</u> Depth (int Remarks:	l Matrix (S6) rface (S7) (LRR R f hydrophytic vege Layer (if observe lay ches): <u>11.0</u>	tation and v d):	vetland hydrology m	nust be pres	sent, unle	ss disturbe	ed or problematic. Hydric Soil Prese	nt? Yes <u>√</u> No
	Stripped Stripped Dark Su ³ Indicators o Restrictive I Type: <u>CI</u> Depth (ind Remarks:	l Matrix (S6) rface (S7) (LRR R f hydrophytic vege Layer (if observe lay ches): <u>11.0</u>	tation and v d):	vetland hydrology m	nust be pres	sent, unle	ss disturbe	ed or problematic. Hydric Soil Prese	nt? Yes <u>√</u> No
	Stripped Stripped Dark Su ³ Indicators o Restrictive I Type: <u>C</u> I Depth (ind Remarks:	l Matrix (S6) rface (S7) (LRR R f hydrophytic vege Layer (if observe r lay ches): <u>11.0</u>	tation and v d):	vetland hydrology m	nust be pres	sent, unle	ss disturbe	ed or problematic. Hydric Soil Preser	nt? Yes <u>√</u> No
	Stripped Stripped Dark Su ³ Indicators o Restrictive I Type: <u>CI</u> Depth (ind Remarks:	I Matrix (S6) rface (S7) (LRR R f hydrophytic vege Layer (if observe lay ches): <u>11.0</u>	tation and v tation and v d):	vetland hydrology m	nust be pres	sent, unle	ss disturbe	ed or problematic. Hydric Soil Prese	nt? Yes <u>√</u> No
	Stripped Dark Su ³ Indicators o Restrictive I Type: <u>CI</u> Depth (ind Remarks:	I Matrix (S6) rface (S7) (LRR R f hydrophytic vege Layer (if observe lay ches): <u>11.0</u>	tation and v tation and v d):	vetland hydrology m	nust be pres	sent, unle	ss disturbe	ed or problematic. Hydric Soil Prese	nt? Yes <u>√</u> No
	Stripped Stripped Dark Su ³ Indicators o Restrictive I Type: <u>CI</u> Depth (ind Remarks:	I Matrix (S6) rface (S7) (LRR R f hydrophytic vege Layer (if observe lay ches): <u>11.0</u>	tation and v tation and v d):	vetland hydrology m	nust be pres	sent, unle	ss disturbe	ed or problematic. Hydric Soil Preser	nt? Yes <u>✓</u> No

Project/Site: NW OHIO WIND	City/County: PA	ULDING CO	Sampling Date: 4/15/2013 7:55:18 PM
Applicant/Owner: WESTWOOD	enj, eeuniji	State: OH	Sampling Point: X-02 UPLAND
Investigator(s): MATTHEW VOLLBRECHT 2115	Section, Townshir	Bange: Sec 22 T1N	N R2E
Landform (billslope, terrace, etc.). Flat	Local I	elief (concave, convex, n	_{lone)} . Flat
Slope (%): 0-5% Lat: 699709.2278	4545080).855	Datum: UTM NAD 83Z13N
Soil Map Linit Name: LC-Latty silty clay	Long		assification: Not Mapped
Are elimetia / hydrologic conditions on the site typical for this time	of year? Yea		n in Romarka)
Are Vegetation, Soil, or Hydrology signific	antly disturbed?	Are "Normal Circumstan	ces″ present? Yes <u>▼</u> No
Are Vegetation, Soil, or Hydrology natura	lly problematic?	(If needed, explain any a	nswers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ving sampling po	int locations, trans	ects, important features, etc.
Hydrophytic Vegetation Present? Yes No 🗸	Is the Sam	pled Area	
Hydric Soil Present? Yes No _✓	within a W	/etland? Yes _	No_ <u>√</u>
Wetland Hydrology Present? Yes No	If yes, optio	onal Wetland Site ID: U	pland sample point X-02
Remarks: (Explain alternative procedures here or in a separate	report.)		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary	Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that ap	oply)	Surface	e Soil Cracks (B6)
Surface Water (A1) Water-Sta	ined Leaves (B9)	Drainag	ge Patterns (B10)
High Water Table (A2) Aquatic Fa	auna (B13)	Moss I	rim Lines (B16)
Water Marks (B1)	Sulfide Odor (C1)	Dry-Sea	h Burrows (C8)
Sediment Deposits (B2) Oxidized I	Rhizospheres on Living	Roots (C3) Saturat	ion Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence	of Reduced Iron (C4)	Stunted	d or Stressed Plants (D1)
Algal Mat or Crust (B4)	on Reduction in Tilled Se	oils (C6) Geomo	rphic Position (D2)
Iron Deposits (B5) Thin Mucl	c Surface (C7)	Shallow	v Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Ex	plain in Remarks)	Microto	pographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		FAC-Ne	eutral Test (D5)
Field Observations:			
Surface Water Present? Yes No ✓ Depth (in	iches):		
Water Table Present? Yes No ✓ Depth (in	iches):		
Saturation Present? Yes No _ Depth (in (includes capillary fringe)	ches):	Wetland Hydrology P	resent? Yes No _✓
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspec	tions), if available:	
Remarks:			

Sampling Point: X-02 UPL

30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 50)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>2</u> (B)
4.				Percent of Deminant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
3				
b	<u> </u>			Prevalence Index worksheet:
Total Cove	r: <u>0</u>			Total % Cover of:Multiply by:
50% of total cover: 0	20% c	of total cove	er: 0	OBL species 0 x 1 = 0
Sapling/Shrub Stratum (Plot size: <u>30</u>)				FACW species 0 x 2 = 0
1				FAC species 0 $x_3 = 0$
2.				FACU species 30 x 4 = 120
3	·			UPL species 40 x 5 = 200
3	·			Column Totals: <u>70</u> (A) <u>320</u> (B)
4	·			Provelence Index = P/A = 4.57
5				
6				Hydrophytic Vegetation Indicators:
Total Cove	r: 0			Rapid Test for Hydrophytic Vegetation
EQ% of total cover: 0	20%	f total covo	r. 0	Dominance Test is >50%
Herb Stratum (Plot size: 5	20%0			Prevalence Index is ≤3.0 ¹
1. Bromus inermis	40	Yes	UPL	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2 Dactylis glomerata	30	Yes	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2				
	·			¹ Indicators of hydric soil and wetland hydrology must
4	·			be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree Woody plants 2 in (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8.				Septime/shouth Weady plants loss than 2 in DDU
9				and greater than 3.28 ft (1 m) tall.
10				
	·			of size, and woody plants less than 3.28 ft tall.
11				
Total Cover	. 10			Woody vines – All woody vines greater than 3.28 ft in height
50% of total cover: <u>35</u>	20% o	f total cove	r: <u>14</u>	lingitu
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2				
2				
3				Hydrophytic Vegetation
4	·			Present? Yes No 🗸
Total Cove	r: 0			
50% of total cover: <u>0</u>	20% o	f total cove	r: <u>0</u>	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

)-26	Color (maint)	0/	Color (moiot) $0/$ Ture ¹ $1 - 2$	- Toxture	Domortico
J-20		%		iexture	Kemarks
	1011(3/2				
Type: C=Co	oncentration, D=De	pletion, RM	=Reduced Matrix, CS=Covered or Coated Sand C	Grains. ² Location: PL=	Pore Lining, M=Matrix.
Iyaric Soli			Debuglue Delevy Surface (SS) / DD D		
Histosof Histic Er	oipedon (A2)		MLRA 149B)	Coast Prairie Red	lox (A16) (LRR K, L, R)
Black Hi	istic (A3)		Thin Dark Surface (S9) (LRR R, MLRA 149	B) 5 cm Mucky Peat	or Peat (S3) (LRR K, L, R)
_ Hydroge	en Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR K, L)	Dark Surface (S7) (LRR K, L)
_ Stratified	d Layers (A5) d Below Dark Surfac	ce (A11)	Loamy Gleyed Matrix (F2)	Polyvalue Below Thin Dark Surfac	Surface (S8) (LRR K, L)
_ Thick Da	ark Surface (A12)	50 (ATT)	Redox Dark Surface (F6)	Iron-Manganese	Masses (F12) (LRR K, L, R
Sandy M	lucky Mineral (S1)		Depleted Dark Surface (F7)	Piedmont Floodp	ain Soils (F19) (MLRA 149
_ Sandy G	Gleyed Matrix (S4)		Redox Depressions (F8)	Mesic Spodic (TA	6) (MLRA 144A, 145, 149E
_ Sandy R Stripped	(edox (S5) I Matrix (S6)			Very Shallow Dar	rial (F21) k Surface (TF12)
_ Dark Su	rface (S7) (LRR R,	MLRA 149	3)	Other (Explain in	Remarks)
ndicators of	f hydrophytic vegeta	ation and we	Itand hydrology must be present, unless disturbe	ed or problematic.	
	Layer (il observed))=			
Dopth (in	abaa):			Hydric Soil Present?	Yes No.√
Depth (ind	cnes):				

Project/Site: NW OHIO WIND	City/County: F	PAULDING	CO	Sampling Date: 4/15/2013 7:52:24 PM
Applicant/Owner: WESTWOOD			State: OH	Sampling Point: X-02 WETLAND
Investigator(s); MATTHEW VOLLBRECHT 2115	Section. Town	ship. Range:	Sec 22 T1N	R2E
Landform (billslope, terrace, etc.). Flat		al relief (conc	ave. convex. no	ne). Side slope of ditch
Slope (%): 5-10% Lat: 699709.3637	1 ong: 45450	77.391		Datum: UTM NAD 83Z13N
Soil Map Linit Name: LC-Latty silty clay				Data
Are elimetic / hydrologic conditions on the site typical for this time of		No		in Remarka)
Are climatic / hydrologic conditions on the site typical for this time of		INO		
Are Vegetation, Soil, or Hydrology significan	tly disturbed?	Are "Norm	nal Circumstance	es" present? Yes V No
Are Vegetation, Soil, or Hydrology naturally	problematic?	(If needed	l, explain any an	swers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	ng sampling p	point locat	ions, transe	cts, important features, etc.
Hydrophytic Vegetation Present? Yes ✓ No	Is the S	ampled Area	a	
Hydric Soil Present? Yes ✓ No	within a	a Wetland?	Yes	✓ No
Wetland Hydrology Present? Yes ✓ No	If yes, c	ptional Wetla	nd Site ID: We	tland sample point X-02
Remarks: (Explain alternative procedures here or in a separate rep	port.)			
Wetland located in the bed of an agricultural ditch				
Wetland Hydrology Indicators:			Secondary In	dicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply	()		Surface	Soil Cracks (B6)
Surface Water (A1) Water-Staine	d Leaves (B9)		Ounded (Patterns (B10)
✓ High Water Table (A2)	a (B13)		Drainage Moss Tri	m Lines (B16)
✓ Saturation (A3) Marl Deposit	s (B15)		Dry-Seas	son Water Table (C2)
Water Marks (B1)	llfide Odor (C1)		Cravfish	Burrows (C8)
Sediment Deposits (B2) Oxidized Rhi	zospheres on Livi	na Roots (C3) Saturatio	on Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Reduced Iron (C4	.)	Stunted of	or Stressed Plants (D1)
Algal Mat or Crust (B4)	Reduction in Tilled	d Soils (C6)	Geomorp	phic Position (D2)
Iron Deposits (B5) Thin Muck S	urface (C7)		Shallow	Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Expla	in in Remarks)		Microtop	ographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)			🖌 FAC-Neu	utral Test (D5)
Field Observations:				
Surface Water Present? Yes No ✓ Depth (inche	es):	_		
Water Table Present? Yes ✓ No Depth (inche	es): <u>3.0</u>	_		
Saturation Present? Yes 🖌 No Depth (inche	es): <u>4.0</u>	_ Wetland	d Hydrology Pre	esent? Yes <u>√</u> No
(Includes capillary fringe) Describe Recorded Data (stream dauge monitoring well, aerial pho	otos previous ins		vailable:	
Describe Recorded Data (stream gauge, monitoring weil, achar pix		pections), ii a	valiable.	
Remarks:				

Sampling Point: X-02 WET

Trop Stratum (Plot size: 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
	% Cover	<u>Species</u> ?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
Total Cove	r: 0			Total % Cover of: Multiply by:
50% of total cover: 0	20% (of total cove	r: 0	$OBL species 70 \qquad x_{1} = 70$
Sapling/Shrub Stratum (Plot size: 30				FACW species 0 $x 2 = 0$
<u></u>				FAC species 0 x 3 = 0
				FACU species 0 x 4 = 0
2				UPL species 0 $x_5 = 0$
3				Column Totals: 70 (A) 70 (B)
4				
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
Total Cove	r. 0			Rapid Test for Hydrophytic Vegetation
			0	✓ Dominance Test is >50%
50% of total cover: <u>0</u>	20% o	f total cover		✓ Prevalence Index is $\leq 3.0^1$
<u>Herb Stratum</u> (Plot size: <u>5</u>)	70	Vee		Morphological Adaptations ¹ (Provide supporting
		165		data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation' (Explain)
3				¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vagatation Strata
6.	_			Deminions of Vegetation Strata.
7				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
· ·				at breast height (DBH), regardless of height.
ő				Sapling/shrub – Woody plants less than 3 in. DBH
9				
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cove	. <u>.</u> 70			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: <u>35</u>	20% c	of total cove	r: <u>14</u>	neight.
Woody Vine Stratum (Plot size: 30)				
1				
··				
2				
3				Hydrophytic Vegetation
4				Present? Yes V No
Total Cove	r: 0			
50% of total cover: <u>0</u>	20% o	f total cover	. <u>.</u> 0	
Remarks: (Include photo numbers here or on a separate s	sheet.)			
	,			

SUL	S	Ο		
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Profile Desc	ription: (Describe	to the dep	oth needed to docur	ment the	indicator	or confirm	m the absence of indicators.)	
Depth	Matrix		Redo	x Feature	es 1		-	
(inches)	Color (moist)		Color (moist)	%	Type'	Loc ²	Texture Remarks	_
0-8	10YR2/1	100					Muck	_
8-16	10YR5/1	90	10YR5/8	10	C	M	Silty Clay	-
								-
								_
								-
								_
								-
								_
								-
								-
								-
								-
1 Type: C=C	oncentration D=Den	letion RM	=Reduced Matrix CS	S=Covere	d or Coate	ed Sand G	Grains ² Location: PL=Pore Lining M=Matrix	-
Hydric Soil	Indicators:			0-001010	<u>u or ooun</u>		Indicators for Problematic Hydric Soils ³ :	
Histosol	(A1)		Polyvalue Belov	w Surface	(S8) (I R	RR	2 cm Muck (A10) (I RR K I MI RA 149B)	
✓ Histic Er	bipedon (A2)		MLRA 149B)	, (00) (L R	,	Coast Prairie Redox (A16) (LRR K. L. R)	
Black Hi	stic (A3)		Thin Dark Surfa	, ace (S9) (LRR R. M	LRA 149E	B) 5 cm Mucky Peat or Peat (S3) (LRR K. L. R)	
Hydroge	n Sulfide (A4)		Loamy Mucky	Mineral (F	(LRR M	K, L)	Dark Surface (S7) (LRR K, L)	
Stratified	Layers (A5)		Loamy Gleyed	Matrix (F2	2)	. ,	Polyvalue Below Surface (S8) (LRR K, L)	
Depleted	d Below Dark Surfac	e (A11)	Depleted Matrix	(F3)	,		Thin Dark Surface (S9) (LRR K, L)	
Thick Da	ark Surface (A12)		Redox Dark Su	rface (F6))		Iron-Manganese Masses (F12) (LRR K, L, R)	
Sandy M	lucky Mineral (S1)		Depleted Dark	Surface (I	F7)		Piedmont Floodplain Soils (F19) (MLRA 149B	3)
Sandy G	Bleyed Matrix (S4)		Redox Depress	sions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B))
Sandy R	edox (S5)						Red Parent Material (F21)	
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)	
Dark Su	rface (S7) (LRR R, N	MLRA 149	B)				Other (Explain in Remarks)	
[°] Indicators of	f hydrophytic vegeta	tion and w	etland hydrology mus	st be pres	ent, unles	s disturbed	ed or problematic.	
Restrictive I	_ayer (if observed):	:						
Type:								
Depth (ind	ches):						Hydric Soil Present? Yes <u>✓</u> No	-
Remarks:	,							
rtemarko.								

Project/Site: NW OHIO WIND	City/County:	PAULDING (00	Sampling Date: 4/17/2013 5:11:52 PM
Applicant/Owner: WESTWOOD	end, e e anny	s	tate [.] OH S	ampling Point: X-03 UPLAND
Investigator(s): MATTHEW VOLLBRECHT 2115	Section, Towr	ship, Range: S	Sec 22 T1N R2	E
Landform (hillslope terrace etc.): Flat		cal relief (conca	ve convex none).	Side slope of creek
Slope (%): 5-10% Lat: 700176.4229	Long: 4544	907.647		Datum: UTM NAD 83Z13N
Solution Linit Name: Sb-Saranac silty clay loam, occa.	sionally flooded		NIM/L clossific	otion: Not Mapped
		Ne		
Are climatic / hydrologic conditions on the site typical for this tim	ie of year? Yes <u>•</u>		(If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology signi	ficantly disturbed?	Are "Norma	l Circumstances" p	resent? Yes <u>Y</u> No
Are Vegetation, Soil, or Hydrology nature	ally problematic?	(If needed, e	explain any answei	s in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho	owing sampling	point locatio	ons, transects	, important features, etc.
Hydrophytic Vegetation Present? Ves No	✓ Is the	Sampled Area		
Hydric Soil Present? Yes No	✓ within	a Wetland?	Yes	No✓
Wetland Hydrology Present? Yes No	✓ If ves.	optional Wetland	d Site ID: Upland	sample point X-03
Remarks: (Explain alternative procedures here or in a separation	te report.)			
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; check all that	apply)		Surface Soil	Cracks (B6)
Surface Water (A1) Water-S	tained Leaves (B9)		Drainage Pat	terns (B10)
High Water Table (A2) Aquatic	Fauna (B13)		Moss Trim Li	nes (B16)
Saturation (A3) Marl De	posits (B15)		Dry-Season	Nater Table (C2)
Water Marks (B1) Hydroge Ovidingent Dengesite (D2)	en Sulfide Odor (C1)	in a Deete (C2)	Crayfish Burr	ows (C8)
Drift Deposits (B3)	a of Reduced Iron (C.		Saturation VI	ressed Plants (D1)
Algal Mat or Crust (B4)	ron Reduction in Tille	⁺/ d Soils (C6)	Geomorphic	Position (D2)
Iron Deposits (B5)	ck Surface (C7)		Shallow Aqui	tard (D3)
I Inundation Visible on Aerial Imagery (B7) Other (E	xplain in Remarks)		Microtopogra	phic Relief (D4)
Sparsely Vegetated Concave Surface (B8)			FAC-Neutral	Test (D5)
Field Observations:				
Surface Water Present? Yes No ✓ Depth (inches):	_		
Water Table Present? Yes No ✓ Depth (inches):	-1		
Saturation Present? Yes No ✓ Depth (inches):	Wetland I	Hydrology Presen	t? Yes No_√
Describe Recorded Data (stream gauge, monitoring well, aeria	al photos, previous ins	pections), if ava	ailable:	
Remarks:				
1				

Sampling Point: X-03 UPL

Ture Office (Direction 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1	·			That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: 1 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6				
0	0			Prevalence Index worksheet:
l otal Cove	r: <u> </u>		<u> </u>	Total % Cover of: Multiply by:
50% of total cover: 0	20% c	of total cove	r: <u>0</u>	OBL species 0 $x_1 = 0$
Sapling/Shrub Stratum (Plot size: 30)				FACW species 0 $x 2 = 0$
1				FAC species 0 $x 3 = 0$
2.				FACU species 0 $x 4 = 0$
3				UPL species 45 $x 5 = 225$
0				Column Totals: <u>45</u> (A) <u>225</u> (B)
4	·			Prevalence index $- B/A - 5$
5	·			
6				Hydrophytic Vegetation Indicators:
Total Cove	r: 0			Rapid Test for Hydrophytic Vegetation
50% of total cover: 0	20% 0	f total cover	- 0	Dominance Test is >50%
Herb Stratum (Plot size: 5	20700			Prevalence Index is ≤3.0 ¹
1. Bromus inermis	45	Yes	UPL	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
4				¹ Indicators of hydric soil and wetland hydrology must
	·			be present, unless disturbed of problematic.
5	·			Definitions of Vegetation Strata:
6	·			Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7	·			at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10.				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cover	. 45			Woody vines – All woody vines greater than 3.28 ft in
			0	height.
50% of total cover: <u>22.5</u>	20% c	f total cove	r: <u>9</u>	
Woody Vine Stratum (Plot size: 30)				
1				
2				
3.				Hydrophytic
4				Vegetation
Tatal Caus				Present? Yes No 🖌
	r: <u> </u>		0	
50% of total cover: 0	20% o	f total cover		
Remarks: (Include photo numbers here or on a separate s	heet.)			

Depth	Matrix		Redox Features	_	_
(inches)	Color (moist)	<u>%</u>	Color (moist) % Type ¹ Loc ²	Texture	Remarks
)-22	10YR5/3	100		Silty Clay	
T		Lation DM	Badward Matrix CC Cavard as Costad Card C		PL Dava Lining M. Matrix
Type: C=C	Indicators:	netion, Rivi=	Reduced Matrix, CS=Covered or Coated Sand Gr	Indicators for	n: PL=Pore Lining, M=Matrix. Problematic Hydric Soils ³ :
Histoso			Polyvalue Below Surface (S8) (I RR R	2 cm Muck	
Histic E	pipedon (A2)	-	MLRA 149B)	Coast Prai	rie Redox (A16) (LRR K, L, R)
Black H	istic (A3)	-	Thin Dark Surface (S9) (LRR R, MLRA 149B)	5 cm Muck	xy Peat or Peat (S3) (LRR K, L, R)
Hydrog	en Sulfide (A4)	-	Loamy Mucky Mineral (F1) (LRR K, L)	Dark Surfa	ce (S7) (LRR K, L)
Stratifie	d Layers (A5)	-	Loamy Gleyed Matrix (F2)	Polyvalue	Below Surface (S8) (LRR K, L)
Deplete	d Below Dark Surfac	e (A11)	Depleted Matrix (F3)	Thin Dark	Surface (S9) (LRR K, L)
Inick D Sandy I	Ark Surface (A12) Mucky Mineral (S1)	-	Redox Dark Surface (F6) Depleted Dark Surface (F7)	Iron-Ivianga	anese Masses (F12) (LRR K, L, R) Floodolain Soils (F19) (MI RA 149 8
Sandy (Gleved Matrix (S4)	-	Redox Depressions (F8)	Mesic Spo	dic (TA6) (MLRA 144A, 145, 149B)
Sandy I	Redox (S5)	-		Red Paren	t Material (F21)
Stripped	d Matrix (S6)			Very Shall	ow Dark Surface (TF12)
Dark Su	urface (S7) (LRR R, I	MLRA 149B		Other (Exp	lain in Remarks)
3	Charles when the strength	(*************************************		an analytic set of a	
Indicators of	t hydrophytic vegeta	tion and wet	land hydrology must be present, unless disturbed	or problematic.	
Tupo	Layer (II Observeu)				
Type.				Undrie Cail Dre	
Depth (in	ches):			Hydric Soli Pre	sent? fes No
Remarks:					

Project/Site: NW OHIO WIND	City/County: PAULDING	; CO	Sampling Date:
Applicant/Owner: WESTWOOD		State: OH	Sampling Point: X UPLAND
Investigator(s): MATTHEW VOLLBRECHT 2115	Section, Township, Range:	Sec 22 T1N R2	E
Landform (hillslope, terrace, etc.): Flat	Local relief (con	cave, convex, none):	Flat
Slope (%): 0-5% Lat: 700185.3809	Long: 4544899.137		Datum: UTM NAD 83Z13N
Soil Map Unit Name: Sb-Saranac silty clay loam, occasional	lly flooded	NWI classific	cation: Not Mapped
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🖌 No	_ (If no, explain in R	Remarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norr	nal Circumstances" p	oresent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally pro	oblematic? (If needed	ל, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point loca	tions, transects	, important features, etc.

Hydrophytic Vegetation Present?	Yes No <u>✓</u>	Is the Sampled Area
Hydric Soil Present?	Yes No <u>✓</u>	within a Wetland? Yes No _ ✓
Wetland Hydrology Present?	Yes No <u>✓</u>	If yes, optional Wetland Site ID: Upland sample point X-04
Remarks: (Explain alternative proced	dures here or in a separate report.)	•

HYDROLOGY

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

Sampling Point: X-04 UPL

30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 50)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1	·			That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>1</u> (B)
4.				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6	·			
0	0			Prevalence Index worksheet:
Total Cove	r: <u> </u>		•	Total % Cover of: Multiply by:
50% of total cover: 0	20% c	of total cove	r: <u>0</u>	OBL species 0 $x_1 = 0$
Sapling/Shrub Stratum (Plot size: 30)				FACW species 0 $x 2 = 0$
1				FAC species 0 $x_3 = 0$
2				FACU species 0 $x 4 = 0$
3.				UPL species 45 $x_5 = 225$
1	·			Column Totals: <u>45</u> (A) <u>225</u> (B)
	·			Prevalence Index = $B/A = 5$
5		·		
6		·		Hydrophytic Vegetation Indicators:
Total Cove	r: <u>0</u>			Rapid Test for Hydrophytic Vegetation
50% of total cover: 0	20% o	f total cover	. 0	Dominance lest is >50%
Herb Stratum (Plot size: 5				Prevalence Index is ≤3.0 [°]
1. Glycine spp	45	Yes	UPL	Morphological Adaptations ' (Provide supporting data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
4				¹ Indicators of hydric soil and wetland hydrology must
	·		·	be present, unless disturbed of problematic.
5		·		Definitions of Vegetation Strata:
6	·			Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7	·			at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cover	45			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: 22.5	20% 0	of total cove	r:9	height.
Woody Vine Stratum (Plot size: 30				
l	·	·		
2	·			
3	·			Hydrophytic
4				Present? Yes No
Total Cove	r: 0			
50% of total cover: 0	20% o	f total cove	<u> 0 </u>	
Remarks: (Include photo numbers here or on a separate s	heet.)			1
	,			

cohem Color (molet) % Color (molet) % Type' Loc' Texture Remarks 28 10YR5/3 100	Depth	Matrix		Redox	Features	0		
228 10YR5/3 100 Silty Clay	(inches)	Color (moist)	%	Color (moist)	<u>%</u> <u>Type¹</u>	_Loc ²	Texture	Remarks
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. *Location: PL=Pore Lining, M=Matrix. yrine Soli Indicators: Indicators for Problematic Hydric Solis? Histos Chi (A1) — Polyvalue Below Surface (S9) (LRR R, MLRA 149B)	0-28	10YR5/3	100				Silty Clay	
ypc: C_Concentration, D=Depletion, RM-Reduced Matrix, CS=Covered or Coated Sand Grains. *Location: PL=Pore Lining, M=Matrix. yrdrc Soil Indicators : Indicators (1) Polyvalue Below Surface (8) (LRR K, L) Indicators for Problematic Hydric Soils*: Heitos (A1) Polyvalue Below Surface (8) (LRR K, L) Coast Praine Redox (A16) (LRR K, L, LR A 1498) Coast Praine Redox (A16) (LRR K, L, LR A 1498) Black Heitic (A3) Thin Dark Surface (8) (LRR K, L) Dapketed Matrix (F3) Ton Dark Surface (8) (LRR K, L) Depleted Delow Dark Surface (A11) Depleted Dark Surface (F6) Ton Dark Surface (F6) Ton Dark Surface (F6) Thick Oark Surface (S7) Redox Depressions (F8) Mexic Minere (12) Polymate (A14), 44, 45, 41998 Sandy Regive Matrix (S6) Redox Depressions (F8) Mexic Morace (TF12) Polymont Flootplain Surface (F12) (LRR K, L) Sandy Regive Matrix (S6) Redox Depressions (F8) Watels Coals (F10) (MLR A 144, 45, 1498) Mexic Soil CT12) (MLR A 144, 45, 1498) uctators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Setterity Circle Network) Type: Depleted field Mytric Soil Present? Yes No _ No _ marks: amarks: sample point in tilled field Sample point in tilled field Soil Present?								
ype:								
ype: C-Concentration, D=Dapletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains ² Location: PL=Pore Lining, M=Matrix, Indicators for Problematic Hydric Solis ² : 1 Histoc I (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 1498)								
ype:								
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. yrife Soil Indicators: Indicators for Problematic Hydric Soils': Helatcol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 1498) Back Hield (A3) Thin Dark Surface (S9) (LRR R, MLRA 1498) Stratified Layers (A3) Loamy Mucky Mineral (F1) (LRR K, L) Depleted Below Dark Surface (F3) Dark Surface (S9) (LRR K, L, R) Stratified Layers (A5) Loamy Oleyed Matrix (F2) Depleted Below Dark Surface (F6) Iton Managanees Masses (F12) (LRR K, L, R) Standy Macky Mineral (S1) Depleted Dark Surface (F7) Standy Macky (S4) Redox Dark Surface (F6) Standy Redox (S5) Merean Material (F2) Dark Surface (S7) Watrix (S6) Standy Redox (S5) Merean Material (F2) Dark Surface (S7) (LRR R, MLRA 1498) Other (Explain in Remarks) Metators of hydrophylic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Layer (if observed): Trip Type:								
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ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix, VS=Covered or Coated Sand Grains. ypric Soil Indicators: Indicators for "Polynalue Below Surface (S8) (LRR R, International Coast Prainfe Redox (A16) (LRR K, L, R), Black Histic (A3) Polynalue Below Surface (S8) (LRR R, MLRA 149B) Black Histic (A3) Coast Prainfe Redox (A16) (LRR K, L, R), Depleted Polynalue Below Surface (S9) (LRR K, L) Polynalue Below Surface (S8) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polynalue Below Surface (S9) (LRR K, L) Depleted Boark Surface (F7) Polynalue Below Surface (S9) (LRR K, L) Dark Surface (A12) Redox Dark Surface (F7) Poledmatrix (F2) Sandy Mucky Matrix (S4) Redox Dark Surface (F7) Poledmatrix (F2) Dark Surface (S7) (LRR R, MLRA 149B) Cother (S6) (LRR K, L), Stratece (F7) Poledmatrix (F2) Dark Surface (S7) (LRR R, MLRA 149B) Cother (S6) Into-Adarganese Masses (F12) (LRR K, L), Stratece (F7) Dark Surface (S7) (LRR R, MLRA 149B) Cother (S6) URR A, 145, 143B Strate (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) videators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. settrictic Layer (If Observed): Type: No _								
ype: Cacconcentration, D-Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains. ³ Location: PL=Pore Lining, M=Matrix, Indicators for Problematic Hydric Soils ² ; Histos Eppedon (A2) Polyvalue Below Surface (S9) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, P) Loamy Mucky Mineral (P1) (LRR K, L) Dark Surface (S7) (LRR K, L) Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Sandy Gleyed Matrix (F3) Thin Dark Surface (S7) (LRR K, L) Thin Dark Surface (S7) (LRR K, L) Sandy Gleyed Matrix (F3) Redox Dark Surface (F6) Uron-Manganese Masses (F12) (LRR K, L) Sandy Gleyed Matrix (F3) Redox Dark Surface (F7) Peledmort Floodplain Soils (F19) (MLR A 1449, 1498) Sandy Redox (S6) Redox Depressions (F8) Red Parent Material (F21) Stripped Matrix (F3) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 1498) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Sandy Gleyed Matrix (S6) User Space (T) (LRR R, MLRA 1498) Other (Explain in Remarks) variance (S7) (LRR R, MLRA 1498) Other (Explain in Remarks) <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
ype: C-Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils?: Indicators for Problematic Hydric Soils?: Histos (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 1498) 2 cm Muck (A10 (LRR K, L, RA 1498) Back Histic (A3) Thin Dark Surface (S9) (LRR K, L) Dark Surface (S7) (LRR K, L, R) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Dott Surface (S7) (LRR K, L, R) Thic Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Thic Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Predmont Floodphilm Solis (F16) (MLRA 1494, 145, 1498) Sandy Redox (S5) Sandy Clevet Matrix (S4) Red varent Material (F21) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Predmont Floodphilm Solif (F16) (MLRA 1444, 145, 1498) Getarts of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Exercitive Layer (If observed): Type:								
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Histos Dipódon (A2) MLRA 149B								
ype: C-Concentration, D-Dopletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ¹ Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ¹ : - Histosol (A1) Histo Epipedon (A2) Histosol (A3) - Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histo (A3) - Thin Dark Surface (S9) (LRR R, L, R) Depleted Below Dark Surface (A1) Depleted Dark Surface (F6) Stratified Layers (A5) Sandy Redox Marks (F2) Sandy Redox Mineral (F1) Sandy Redox Mineral (F1) Sandy Redox Mineral (F2) Sandy Redox Mineral (F1) Surface (A12) Sandy Redox Mineral (F1) Sandy Redox (S5) Sandy Redox (S5) Surface (F7) (LRR R, MLRA 149B) Meise Sopodic (TA6) (MLRA 1444, 145, 149B Surface (S7) (LRR R, MLRA 149B) Meise Sopodic (TA6) (MLRA 1444, 145, 149B Surface (S7) (LRR R, MLRA 149B) Meise Sopodic (TA6) (MLRA 1444, 145, 149B Surface (S7) (LRR R, MLRA 149B) Meise Sopodic (TA6) (MLRA 1444, 145, 149B Meise Sopodic (TA6) (MLRA 1444, 145, 149B Surface (S7) (LRR R, MLRA 149B) Meise Sopodic (TA6) (MLRA 1444, 145, 149B Meise Sopodic (TA6) (MLRA 149B Meise Sopodic (TA6) (MLRA 149B Meise								
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ype: C_Concentration, D_Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. *Location: PL=Pore Lining, M=Matrix, ydric Soil Indicators: Indicators for Problematic Hydric Soils*: Histosol (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, R) Histosol (A2) MLRA 149B) 5 cm Muck (A10) (LRR K, L, R) Phytogen Sulfde (A4) Learny Gleyed Matrix (F2) Depleted Below Surface (S9) (LRR K, L, R) Stratified Layers (A5) Learny Gleyed Matrix (F3) Thin Dark Surface (A11) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Depleted Matrix (S4) Redox Dark Surface (F6) Icm-Manganese Masses (F12) (LRR K, L, R) Sandy Kedy Mineral (S1) Depleted Dark Surface (F7) Pledmort Floodpiain Soils (F19) (MLRA 1442, 145, 149B Sandy Kedy Mineral (S1) Depleted Dark Surface (F7) Pledmort Floodpiain Soils (F19) (MLRA 1442, 145, 149B Stripped Matrix (S6) Were Solid theraint (F21) Red Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Layer (if observed): Type: Depth (inches): Mod								
Spec C-Concentration, D-Depletion, RM-Reduced Matrix, CS=Covered or Coated Sand Grains Coataion: PL-Pore Lining, M=Matrix, Indicators for Problematic Hydric Soils*: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) Coastion: PL-Pore Lining, M=Matrix, Indicators for Problematic Hydric Soils*: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A3) Coastion: PL-Pore Lining, M=Matrix, Polyvalue Below Surface (A16) (LRR K, L, MLR 149B) Coastion: PL-Pore Lining, M=Matrix, Polyvalue Below Surface (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coastion: PL-Pore Lining, M=Matrix, Polyvalue Below Surface (A16) (LRR K, L, R) Stiffied Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stiffied Matrix (C4) Depleted Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L, R) Stiffied Matrix (S1) Depleted Matrix (S1) Depleted Matrix (S1) Depleted Matrix (S1) Sandy McVy Mineral (S1) Depleted Dark Surface (S7) (LRR R, MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B Sandy McVy Mineral (S7) Pietomor Floodynia Soils (F19) (MLRA 144B) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B Sandy McVy Mineral (S1) Depleted Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Dark Surf								
ydric Soil Indicators: Indicators for Problematic Hydric Soils': Histoso (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, R) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 1492) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 1449.145, 1498) Sandy Gleyed Matrix (S6) Very Shallow Dark Surface (TF12) Depleted Cark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Depleted	Type: C=C	oncentration, D=Dep	pletion, RM=F	Reduced Matrix, CS=	Covered or Coated	d Sand Grai	ns. ² Locatio	on: PL=Pore Lining, M=Matrix.
	Hydric Soil	Indicators:					Indicators for	Problematic Hydric Soils [°] :
Initic Epipedon (A2) MLRA 1498) Coast Praine Redox (A1b) (LRR K, L, R) Black Histic (A3)	Histosol	(A1)	-	Polyvalue Below	Surface (S8) (LRR	! R,	2 cm Mucł	(A10) (LRR K, L, MLRA 149B)
Diack risku (x6)	Histic Ep	Dipedon (A2)		MLRA 149B)		DA 140D)	Coast Prai	Irie Redox (A16) (LRR K, L, R)
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Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Ton-Manganese Masses (F12) (LRR K, L, R) Depleted Dark Surface (F7) Predmont Floodphain Solis (F10) (MLRA 144A, 145, 149B Mesic Spodic (TA6) (MLRA 144A, 145, 149B	Stratified	d Lavers (A5)	-	Loamy Gleved N	latrix (F2)	-)	Polvvalue	Below Surface (S8) (LRR K. L)
	Deplete	d Below Dark Surfac	ce (A11)	Depleted Matrix	(F3)		Thin Dark	Surface (S9) (LRR K, L)
Sandy Mucky Mineral (S1)Depleted Dark Surface (F7)Piedmont Floodplain Solis (F19) (MLRA 1492 Sandy Redox (S5)Red Parent Material (F21) Stripped Matrix (S6)Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B)Other (Explain in Remarks) ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. 	Thick Da	ark Surface (A12)	_	Redox Dark Surf	ace (F6)		Iron-Mang	anese Masses (F12) (LRR K, L, R)
Sandy Gleyed Matrix (S4)Redox Depressions (F8)Mesic Spodic (TA6) (MLRA 144A, 145, 149BRed Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Depth (inches): Hydric Soil Present? Yes No _ emarks: sample point in tilled field</td <td> Sandy N</td> <td>lucky Mineral (S1)</td> <td>_</td> <td>Depleted Dark S</td> <td>urface (F7)</td> <td></td> <td>Piedmont</td> <td>Floodplain Soils (F19) (MLRA 1498</td>	Sandy N	lucky Mineral (S1)	_	Depleted Dark S	urface (F7)		Piedmont	Floodplain Soils (F19) (MLRA 1498
Sandy Redox (S5) Red Parent Material (F21) 	Sandy G	Bleyed Matrix (S4)	-	Redox Depression	ons (F8)		Mesic Spo	odic (TA6) (MLRA 144A, 145, 149B
	Sandy F	Redox (S5)					Red Parer	nt Material (F21)
	Stripped	Matrix (S6)					Very Shall	ow Dark Surface (TF12)
Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	Dark Su	$Hace(S^{\prime})(LKKK,$	WILKA 149D)					Jain in Remarks)
estrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No _	³ Indicators o	f hydrophytic vegeta	ation and wetl	and hydrology must	be present, unless	disturbed or	r problematic.	
Type:	Restrictive	Layer (if observed)	:	, ,,			•	
Depth (inches): No _ emarks: sample point in tilled field	Туре:							
emarks: sample point in tilled field	Depth (in	ches).					Hydric Soil Pre	esent? Yes No _✓
sample point in tilled field	Romarke:						•	
	Sa Sa	ample point in til	led field					

Project/Site: NW OHIO WIND	City/County: PAULDING	G CO	Sampling Da	te:
Applicant/Owner: WESTWOOD		State: OH	_ Sampling Point	: X-04 WETLAND
Investigator(s): MATTHEW VOLLBRECHT 2115	Section, Township, Range:	Sec 22 T1N	R2E	
Landform (hillslope, terrace, etc.): Flat	Local relief (con	ncave, convex, noi	ne): Side slope	e of creek
Slope (%): 5-10% Lat: 700176.4229	Long: 4544907.647		Datum: UTI	M NAD 83Z13N
Soil Map Unit Name: Sb-Saranac silty clay loam, occas	ionally flooded	NWI clas	sification: N	PFO1C
Are climatic / hydrologic conditions on the site typical for this time	e of year? Yes 🖌 No	(If no, explain i	in Remarks.)	
Are Vegetation, Soil, or Hydrology signifi	cantly disturbed? Are "Nor	mal Circumstance	es" present? Yes	✓ No
Are Vegetation, Soil, or Hydrology natura	ally problematic? (If neede	d, explain any ans	swers in Remarks	.)
SUMMARY OF FINDINGS – Attach site map sho	wing sampling point loca	ations, transe	cts, important	t features, etc.
Hydrophytic Vegetation Present? Yes No	/ Is the Sampled Are	ea		
Hydric Soil Present? Yes ✓ No	within a Wetland?	Yes _ v	/ No	_
Wetland Hydrology Present? Yes <u>✓</u> No	If yes, optional Wetl	and Site ID: We	tland sample p	point X-04
Remarks: (Explain alternative procedures here or in a separate	e report.)			
Type 7 wooded wetland				

HYDROLOGY

Wetland Hydrology Indicators: Secondary Indicators (minimum of two required Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)	Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; cf ✓ Surface Water (A1) ✓ High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes ✓ Water Table Present? Yes ✓ Mater Table Present? Yes ✓ No Saturation Present? Yes Yes ✓ No Saturation Present? Yes No Saturation Present? Yes No Cincludes capillary fringe) Describe Recorded Data (stream gauge, monitorir	meck all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (respective (C7)) Other (Explain in Remarks) ✓ Depth (inches): <u>5.0</u> Depth (inches): <u>6.0</u> Depth (inches): <u>6.0</u>	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) ✓ Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10) ✓ High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16)	Primary Indicators (minimum of one is required; ch ✓ Surface Water (A1) ✓ High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes ✓ No Water Table Present? Yes ✓ No Saturation Present? Yes ✓ No Saturation Present? Yes ✓ No Saturation Present? Yes ✓ No Saturation Present? Yes ✓ No	meck all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (in the context of the conte	Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) is (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) C6) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
✓ Surface Water (A1)	 ✓ Surface Water (A1) ✓ High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes ✓ No Nater Table Present? Yes ✓ No Saturation Present? Yes ✓ No Saturation Present? Yes ✓ No Saturation Present? Yes Mo includes capillary fringe) Describe Recorded Data (stream gauge, monitorir 	Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (reduced Iron (C4)) Thin Muck Surface (C7) Other (Explain in Remarks) ✓ Depth (inches): Depth (inches): Depth (inches):	Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) C6) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
✓ High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8)	 ✓ High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes ✓ No Naturation Present? Yes ✓ No Saturation Present? Yes ✓ No 	Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (Thin Muck Surface (C7) Other (Explain in Remarks) ✓ Depth (inches): 5.0 Depth (inches): 6.0 We	Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) is (C3)Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) C6)Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
	Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes ✓ No Nater Table Present? Yes ✓ No Saturation Present? Yes No Saturation Present? Yes No Describe Recorded Data (stream gauge, monitorir	Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (reduced Iron (C7)) Other (Explain in Remarks) ✓ Depth (inches): Depth (inches): Depth (inches):	Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) C6) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) Mo
	Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes ✓ No Nater Table Present? Yes ✓ No Saturation Present? Yes No Describe Recorded Data (stream gauge, monitorir	Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (reduced Iron (C4)) Thin Muck Surface (C7) Other (Explain in Remarks) ✓ Depth (inches):	Crayfish Burrows (C8) (C3)Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) (C6)Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8)	Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes ✓ No Nater Table Present? Yes ✓ No Saturation Present? Yes ✓ No Saturation Present? Yes No Describe Recorded Data (stream gauge, monitorir	Oxidized Rhizospheres on Living Roof Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (in the control of t	Is (C3)Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) C6)Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
	Drift Deposits (B3)Algal Mat or Crust (B4)Iron Deposits (B5)Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes ✓ No Vater Table Present? Yes ✓ No Saturation Present? Yes	Presence of Reduced Iron (C4)Recent Iron Reduction in Tilled Soils (reduction)Thin Muck Surface (C7) Other (Explain in Remarks) ✓	C6)Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) "ield Observations: ✓ Surface Water Present? Yes ✓ Surface Water Present? Yes ✓ Yet Table Present? Yes ✓ No Depth (inches): 6.0 xaturation Present? Yes ✓ No Depth (inches): 6.0 wetland Hydrology Present? Yes No Depth (inches): 6.0 ✓ Surface Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: ✓ Other Kareas within the wetland were inundated at the time of delineation ✓	Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Sield Observations: Surface Water Present? Yes ✓ No Vater Table Present? Yes ✓ No Saturation Present? Yes ✓ No Saturation Present? Yes No Nocludes capillary fringe) Describe Recorded Data (stream gauge, monitoring)	Recent Iron Reduction in Tilled Soils (Thin Muck Surface (C7) Other (Explain in Remarks) ✓ Depth (inches): 5.0 Depth (inches): 6.0 Depth (inches):	C6)Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8)	Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes ✓ No Vater Table Present? Yes ✓ No Saturation Present? Yes No Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring)	Thin Muck Surface (C7) Other (Explain in Remarks) ✓ Depth (inches): 5.0 Depth (inches): 6.0 Depth (inches): We	Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: ✓ ✓ Surface Water Present? Yes ✓ Vater Table Present? Yes ✓ Vater Table Present? Yes ✓ Saturation Present? Yes No Depth (inches): 6.0 ✓ Saturation Present? Yes No Depth (inches): Includes capillary fringe) No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Image: Saturation Saturation the wetland were inundated at the time of delineation Image: Saturation	Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes ✓ No Vater Table Present? Yes ✓ No Saturation Present? Yes No includes capillary fringe) Describe Recorded Data (stream gauge, monitorir	Other (Explain in Remarks) ✓ Depth (inches): 5.0 Depth (inches): 6.0 Depth (inches):	Microtopographic Relief (D4) FAC-Neutral Test (D5)
Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations:	Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes Nater Table Present? Yes Yes ✓ No No Saturation Present? Yes Yes Yes No No Saturation Present? Yes No No No No No No No No No No Saturation Present? Yes No No Saturation Present? Yes No No No No No No No No No No </td <td>✓ Depth (inches): 5.0 Depth (inches): 6.0 Depth (inches): ₩e</td> <td>FAC-Neutral Test (D5) </td>	✓ Depth (inches): 5.0 Depth (inches): 6.0 Depth (inches): ₩e	FAC-Neutral Test (D5)
Field Observations:	Field Observations: Surface Water Present? Yes ✓ No Vater Table Present? Yes ✓ No Vater Table Present? Yes ✓ No Vaturation Present? Yes No includes capillary fringe) Describe Recorded Data (stream gauge, monitorir	✓ Depth (inches): 5.0 Depth (inches): 6.0 Depth (inches): ₩e	tland Hydrology Present? Yes No
Surface Water Present? Yes V No Depth (inches): 5.0 Vater Table Present? Yes V No Depth (inches): 6.0 Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Other Kareas within the wetland were inundated at the time of delineation	Surface Water Present? Yes <mark>✓ No</mark> Vater Table Present? Yes <mark>✓ No</mark> <u>Saturation Present? Yes No</u> includes capillary fringe) Describe Recorded Data (stream gauge, monitorir	Depth (inches): 5.0 Depth (inches): 6.0 Depth (inches): We	etland Hydrology Present? Yes No
Water Table Present? Yes ✓ No Depth (inches): 6.0 Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Image: Comparison of the stream gauge in the stream gau	Vater Table Present? Yes <u>✓ No</u> Saturation Present? Yes No includes capillary fringe) Describe Recorded Data (stream gauge, monitorir	Depth (inches): 6.0	etland Hydrology Present? Yes No
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Second Secon	Saturation Present? Yes No includes capillary fringe) Describe Recorded Data (stream gauge, monitorir	Depth (inches):	etland Hydrology Present? Yes No
includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 연대관양areas within the wetland were inundated at the time of delineation	includes capillary fringe) Describe Recorded Data (stream gauge, monitorir	Depiri (inches).	
Othek areas within the wetland were inundated at the time of delineation		ng well, aerial photos, previous inspections	s), if available:
	Cometrareas within the wetland were inc	undated at the time of delineation	
VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 Carya ovata	45	Yes	FACU	Number of Dominant Species
2 Robinia pseudoacacia	10	No	FACU	
2				Total Number of Dominant Species Across All Strate: 4 (B)
3				
4				Percent of Dominant Species That Are OBL_EACW_or EAC: 25 (A/B)
5				
6	<u> </u>	·		Prevalence Index worksheet:
Total Cover				Total % Cover of: Multiply by:
50% of total cover: <u>27.5</u>	20% o	f total cove	r: <u>11</u>	OBL species 0 $x = 0$
Sapling/Shrub Stratum (Plot size: 30)				FACW species 0 $x^2 = 0$
1. Lonicera japonica	15	Yes	FACU	FAC species 23 $x_3 = 73$
2				FACU species 0 $x = 0$
3				Column Totals: 110 (A) 415 (B)
4				
5				Prevalence Index = $B/A = 3.77$
6.				Hydrophytic Vegetation Indicators:
Total Cover	. 15			Rapid Test for Hydrophytic Vegetation
500 (1.1.1. 7.5			3	Dominance Test is >50%
50% of total cover: 7.5	20% 01	total cover		Prevalence Index is ≤3.0 ¹
A Carex blanda	25	Yes	FAC	Morphological Adaptations ¹ (Provide supporting
Trillium sessile	15	Ves	FACIL	Problematic Hydrophytic Vegetation ¹ (Explain)
		163	1700	
3		·		¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5	. <u> </u>			Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cover:	40			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: 20	20% 0	f total cover	-8	height.
Woody Vine Stratum (Plot size: 30)	_			
1.				
2				
2				
3				Vegetation
4	0			Present? Yes No ✓
			0	
50% of total cover: <u>0</u>	20% of	total cover	<u>. 0</u>	
Remarks: (Include photo numbers here or on a separate sl	neet.)			
Portions of the wetland outside the corridor at th	e same	elevation	were do	minated by more wetland species
				•

Profile Desc	ription: (Describe	to the dep	oth needed to docu	ment the	indicator	or confirm	rm the absence of indicators.)	
Depth	Matrix		Redo	ox Feature	s		_	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²	Texture Remarks	_
0-16	10YR3/2	100					Loam	_
16-22	10YR6/1	75	10YR5/8	25	С	Μ	Silty Clay	
								-
								-
				_				_
								-
								_
		_						-
								-
								_
				_				-
								_
								_
¹ Type: C=Co	oncentration, D=Dep	letion, RN	=Reduced Matrix, C	S=Covere	d or Coate	ed Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.	
Hydric Soil	Indicators:		,				Indicators for Problematic Hydric Soils ³ :	
Histosol	(A1)		Polyvalue Belo	w Surface	e (S8) (LR	R R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)	
Histic Ep	pipedon (A2)		MLRA 149B)			Coast Prairie Redox (A16) (LRR K, L, R)	
Black Hi	stic (A3)		Thin Dark Surfa	ace (S9) (LRR R, M	LRA 149E	B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)	
Hydroge	en Sulfide (A4)		Loamy Mucky I	Mineral (F	1) (LRR 🖌	K, L)	Dark Surface (S7) (LRR K, L)	
Stratified	d Layers (A5)	(Loamy Gleyed	Matrix (F2	2)		Polyvalue Below Surface (S8) (LRR K, L)	
✓ Depleted	d Below Dark Surfac	e (A11)	Depleted Matrix	х (F3) 			Thin Dark Surface (S9) (LRR K, L)	
Thick Da	Ark Surrace (A12) Aucky Mineral (S1)		Redox Dark St	Surface (F6)) =7)		Iron-Manganese Masses (F12) (LRR N, L, R) Piedmont Eloodplain Soils (E19) (MI BA 149	2)
Sandy R	leved Matrix (S4)		Depleted Dark	sions (F8)	")		Mesic Spodic (TA6) (MI RA 144A, 145, 149B	3) ()
Sandy R	Redox (S5)						Red Parent Material (F21)	,
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)	
Dark Su	rface (S7) (LRR R, I	MLRA 149	B)				Other (Explain in Remarks)	
³ Indicators of	f hydrophytic vegeta	tion and w	etland hydrology mus	st be pres	ent, unles	s disturbed	ed or problematic.	
Restrictive I	Layer (if observed):							
Туре:								
Depth (ind	ches):						Hydric Soil Present? Yes ✓ No	-
Remarks:	,							

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NW OHIO WIN	D		Citv/Countv:	PAULDING	СО	Sampling Date: 4/16/2013 7:30:39 PM	
Applicant/Owner: WESTWOO	D		. , ,		_{State:} OH	Sampling Point: Y-01 UPLAND	
Investigator(s): MATTHEW V	OLLBRECHT	2115	Section Toy	nshin Range	Sec 23 T1N F	R2E	
Landform (hillslope terrace etc.)	Flat			ocal relief (conc	ave convex non	e). Flat	
Slope (%): 0-5% Lat: 70			454	4422.054		Datum: UTM NAD 83Z13N	
Coil Man Linit Name: C-Latty	silty loam		Long.			Datum	
Soli Map Unit Name:				7			
Are climatic / hydrologic condition	is on the site typic	al for this time of ye	ear? Yes <u>v</u>	No	_ (If no, explain ir	n Remarks.)	
Are Vegetation, Soil	, or Hydrology _	significantly	y disturbed?	Are "Norm	al Circumstances	s" present? Yes <u>√</u> No	
Are Vegetation, Soil	, or Hydrology _	naturally pr	roblematic?	(If needed	, explain any ans	wers in Remarks.)	
SUMMARY OF FINDINGS	6 – Attach site	e map showing	g sampling	j point locat	ions, transec	ts, important features, etc.	
Hvdrophytic Vegetation Present	? Yes	No ✓	Is the	Sampled Area	a		
Hydric Soil Present?	Yes	No ✓	withi	n a Wetland?	Yes	No _ ✓	
Wetland Hydrology Present?	Yes	No _✓	. If yes	, optional Wetla	nd Site ID: Upla	and sample point Y-01	
Remarks: (Explain alternative p	procedures here or	r in a separate repo	ort.)				
Upland sample point adja	cent to wetlan	d located in the	e bed of an	agricultural c	litch		
HYDROLOGY							
Wetland Hydrology Indicators	5: 				Secondary Ind	cit Oracles (DO)	
Primary Indicators (minimum of	one is required; c	neck all that apply)	(D0)		Surface S	OII Cracks (B6)	
Ligh Water Table (A2)		vvater-Stained	a (B13) Moss Trim Lines (B16)				
Saturation (A3)		Marl Deposits	(B15)			$\frac{1}{2} \text{ Lines (D10)}$	
Water Marks (B1)		Hvdrogen Sulf	lfide Odor (C1) Crayfish Burrows (C8)				
Sediment Deposits (B2)		Oxidized Rhizo	ospheres on L	iving Roots (C3) Saturation	Visible on Aerial Imagery (C9)	
Drift Deposits (B3)		Presence of R	educed Iron (C4)	Stunted of	r Stressed Plants (D1)	
Algal Mat or Crust (B4)		Recent Iron Re	eduction in Til	led Soils (C6)	Geomorph	nic Position (D2)	
Iron Deposits (B5)		Thin Muck Sur	rface (C7)		Shallow A	quitard (D3)	
Inundation Visible on Aerial	I Imagery (B7)	Other (Explain	n in Remarks)		Microtopo	graphic Relief (D4)	
Sparsely Vegetated Concar	ve Surface (B8)				FAC-Neut	ral Test (D5)	
Field Observations:							
Surface Water Present?	Yes No <u>✓</u>	Depth (inches	s):	<u> </u>			
Water Table Present?	Yes No _✓	Depth (inches	s):	—			
Saturation Present?	Yes No _✓	Depth (inches	s):	Wetland	I Hydrology Pres	sent? Yes No _✓	
Describe Recorded Data (stream	m gauge, monitori	ng well, aerial phot	tos, previous i	nspections), if a	vailable:		
Demorker							
Remarks.							

VEGETATION – Use scientific names of plants.

Sampling Point: Y-01 UPL

Tree Stratum (Plot size: 30) % Cover Species? Status Dominance rest worksheet. 1 That Are OBL, FACW, or FAC: 0 (A)	
1 That Are OBL, FACW, or FAC: (A)	
)
2 Total Number of Dominant	
3. Species Across All Strata: 1 (B))
That Are OBL_EACW_or_EAC: 0	/B)
5	0)
6 Prevalence Index worksheet:	
Total Cover: 0 Total % Cover of: Multiply by:	
50% of total cover: 0 20% of total cover: 0 OBL species 0 x 1 = 0	
Sapling/Shrub Stratum (Plot size: 30) FACW species 0 x 2 = 0	
FAC species 0 $x_3 = 0$	
FACU species 0 x 4 = 0	
2 UPL species 100 x 5 = 500	
^{3.} Column Totals: 100 (A) 500 (B	B)
4	
5 Prevalence Index = B/A =	
6. Hydrophytic Vegetation Indicators:	
Tatal Causer 0 Rapid Test for Hydrophytic Vegetation	
Dominance Test is >50%	
50% of total cover: 0 20% of total cover: 0 Prevalence Index is $\leq 3.0^1$	
Herb Stratum (Plot size: 5)	
<u>I Diorido incrinio</u> <u>I CO</u> <u>I CO</u> <u>OT E</u> data in Remarks of on a separate sneet)	
3 Indicators of hydric soil and wetland hydrology must	+
4	•
5. Definitions of Versetation Strates	
Tree – Woody plants 3 in. (7.6 cm) or more in diameter	ter
^{o.} Sapling/shrub – Woody plants less than 3 in. DBH	
10 Herb – All herbaceous (non-woody) plants, regardless	SS
Total Cover: <u>100</u> Woody vines – All woody vines greater than 3.28 ft ir	in
50% of total cover: <u>50</u> 20% of total cover: <u>20</u>	
Woody Vine Stratum (Plot size: 30	
1.	
^{3.} Hydrophytic	
^{4.} Present? Yes No √	
Total Cover: 0	
50% of total cover: 0 20% of total cover: 0	
Remarks: (Include photo numbers here or on a separate sheet.)	

Depth	Matrix		Redox Features		
(inches)	Color (moist)		Color (moist) % Type ¹ Loc ²	Texture	Remarks
0-25	10YR5/3	100		Silty Clay	
		·		·	
				·	
		·			
				·	
				·	
		·		·	
				·	
				·	
Type: C=C	oncentration, D=Dep	oletion, RM=	Reduced Matrix, CS=Covered or Coated Sand G	irains. ² Location	n: PL=Pore Lining, M=Matrix.
Hydric Soli	Indicators:			Indicators for I	
Histosol	(A1) ninedon (A2)		Polyvalue Below Surface (S8) (LRR R,	2 cm Muck	(A10) (LRR K, L, MLRA 149B) tie Redox (A16) (LRP K, L, P)
Black H	istic (A3)		Thin Dark Surface (S9) (LRR R. MLRA 1498	$\frac{1}{5}$ cm Muck	v Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR K, L)	Dark Surfa	ce (S7) (LRR K, L)
Stratifie	d Layers (A5)		Loamy Gleyed Matrix (F2)	Polyvalue B	Below Surface (S8) (LRR K, L)
Deplete	d Below Dark Surfac	e (A11)	Depleted Matrix (F3)	Thin Dark S	Surface (S9) (LRR K, L)
Thick Da	ark Surface (A12)		Redox Dark Surface (F6)	Iron-Manga	anese Masses (F12) (LRR K, L, R)
Sandy N	Mucky Mineral (S1)		Depleted Dark Surface (F7)	Piedmont F	Floodplain Soils (F19) (MLRA 149B)
Sandy C	Beyed Matrix (S4)		Redox Depressions (F8)	Mesic Spoo	dic (TA6) (MLRA 144A, 145, 149B)
Sanuy r	(35) Matrix (S6)			Very Shalle	w Dark Surface (TE12)
Dark Su	urface (S7) (LRR R. I	MLRA 149B)	Other (Exp	lain in Remarks)
			,		,
³ Indicators o	f hydrophytic vegeta	tion and we	tland hydrology must be present, unless disturbed	d or problematic.	
Restrictive	Layer (if observed)				
Type:					
Depth (in	ches):			Hydric Soil Pres	sent? Yes No _✓
Remarks:					

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NW OHIO WIND	City/County: PAU	JLDING CO	Sampling Date: 4/16/2013 6:12:04 PM
Applicant/Owner: WESTWOOD		_{State:} OH	Sampling Point: Y-01 WETLAND
Investigator(s): MATTHEW VOLLBRECHT 2115	Section Townshir	Range Sec 23 T1N	R2E
Landform (billslope terrace etc.). Flat		elief (concave, convex, no	ne). Side slope of ditch
Clane (0/) 5-10% Lat 701613 4138	4544421	651	Deturn UTM NAD 83713N
Slope (%): Lat Lat Lat	_ Long:		
Soil Map Unit Name: Sity Sity Clay	/	NWI clas	sification: <u>Not mapped</u>
Are climatic / hydrologic conditions on the site typical for this time of y	vear?Yes 🔽 I	No (If no, explain	in Remarks.)
Are Vegetation, Soil, or Hydrology significant	y disturbed?	Are "Normal Circumstance	es" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally p	roblematic?	(If needed, explain any an	swers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling poi	nt locations, transe	cts, important features, etc.
	Is the Sam	pled Area	
Hydrophydre vegetation resent? res No	within a W	etland? Yes	/ No
Wetland Hydrology Present? Yes ✓ No	- If ves, optic	nal Wetland Site ID: We	tland sample point Y-01
Remarks: (Explain alternative procedures here or in a separate rep	ort.)		
Wetland located in the bed of an agricultural ditch			
Wetland Hydrology Indicators:		Secondary In	dicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)	<u>Surface</u>	Soil Cracks (B6)
Surface Water (A1)			Pottorno (P10)
✓ High Water Table (A2)		Drainage Moss Tri	m Linos (B16)
✓ Fight Water Table (A2) Aqualit Fault	a (B15)		son Water Table (C2)
Water Marks (B1)	fide Odor (C1)	Dry Oca. Cravfish	Burrows (C8)
Sediment Deposits (B2)	rospheres on Living	Roots (C3) Saturatio	n Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of F	Reduced Iron (C4)	Stunted of	or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron R	eduction in Tilled So	oils (C6) Geomorr	phic Position (D2)
Iron Deposits (B5)	Irface (C7)	Shallow /	Aquitard (D3)
I Inundation Visible on Aerial Imagery (B7) Other (Explain	n in Remarks)	Microtop	ographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		✓ FAC-Neu	utral Test (D5)
Field Observations:			
Surface Water Present? Yes No ✓ Depth (inche	s):		
Water Table Present? Yes <u>✓</u> No Depth (inche	s): <u>5.0</u>		
Saturation Present? Yes <u>✓</u> No Depth (inche	s): <u>6.0</u>	Wetland Hydrology Pre	esent? Yes <u>√</u> No
(includes capillary fringe)		tione) if eveilebles	
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspec	tions), if available:	
Remarks:			

VEGETATION – Use scientific names of plants.

Sampling Point: Y-01 WET

Trac Stratum (Distaires 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u></u>)	<u>% Cover</u>	<u>Species</u> ?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:(A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
Total Cove	r: <u>0</u>			Total % Cover of:Multiply by:
50% of total cover: 0	20% c	of total cove	er: 0	OBL species <u>70</u> x 1 = <u>70</u>
Sapling/Shrub Stratum (Plot size: <u>30</u>)				FACW species 0 $x 2 = 0$
1				FAC species 0 x 3 = 0
2.	_			FACU species 0 x 4 = 0
3				UPL species $\frac{0}{70}$ x 5 = $\frac{0}{70}$
0				Column Totals: <u>70</u> (A) <u>70</u> (B)
4				Prevalence Index = $B/A = 1$
5		·		
6			·	Hydrophytic Vegetation Indicators:
Total Cove	er: 0			Rapid Test for Hydrophytic Vegetation
50% of total cover: 0	20% o	f total cove	r: <u>0</u>	\checkmark Dominance rest is >50%
Herb Stratum (Plot size: 5)				Morphological Adaptations ¹ (Provide supporting
1. Carex lacustris	70	Yes	OBL	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
4				¹ Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed of problematic.
				Definitions of Vegetation Strata:
o				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
/			·	at breast height (DBH), regardless of height.
8			·	Sapling/shrub – Woody plants less than 3 in. DBH
9			·	and greater than 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cove	r: <u>70</u>			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: <u>35</u>	20% c	of total cove	r: <u>14</u>	neight.
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2.				
3				Hudronhutio
A				Vegetation
Tetel Cour				Present? Yes 🗸 No
			0	
50% of total cover: 0	20% o	f total cove	r: 0	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Profile Desc	cription: (Describe	to the dept	h needed to docur	nent the i	ndicator	or confirm	m the absence of indicators.)
Depth	Matrix		Redo	x Features	s	0	-
(inches)	Color (moist)	%	Color (moist)		Type'	_Loc ²	Texture Remarks
0-10	10YR3/1	100					Muck
10-20	10YR6/1	100					Silty Clay
				·			
				·			
				·			
				·			
				·			
				·			
<u> </u>							
¹ Type: C=C	oncentration, D=De	pletion, RM=I	Reduced Matrix, CS	S=Covered	d or Coate	ed Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for Problematic Hydric Soils':
Histosol	(A1)	-	Polyvalue Belov	w Surface	(S8) (LRI	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Ep	pipedon (A2)		MLRA 149B				Coast Prairie Redox (A16) (LRR K, L, R)
Black Hi	istic (A3)	-	Thin Dark Surfa	ice (S9) (L		LRA 1498	B)5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)	-	Loamy Mucky N	/lineral (F1	1) (LRR K	., L)	Dark Surface (S7) (LRR K, L)
Stratified	d Layers (A5) d Bolow Dark Surfa	-	Loarny Gleyed Doploted Matrix	(E2))		Thip Dark Surface (S8) (LRR K, L)
Thick Da	ark Surface (A12)		Depleted Math	rface (F6)			Iron-Manganese Masses (E12) (I RR K I R)
Sandy M	Aucky Mineral (S1)	-	Depleted Dark	Surface (F	7)		Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy G	Gleved Matrix (S4)	-	Redox Depress	ions (F8)	,		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy R	Redox (S5)	-					Red Parent Material (F21)
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)
Dark Su	rface (S7) (LRR R,	MLRA 149B)				Other (Explain in Remarks)
		- ,					
³ Indicators o	f hydrophytic vegeta	ation and wet	land hydrology mus	t be prese	ent, unless	s disturbed	d or problematic.
Restrictive I	Layer (if observed)	:					
Type:							
Depth (in	ches).						Hydric Soil Present? Yes ✓ No
Deput (int							
Remarks:							

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NW OHIO W	'IND	Citv/	County: PAULDING	G CO	Sampling Date: 4/16/2013 7:24:16 PM	
Applicant/Owner: WESTW	OOD			State: OH	Sampling Point: Z-01 UPLAND	
Investigator(s): MATTHEV	V VOLLBRECHT 21	115 Sect	ion Townshin Range	Sec 24 T1N R2	2E	
Landform (billslone, terrace, e		0000	Local relief (cor	·	. Flat	
Clana (0) , 0-5%	704013,2816	Long	4545342.168	icave, convex, none)	Datum: UTM NAD 83Z13N	
		LONQ		NNA// 1	Not Mapped	
Soil Map Unit Name:			1	NVVI classifi	cation: Not Mapped	
Are climatic / hydrologic condi	tions on the site typical f	for this time of year?	Yes ⊻ No	(If no, explain in I	Remarks.)	
Are Vegetation, Soil	, or Hydrology	significantly distu	Irbed? Are "Nor	mal Circumstances"	present? Yes 🖌 No	
Are Vegetation, Soil	, or Hydrology	naturally problem	natic? (If neede	ed, explain any answe	ers in Remarks.)	
SUMMARY OF FINDIN	GS – Attach site r	map showing sa	mpling point loca	ations, transects	s, important features, etc.	
Hydrophytic Vegetation Pres	sent? Yes	No	Is the Sampled Are	ea		
Hydric Soil Present?	Yes	No	within a Wetland?	Yes	No✓	
Wetland Hydrology Present?	? Yes	No	If yes, optional Wet	land Site ID: Uplar	id sample point Z-01	
Remarks: (Explain alternativ	/e procedures here or in	a separate report.)				
Upland sample point a	djacent to wetland I	ocated in road dit	ch			
HYDROLOGY						
Wetland Hydrology Indicat	tors:			Secondary Indic	ators (minimum of two required)	
Primary Indicators (minimum	n of one is required; chec	ck all that apply)		Surface Soi	Cracks (B6)	
Surface Water (A1)		_ Water-Stained Leav	es (B9)	Drainage Pa	atterns (B10)	
High Water Table (A2)	_	Aquatic Fauna (B13	(B13) Moss Trim Lines (B16)			
Saturation (A3)	_	Marl Deposits (B15)		Dry-Season	Water Table (C2)	
Water Marks (B1)	_	Hydrogen Sulfide O	dor (C1)	Crayfish Bu	rrows (C8)	
Sediment Deposits (B2)		Oxidized Rhizosphe	res on Living Roots (C	3) Saturation \	/isible on Aerial Imagery (C9)	
Drift Deposits (B3)		Presence of Reduce	ed Iron (C4)	Stunted or S	Stressed Plants (D1)	
Algal Mat or Crust (B4)		_ Recent Iron Reducti		Geomorphic	viterd (D2)	
Inundation Visible on Ac	mial Imageny (B7)	Other (Explain in Re	(C7)	Shallow Aqu	anhic Relief (D4)	
Sparsely Vegetated Cor	nai inagery (D7)		illaiks)	EAC-Neutra	I Test (D5)	
Field Observations:						
Surface Water Present?	Yes No.√	Depth (inches):				
Water Table Present?	Yes No ✓	_ Depth (inches):				
Saturation Present?	Yes No ✓	Depth (inches):	Wetlar	nd Hydrology Prese	nt? Yes No.√	
(includes capillary fringe)						
Describe Recorded Data (st	ream gauge, monitoring	well, aerial photos, pr	evious inspections), if	available:		
Remarks:						

VEGETATION – Use scientific names of plants.

Sampling Point: Z-01 UPL

20	Absolute	Dominant I	ndicator	Dominance Test worksheet
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata:(B)
4.				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
3	·			
б	0			Prevalence Index worksheet:
Total Cove	r: <u>0</u>			Total % Cover of:Multiply by:
50% of total cover: 0	20% c	of total cover:	0	OBL species $\frac{0}{2}$ x 1 = $\frac{0}{2}$
Sapling/Shrub Stratum (Plot size: 30)				FACW species 0 $x 2 = 0$
1				FAC species 0 $x_3 = 0$
2.				FACU species 100 x 4 = 400
3				UPL species 0 $x 5 = 0$
0				Column Totals: <u>100</u> (A) <u>400</u> (B)
4	·			Prevalence Index = $B/A = 4$
5				
6	·			Hydrophytic Vegetation Indicators:
Total Cove	r: <u>0</u>			Rapid Test for Hydrophytic Vegetation
50% of total cover: 0	20% o	f total cover:	0	Dominance Test is >50%
Herb Stratum (Plot size: 5				Prevalence Index is ≤3.0'
1. Dactylis glomerata	100	Yes	FACU	Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3.				
4.				Indicators of hydric soil and wetland hydrology must
5	·			
	·			Definitions of Vegetation Strata:
o				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7	·			at breast height (DBH), regardless of height.
8	·			Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10	·			Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Cover	100			Woody vines – All woody vines greater than 3.28 ft in
50% of total cover: 50	20% c	of total cover:	20	height.
Woody Vine Stratum (Plot size: 30		••••••		
(1 lot 0.20)				
	·			
2				
3				Hydrophytic
4				Present? Yes No V
Total Cove	r: 0			
50% of total cover: 0	20% o	f total cover:	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

D-15 10YR5/3 100 Silty Clay 15-22 10YR6/2 100 Silty Clay IS-22 10YR6/2 100 Silty Clay IS-22 10YR6/2 100 Silty Clay IS-23 10YR6/2 100 Silty Clay IS-24 IS-25 10YR6/2 100 IS-25 IS-26 IS-26 IS-26 IS-25 IS-26 IS-26 IS-26 IS-25 IS-26 IS-26 IS-26 IS-25 IS-26 IS-26 IS-26 Is-26 IS-26	(inches)	Color (moist)	%	Color (moist)	% Tvne	¹ Loc ²	Texture	Remarks
15-22 10YR6/2 100 Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Clay Image: Silty Silty Clay Image: Silty Silt	0-15	10YR5/3	100				Silty Clay	
Type: C-Concentration, D-Depletion, RM-Reduced Matrix, CS=Covered or Coated Sand Grains. *Location: PL=Pote Lining, M=Matrix. Type: C-Concentration, D-Depletion, RM-Reduced Matrix, CS=Covered or Coated Sand Grains. *Location: PL=Pote Lining, M=Matrix. Vydric Soll Indicators: Indicators for Problematic Hydric Solis*: Helatool (A1) Polyvalue Balow Surface (S8) (LRR R, MLRA 1498) Helatool (A2) MLRA 1498) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 1498) Sonth Mucky Dark Surface (A11) Depleted Balow Surface (S9) (LRR K, L) Depleted Balow Lark Surface (A12) Redox Dark Surface (F7) Sandy Mucky Mineral (F1) Depleted Balow Surface (S9) Sandy Mucky Mineral (S1) Depleted Balow Surface (S9) Sandy Mucky Mineral (S1) Depleted Balow Surface (S9) Sandy Mucky (S6) Imon-Marganese Masses (F12) (LRR K, L, R) Sandy Alexy (S5) Red Parent Material (F21) Surface (A12) Redox Depressions (F8) Sandy Alexy Marea (S5) Red Parent Material (F21) Dark Surface (S5) Red Parent Material (F21) Surface (S7) (LRR K, I, R) Polytophytic vegetation and wetand hydrology must be present, unless disturbed or problematic: Type:	15-22	10YR6/2	100				Silty Clav	
Type: C-Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains *Location: PL=Pore Lining, M=Matrix. Indicators in the constraint of the constraint on the constraint of the constraint of the constraint of the constraint of the constraint on the const								
Pype: C-Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ¹ Location: PL=Pore Lining, M=Matrix. Indicators Indicators for Problematic hydric Solis ² : Indicators for Problematic hydric Solis ² : Histos (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 149B) Coast Prairie Reduced (A16) (LRR K, L) Statilied Layers (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Reduced (A16) (LRR K, L) Statilied Layers (A4) Loamy Mucky Mineral (F1) (LRR K, L) Depleted Matrix (F2) Polytakes (A12) Redox Dark Surface (F6) Inon-Amaganese Masses (F12) (LRR K, L) Statilied Layers (A5) Loamy Mucky Mineral (F2) Polytake Below Surface (S9) (LRR K, L) Sandy Glayed Matrix (S4) Redox Depressions (F8) Plextmont Floodards Surface (T42) (LRR K, L) Sandy Glayed Matrix (S6) Redox Depressions (F8) Red Parent Material (F21) Sandy Glayed Matrix (S6) Plextmont Floodards Surface (T42) Very Shallw Data Surface (T42) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Charles (S7) (LRR R, MLRA 149B) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Test (T12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Material (S6)							·	
Type:								
Type: C-Concentration, D-Depletion, RN=Reduced Matrix, CS-Covered or Coated Sand Grains. ¹ Location: PL=Pore Lining, M=Matrix, M=Matrix, Matrix,								
Type: C-Concentration, D=Depletion, RM-Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Indicators: Indicators: Indicators: Indicators: Histos(10,1) Polyvalue Below Surface (S9) (LRR R, MLRA 1498) Coast Parianis Redox (A10) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 1499) S om Mucky Pear or Pate (S3) (LRR K, L, R) Depleted Batrix (F3) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, R) Stards Worky Mineral (S1) Depleted Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Matrix (F3) Thin Dark Surface (S7) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Prelemont Floodplain Solis (F19) (MLRA 149) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Prelemont Floodplain Solis (F19) (MLRA 149, 145, 149E Sandy Rudky Mineral (S1) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144, 145, 149E) Sandy Rudky Mineral (S1) Depleted Dark Surface (F7) Prelemont Floodplain Solis (F19) (MLRA 149E) Sandy Rudky (S5) Wary Shallow Dark Surface (TF12) Dark Surface (S7) (LRR K, L, R) Swirpoet Matrix (S4) Redox Depressions (F8) Other (Explain in Remarks) <t< td=""><td></td><td>_</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>		_						
Expe:								
Type: C-Concentration, D-Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains. ¹ Location: PL=Pore Lining, M-Matrix, Indicators for Problematic Hydric Soils ¹ : Histocs (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, R) Histoc Site (A2) MLRA 149B 5 cm Mucky Peat or Polyvalue Below Surface (S9) (LRR R, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S9) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Dark Surface (F2) Phytogen Sulface (A2) Stratified Layers (A5) Loamy Mucky Mineral (F1) Thin Dark Surface (S9) (LRR K, L) Stratified Layers (A5) Depleted Dark Surface (F7) Thin Dark Surface (S9) (LRR K, L, R) Sandy Retox (S6) Redox Dark Surface (F7) Preforment Floathan Soils (F19) (MLRA 148, 145, 149E Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Preforment Material (F21) Stripped Matrix (S6) Loar Surface (S7) (LRR K, L, R) Stratee (T20) (MLRA 144A, 145, 149E Sandy Retox (S5) Loar Surface (S7) (LRR K, MLRA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. The peth (inches): Type:			-					
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. *Location: PL=Pore Lining, M=Matrix. Vytric Soil Indicators: Indicators for Problematic Hydric Soils? Indicators for Problematic Hydric Soils? Histosci (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, RA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Muck Peat or Peat (S3) (LRR K, L, R) Depleted Solitide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, R, L) Startilied Layers (A5) Loamy Mucky Mineral (F2) Polyvalue Below Surface (S8) (LRR K, L, L) Sandy Mucky Mineral (S1) Depleted Matrix (F3) Thin Dark Surface (S7) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodphilm Soils (F18) (MLRA 149B) Sandy Mucky Mineral (S4) Redox Dark Surface (F7) Piedmont Floodphilm Soils (F18) (MLRA 149B) Sandy Redox (S5) Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (F12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. cestrictive Layer (if Observed): Yes No \checkmark Poperiod Beinery Yes							·	
Type: C-Concentration, D-Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains. ¹ Location: PL=Pore Lining, M=Matrix. Ydric Soil Indicators: Indicators for Problematic Hydric Soils?: Indicators for Problematic Hydric Soils?: Histosoi (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, R), Coast Prains Redox (A16) (LRR K, L, R), Black Histic (A3) Thin Dark Surface (S9) (LRR K, L) Dark Surface (S3) (LRR K, L) Dark Surface (S3) (LRR K, L) Startified Layers (A5) Loamy Mucky Matria (F1) Depleted Matrix (F2) Dark Surface (S9) (LRR K, L) Depleted Wow Dark Surface (A11) Depleted Matrix (F2) Thin Dark Surface (S9) (LRR K, L) Inon-Manganese Masses (F12) (LRR K, L) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Peldent Matrix (S4) Redox Dark Surface (F7) Peldent Matrix (S4) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spade (TA14, L45, 149E Red Parent Material (F21) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spade (TF12) Cother (Explain in Remarks) Sand							·	
Fype: C-Concentration, D-Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains. *Location: PL-Pore Lining, M-Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils? Indicators for Problematic Hydric Soils? Histoc Epipeton (A2) MLRA 1498) Coast Prairie Redox (A16) (LRR K, L, R) Hydrogen Sulfide (A4) Learny Gleyed Matrix (F3) Dany Gleyed Matrix (F3) Dany Gleyed Matrix (F3) Stratified Layers (A5) Learny Gleyed Matrix (F3) Thin Dark Surface (S9) (LRR K, L, R) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Pledmont Floodplain Soils (F19) (MLRA 1439, 139E Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Pledmont Floodplain Soils (F19) (MLRA 1448, 145, 149E Sandy Gleyed Matrix (S6) Meterial (F21) Very Shallow Dark Surface (F71) Sharb Redox (S5) Geed Parent Material (F21) Very Shallow Dark Surface (F12) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No Explain Hydric Soil Present? Yes No Mor Other (Explain in Remarks) Hydric Soil P							·	
Type: C-Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. *Location: PL=Pore Lining, M=Matrix, Vydric Soil Indicators for Problematic Hydric Soils?: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Coaster Prairie Redox (A16) (LRR K, L, R) Histosol (A2) MLRA 149B) Coaster Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) S orn Mucky Peat or Peat (S3) (LRR K, L, R) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Depleted Below Dark Surface (A12) Redox Dark Surface (F6) Thin Dark Surface (S1) (LRR K, L, R, L, R, Sandy Mucky Mineral (S1) Sandy Redox (S5) Sandy Redox (S5) Sendy Redox (S5) Redox Depressions (F6) Stripped Matrix (S4) Redox Depressions (F6) Wesic Spoid: (TA6) (MLR A 144A, 145, 149E Sandy Redox (S5) Stripped Matrix (S4) Redox Depressions (F7) Piedmont Floodplain Solis (F19) (MLRA 144A, 145, 149E Sandy Redox (S5) Stripped Matrix (S4) Redox Depressions (F8) Mesic Spoid: (TA6) (MLR A 144A, 145, 149E Sandy Redox (S5) Stripped Matrix (S4) Redox Depressions (F7) Piedmont Floodplain Solis (F19) (MLR A 144A, 145, 149E Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
Type: C=Concentration; D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ^1_location: PL=Pore Lining, M=Matrix. Varic Soil Indicators: Indicators for Problematic Hydric Soils ² : Indicators for Problematic Hydric Soils ² . Histos (1(A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MIR.A 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Phytogen Surface (A11) Depleted Boark Surface (F7) Thin Dark Surface (S8) (LRR K, L) Depleted Boark Surface (A12) Redox Dark Surface (F6) Trin Dark Surface (S10) (LRR K, L), R) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Predomort Hoodpian Soils (F19) (MLRA 1495) Sandy Redox (S5) Redox CS5) Red Parent Material (F21) Stripped Matrix (S4) Redox CS7) (LRR K, L) Dark Surface (S7) (LRR K, L), R Dark Surface (S7) (LRR K, L) Dark Surface (S7) (LRR K, L), R Redox CS5) Stripped Matrix (S4) Redox CS5 Red Parent Material (F21) Stripped Matrix (S6) Other (Explain in Remarks) ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.								
ydric Soil Indicators: Indicators for Problematic Hydric Soils: Histos Epipedon (A2) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Caast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S9) (LRR K, L, R) Stratified Layers (A5) Loamy Mucky Mineral (F2) Polyvalue Below Surface (S9) (LRR K, L, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 1449 Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 1449, 145, 149E Sandy Redox (S5) Stripped Matrix (S4) Redox Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 144, 145, 149E Stripped Matrix (S4) Redox Depressions (F8) Wersy Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) Dirth Carker (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Yes	Гуре: С=С	Concentration, D=Dep	oletion, RM	=Reduced Matrix, CS	S=Covered or Co	ated Sand G	irains. ² Loc	ation: PL=Pore Lining, M=Matrix.
Histosol (A1) Polyvalue Below Surface (S8) (LRR R,Coast Prairie Redox A(A) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox A(A) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) S cm Mucky Peat or Peat (S3) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR K, L) Delyvalue Below Surface (S3) (LRR K, L, R) Strattified Layers (A5) Learny Gleyed Matrix (F2) Delyvalue Below Surface (S9) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Delyvalue Below Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Pedmont Floodplain Soils (F19) (MLRA 144A, 145, 149E Sandy Mucky Mineral (S1)	lydric Soil	Indicators:					Indicators	for Problematic Hydric Soils ³ :
Indio Puppoon Indio Puppoon<	Histoso Histic F	bl (A1) Eninedon (A2)		Polyvalue Belov	w Surface (S8) (L)	RR R,	2 cm M Coast F	uck (A10) (LRR K, L, MLRA 149B) Prairie Redox (A16) (LRR K, L, R)
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Pedroont Floodplain Solis (F19) (MLRA 149) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. testrictive Layer (if observed): Type:	Black H	listic (A3)		Thin Dark Surfa	, ace (S9) (LRR R,	MLRA 149E	B) 5 cm M	ucky Peat or Peat (S3) (LRR K, L, R)
Stratified Layers (A5) Depleted Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R K, L) Depleted Dark Surface (F7) Piedmont Floodplain Solis (F19) (MLRA 149 Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Solis (F19) (MLRA 149, 145, 149E Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149E Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Depth (inches): Depth (inches): No Vers No Vers No Vers No Vers No No No No No No No No	Hydrog	en Sulfide (A4)		Loamy Mucky	Vineral (F1) (LRF	K, L)	Dark S	urface (S7) (LRR K, L)
	_ Stratifie	ed Layers (A5)	(, , ,)	Loamy Gleyed	Matrix (F2)		Polyval	ue Below Surface (S8) (LRR K, L)
Intro Dark Sundace (R12) International (S11) Internation (S1	Deplete	ed Below Dark Surfac	ce (A11)	Depleted Matrix	x (F3)		Thin Da	ark Surface (S9) (LRR K, L)
Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149E Sandy Redox (S5) Red Parent Material (F21) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Red parent? Very Shallow Dark Surface (TF12) Dther (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Type: Depth (inches): Depth (inches): No Kermarks: No	Sandv	Mucky Mineral (S1)		Depleted Dark Su	Surface (F7)		Piedmo	ont Floodplain Soils (F12) (MLRA 1498
Sandy Redox (S5)Red Parent Material (F21)Very Shallow Dark Surface (TF12)Other (Explain in Remarks)Other (Explain in Remarks)	Sandy	Gleyed Matrix (S4)		Redox Depress	sions (F8)		Mesic S	Spodic (TA6) (MLRA 144A, 145, 149B
Stripped Matrix (S6)Very Shallow Dark Surface (TF12)Other (Explain in Remarks)Other (Explain in Remarks)	Sandy	Redox (S5)					Red Pa	rent Material (F21)
	Strippe	d Matrix (S6)		B)			Very Sł	nallow Dark Surface (TF12)
Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:	Dark Si		IVILKA 1491	D)			Other (Explain in Remarks)
Restrictive Layer (if observed): Type:	Indicators of	of hydrophytic vegeta	ation and we	etland hydrology mus	st be present, unl	ess disturbe	d or problematic.	
Type:	Restrictive	Layer (if observed)	:					
Depth (inches): No v	Type:							
Remarks:	Depth (ir	nches):					Hydric Soil	Present? Yes No _✓
	(emarks:							

I

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: NW OHIO WIND	City/County: PA	ULDING C	O	Sampling Date: 4/15/2013 7:52:24 PM
Applicant/Owner: WESTWOOD		Sta	_{ate:} OH	Sampling Point: Z-01 WETLAND
Investigator(s): MATTHEW VOLLBRECHT 2115	Section Townsh	in Range Se	ec 24 T1N R2	2E
Landform (hillslope terrace etc.). Flat	Local	relief (concave	e convex none	Side slope of road ditch
Slope (%): 5-10% Let: 704015.9479	454342	.824		Datum: UTM NAD 83Z13N
	Long:			_ Datum Chinese Concernent
Soil Map Unit Name: Et Latty Sitty Clay	1		NVVI classifi	cation: <u>Not mapped</u>
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🔽	No (I	If no, explain in I	Remarks.)
Are Vegetation, Soil, or Hydrology significantly	/ disturbed?	Are "Normal	Circumstances"	present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic?	(If needed, ex	xplain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling po	oint locatio	ns, transects	s, important features, etc.
Hydrophytic Vegetation Present? Yes V	Is the Sa	mpled Area		
Hydrophyde Vegetation i resent? Yes ✓ No	within a \	Netland?	Yes _ ✓ _	No
Wetland Hydrology Present? Yes Ves	If ves, opt	ional Wetland	Site ID: Wetla	ind sample point Z-01
Remarks: (Explain alternative procedures here or in a separate repo	ort.)			
Wetland located in the bed of a road ditch				
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)			Surface Soi	I Cracks (B6)
Surface Water (A1) Water-Stained	Leaves (B9)		Drainage Pa	atterns (B10)
✓ High Water Table (A2) Aquatic Fauna	(B13)		Moss Trim L	_ines (B16)
Saturation (A3)	(B15)		Dry-Season	Water Table (C2)
Water Marks (B1) Hydrogen Sulf	ide Odor (C1)		Crayfish Bu	rrows (C8)
Sediment Deposits (B2) Oxidized Rhize	ospheres on Living	g Roots (C3)	Saturation \	/isible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of R	educed Iron (C4)		Stunted or S	Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Re	eduction in Tilled S	Soils (C6)	Geomorphic	c Position (D2)
Iron Deposits (B5) Thin Muck Sur	face (C7)		Shallow Aqu	uitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain	in Remarks)		Microtopogr	raphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)			✓ FAC-Neutra	al Test (D5)
Field Observations:				
Surface Water Present? Yes No ✓ Depth (inches	s):			
Water Table Present? Yes <u>✓</u> No Depth (inches	s): <u>8.0</u>			
Saturation Present? Yes <u>V</u> No Depth (inches	s): <u>9.0</u>	Wetland H	ydrology Prese	nt? Yes <u>✓</u> No
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspe	ections), if avail	lable:	
Remarks:				

VEGETATION – Use scientific names of plants.

Sampling Point: Z-01 WET

Trop Strotum (Plat size: 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
	<u>% Cover</u>	<u>Species</u> ?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: [B]
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Drevelence Index werkeheet:
Total Cove	r. 0			Tetal % Cover of Multiply by
			. 0	$\begin{array}{c c} \hline 10 \text{ for an % Cover of } \\ \hline 00 \text{ cover of } \\ \hline 00 cove$
50% of total cover: <u>0</u>	20% 0	of total cove	r: <u> </u>	$\frac{1}{10} = \frac{1}{10} $
Sapling/Shrub Stratum (Plot size:)				FAC species 0 $x^2 = 0$
1				EACH species 0 $x_4 = 0$
2				$\frac{1}{10} \text{ species } \frac{0}{2} \text{ x 5} = 0$
3				Column Totals: 70 (A) 70 (B)
4.				$\begin{bmatrix} \text{Column rotals.} & \underline{\text{rotals.}} & \text{ro$
5				Prevalence Index = $B/A = 1$
6				Hydronhytic Vegetation Indicators:
0	0			Rapid Test for Hydrophytic Vegetation
Total Cove	r:			✓ Dominance Test is >50%
50% of total cover: <u>0</u>	20% o	f total cover	. <u>0</u>	\checkmark Prevalence Index is <3.0 ¹
Herb Stratum (Plot size: 5)				Morphological Adaptations ¹ (Provide supporting
1. Carex lacustris	70	Yes	OBL	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
				¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than 3.28 ft (1 m) tall.
10.				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
Total Causa				Woody vines – All woody vines greater than 3.28 ft in
			1/	height.
50% of total cover: <u>55</u>	20% c	of total cove	r: <u>14</u>	
Woody Vine Stratum (Plot size: <u>30</u>)				
1				
2				
3				Hydrophytic
4.				Vegetation
Total Cove	r. 0			Present? Yes <u>v</u> No
			0	
	20% 0	i total cove		
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix		Redo	x Features	S	~	_	
(inches)	Color (moist)		Color (moist)		Type ¹	Loc ²	Texture Remarks	
0-14	10YR2/1	100					Muck	
14-22	10YR6/1	100					Silty clay	
				·				_
				·				
				·				_
$\frac{1}{1}$ Type: C=C	oncentration D=Den	letion RM=I	Reduced Matrix CS	 S=Covered	d or Coate	d Sand G	Grains ² Location: PL=Pore Lining M=Matrix	
Hydric Soil	Indicators:						Indicators for Problematic Hydric Soils ³ :	
Histosol	(A1)		Polyvalue Belov	v Surface	(S8) (LRF	R.	2 cm Muck (A10) (LRR K. L. MLRA 149B)	
✓ Histic Ep	pipedon (A2)	-	MLRA 1498)	(00) (,	Coast Prairie Redox (A16) (LRR K, L, R)	
Black Hi	stic (A3)	_	Thin Dark Surfa	ace (S9) (L	.RR R, MI	_RA 149B	B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R	2)
Hydroge	n Sulfide (A4)	-	Loamy Mucky M	/lineral (F1	1) (LRR K	, L)	Dark Surface (S7) (LRR K, L)	
Stratified	d Layers (A5)	-	Loamy Gleyed	Matrix (F2)		Polyvalue Below Surface (S8) (LRR K, L)	
Depleted	d Below Dark Surfac	e (A11)	Depleted Matrix	(F3)			Thin Dark Surface (S9) (LRR K, L)	
Thick Da	ark Surface (A12)	-	Redox Dark Su	rface (F6)			Iron-Manganese Masses (F12) (LRR K, L, I	R)
Sandy N	lucky Mineral (S1)	-	_ Depleted Dark	Surface (F	.7)		Piedmont Floodplain Soils (F19) (MLRA 149	9B)
Sandy G	Bieyed Matrix (54)	-	Redox Depress	ions (F8)			Mesic Spoalc (TA6) (MLRA 144A, 145, 149 Red Parent Material (E21)	в)
Stripped	Matrix (S6)						Very Shallow Dark Surface (TE12)	
Dark Su	rface (S7) (LRR R. I	MLRA 149B					Other (Explain in Remarks)	
³ Indicators of	f hydrophytic vegeta	tion and wet	land hydrology mus	t be prese	ent, unless	disturbed	ed or problematic.	
Restrictive I	_ayer (if observed)			-				
Type:								
Depth (in	ches).						Hydric Soil Present? Yes _✓ No	
Pomarke:								
Remarks.								

Appendix D

ORAM, QHEI and PHWA Datasheets for Field Delineated Wetlands and Watercourses

	Ohio Rapid Assessment Method for Wetlands 10 Page Form for Wetland Categorization						
Version 5.0	Background Information Scoring Boundary Worksheet Narrative Rating Field Form Quantitative Rating ORAM Summary Worksheet Wetland Categorization Worksheet	Ohio EPA, Division of Surface Water Final: February 1, 2001					

Instructions

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

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

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

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

Background Information

Name: Matt Vollbrecht 4-16-13 Date: restructed Professional Services Affiliation: Anagram Prive, Eden Praire Mn 55344 Address: 99 Phone Number: 229 - 2311 matt. Vollbrecht@ west wood ps.com e-mail address: Name of Wetland: 7 Wooded Swanp Vegetation Communit(les): Type HGM Class(es): Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc. ç <u>CR-60</u> <u>Creen</u> <u>CR-48</u> Wetland N-03 句 698296-6252 - 4545712.388 Lat/Long or UTM Coordinate USGS Quad Name Pauldim County Township Blue Creek Section and Subsection 110 Hydrologic Unit Code Site Visit 4-10-13 National Wetland Inventory Map not mapped Ohio Wetland Inventory Map Latty Sr Soil Survey Delineation report/map

Q



Scoring Boundary Worksheet

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

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

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

Narrative Rating

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

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

8b	Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of	YES	NO
	deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	-
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at	YES	NO
	an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	Go to Question 9b	Go to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	
	partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
9c	Are Lake Erie water levels the wetland's primary hydrological influence,	YES	NU
	i.e. the wetland is hydrologically unrestricted (no faceward of uprand border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetland, as these dominated by submersed aquatic vegetation.	Go to Question 9d	Go to Question 10
94	Does the wetland have a predominance of native species within its	YES	NO
54	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance	YES	NO
	tolerant native plant species within its vegetation communities?	Wetland should be evaluated for possible Category 3 status Go to Question 10	Go to Question 10
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in	YES	(NO
10	Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this time dividing and its guality.	Go to Question 11	
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES	(NO)
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), councilians durate the option Counties (e.g. Darke Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	

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

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



ORAM v. 5.0 Field Form Quantitative Rating





End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest

quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality

ORAM Summary Worksheet

		circle	
		answer or insert score	Result
		VES AID	If yes, Category 3.
Narrative Rating	Question 1 Critical Habitat		n yes, ealegely el
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands –	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	2	
rating	Metric 2. Buffers and surrounding land use	١	
	Metric 3. Hydrology	7	
	Metric 4. Habitat	13	
	Metric 5. Special Wetland Communities	5	
	Metric 6. Plant communities, interspersion, microtopography	10	
	TOTAL SCORE	37	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

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

Final Category Choose one Category 1 Category 2 Category 3

End of Ohio Rapid Assessment Method for Wetlands.

	Ohio Rapid Assessment Metho 10 Page Form for Wetland Cat	d for Wetlands egorization
Version 5.0	Background Information Scoring Boundary Worksheet Narrative Rating Field Form Quantitative Rating ORAM Summary Worksheet Wetland Categorization Worksheet	Ohio EPA, Division of Surface Water Final: February 1, 2001

Instructions

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

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

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

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

Background Information

Matt Vollbrecht Name: 13 Date: Professional Services Affiliation: Anagram Prive, Eden Praire mn 55344 Address: 7699 Phone Number: 229 - 2311 13 matt. Vollbrecht@ West Wood ps.com e-mail address: Name of Wetland: Type 7 wooded Shamp Vegetation Communit(ies): HGM Class(es): Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc. WB-04A WB-04A CR-48 Blue 5 ST HWY 177 000 697990.0844 - 4544481.871 Lat/Long or UTM Coordinate **USGS** Quad Name Pauldin County Blue creek Township Э Section and Subsection Hydrologic Unit Code 4-17-13 Site Visit PFOIL National Wetland Inventory Map not mappe Ohio Wetland Inventory Map latty silty Clan Soil Survey Lc-Delineation report/map W-03 In Kport

1

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Wetland Size (acres, hectares): 14.6 Bloeth: Include north arrow, relationship with other surface waters, vegetation zones, etc. Fig Fig Wetland Use that Use that	Name of Wetland:	11-03			
Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. Field Field Wethawd Wet	Wetland Size (acres, he	ectares):		14 6	
Final score : 40 Category Changes:	Sketch: Include north a	rrow, relationship with other	surface waters, veget	ນ ໄດ້ເປັນ tation zones, etc.	
Comments, Narrative Discussion, Justification of Category Changes:	Courts Roed 79	Field	etland W-03		tielt NA
inal score : 40 Category: 2				·	
	inal score :	40		Category:	3

Scoring Boundary Worksheet

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

	the stabilized appring boundaries	done?	not applicable
#	Steps in properly establishing scoring boundaries		
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	405	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	415	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	yes	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	tes	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	yes	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	yes	

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

Narrative Rating

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

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

		YES (NO)
8b	Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	NO
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	Go to Question 9b	Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	NO
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth	YES Go to Question 9d	Go to Question 10
	wetlands, or those dominated by submersed aquatic vegetation.	YES	NO
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
90	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
	here the second in	YES	(NO)
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this	Wetland is a Category 3 wetland. Go to Question 11	Go to Question 11
	type of wetland and its quality.	VES	NO)
11	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	Wetland should be evaluated for possible Category 3 status Complete Quantitative Rating	Complete Quantitative Rating

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Table 1. Characteristic plant species.

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

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



last revised 1 February 2001 jjm

ORAM v. 5.0 Field Form Quantitative Rating





End of Quantitative Rating. Complete Categorization Worksheets.

and of highest quality
ORAM Summary Worksheet

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		circle	
		insert	Result
			If ves. Category 3.
Narrative Rating	Question 1 Critical Habitat	TES (NO	
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES (NO)	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands -	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	4	
Raung	Metric 2. Buffers and surrounding land use		
	Metric 3. Hydrology	8	
	Metric 4. Habitat	13	
	Metric 5. Special Wetland Communities	5	
	Metric 6. Plant communities, interspersior microtopography	9	Cotogony based on score
	TOTAL SCORE	40	breakpoints

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

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



End of Ohio Rapid Assessment Method for Wetlands.

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	Ohio Rapid Assessment Method for Wetlands 10 Page Form for Wetland Categorization					
Version 5.0	Background Information Scoring Boundary Worksheet Narrative Rating Field Form Quantitative Rating ORAM Summary Worksheet Wetland Categorization Worksheet	Ohio EPA, Division of Surface Water Final: February 1, 2001				

Instructions

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

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

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

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

Background Information

Matt Vollbrecht Name: Date: Pro Fessional Services Affiliation: Prive, Eden Praise Mn 55 344 Address: Ana gram Phone Number: - 2311 229 0 Vollbrecht@ West wood ps.com e-mail address: matt. Name of Wetland: Vegetation Communit(ies): Type 7 wooded Shamp HGM Class(es): Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc. WB-04B2 DE MA CR-48 Blue 53 ST HWY 177 698768.5746 - 4544069.686 Lat/Long or UTM Coordinate USGS Quad Name Pauldin County Township creek Blue Section and Subsection 21 Hydrologic Unit Code 4-13-13 Site Visit National Wetland Inventory Map FOIB Ohio Wetland Inventory Map Mapped not Silty Clay loam Soil Survey Sb avana Delineation report/map

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Name of Wetland: $(\mu) - (\mu)$	SHa .		
Wetland Size (acres, hectares	»): 2.6	-	,
Sketch: Include north arrow,	relationship with other surface w	vaters, vegetation zones, etc.	
Wetland W-05 B	The Creation of Category Cha	tiete	VV VV
Final score :	40	Category:	3ø

Scoring Boundary Worksheet

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

	Otoma in property establishing scoring boundaries	done?	not applicable
# Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	Yes	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	415	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	415	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	415	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	469	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	415	

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

Narrative Rating

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

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

		VES T	NO	
8b	Mature forested wetlands. Is the wetland a forested wetland will 50% or more of the cover of upper forest canopy consisting of	1L3	Co to Outotion 92	
	deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	G0 to Question a	
		Go to Question 9a	\wedge	
00	Lake Frie coastal and tributary wetlands. Is the wetland located at	YES	NO	
Ja	an elevation less than 575 feet on the USGS map, adjacent to this	Go to Question 9b	Go to Question 10	
	elevation, or along a tributary to Lake Erie that is accessible to ising	YES	NO	
9b	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c	
		Go to Question 10		
	Are Lake Erie water levels the wetland's primary hydrological influence,	YES	NO	
90	i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth	Go to Question 9d	Go to Question 10	
	wetlands, or those dominated by submersed aquatic vegetation.	YES	NO	
9d	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e	
		Go to Question 10		
	Dece the wetland have a predominance of non-native or disturbance	YES	NO	
96	tolerant native plant species within its vegetation communities?	Wetland should be evaluated for possible Category 3 status	Go to Question 10	
		Go to Question 10	6	
	Lake Plain Sand Prairies (Oak Openings) is the wetland located in	YES	(NO)	
10	Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within	Wetland is a Category 3 wetland.	Go to Question 11	
	several inches of the surface, and offen with a dominated of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its guality.	Go to Question 11		
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES		
	dominated by some or all of the species in Table 1. Extensive praines were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating	

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Table 1. Characteristic plant species.

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Lythrum salicariaZygadenus elegans var. glaucusCalla palustrisCarex cryptolepisCalamagrostis canademMyriophyllum spicatumCacatalia plantagineaCarex atlantica var. capillaceaCarex lasiocarpaCalamogrostis stricaNajas minorCarex flavaCarex echinataCarex strictaCalex atherodPhalaris arundinaceaCarex strilisCarex copillaceaCarex strictaCarex atherodPhragmites australisCarex strictaCarex trispermaCalamagrostis strictaCarex buxbaunPotamogeton crispusDeschampsia caespitosaChamaedaphne calyculataCalamagrostis canadensisCarex strivelRamunculus ficariaEleocharis rostellataDecodon verticillatusQuercus palustrisGentiana andrewsRhamnus frangulaEriophorum virdicarinatumEriophorum virginicumHelianthus grosseserratTypha argustifoliaGentianopsis spp.Latrix laricinaLiatris spicaTypha sglaucaLobelia kalmiiNemopanthus mucronatusLystensi LystensiParnassia glaucaSchechzeria palustrisLystensi audrifilo	invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Potentilla fruticosa Sphagnum spp. Dycnanthemum virginianu Rhamnus alnifolia Vaccinium macrocarpon Silphium terebinthinaceu Rhynchospora capillacea Vaccinium corymbosum Sorghastrum nutau Salix candida Vaccinium oxycoccos Spartina pectina Salix myricoides Woodwardia virginica Solidago riddell Solidago ohioensis Tofieldia glutinosa Triglochin maritimum Triglochin palustre Triglochin palustre Solidago	Lythrum salicaria Myriophyllum spicatum Najas minor Phalaris arundinacea Phragmites australis Potamogeton crispus Ramunculus ficaria Rhamnus frangula Typha angustifolia Typha xglauca	Zygadenus elegans var. glaucus Cacalia plantaginea Carex flava Carex sterilis Carex stricta Deschampsia caespitosa Eleocharis rostellata Eriophorum viridicarinatum Gentianopsis spp. Lobelia kalmii Parnassia glauca Potentilla fruticosa Rhamnus alnifolia Rhynchospora capillacea Salix candida Salix myricoides Salix serissima Solidago ohioensis Tofieldia glutinosa Triglochin maritimum Triglochin palustre	Calla palustris Carex atlantica var. capillacea Carex echinata Carex oligosperma Carex risperma Chamaedaphne calyculata Decodon verticillatus Eriophorum virginicum Larix laricina Nemopanthus mucronatus Schechzeria palustris Sphagnum spp. Vaccinium macrocarpon Vaccinium corymbosum Vaccinium oxycoccos Woodwardia virginica Xyris difformis	Carex cryptolepis Carex lasiocarpa Carex stricta Cladium mariscoides Calamagrostis stricta Calamagrostis canadensis Quercus palustris	Calamagrostis canadensis Calamogrostis stricta Carex atherodes Carex buxbaumii Carex pellita Carex sartwellii Gentiana andrewsii Helianthus grosseserratus Liatris spicata Lysimachia quadriflora Lythrum alatum Pycnanthemum virginianum Silphium terebinthinaceum Sorghastrum nutans Spartina pectinata Solidago riddellii

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



last revised 1 February 2001 jjm

ORAM v. 5.0 Field Form Quantitative Rating



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End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts

and of highest quality

ORAM Summary Worksheet

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		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES (NO)	If yes, Category 3.
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands –	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	Z	
Raung	Metric 2. Buffers and surrounding land use	1	
	Metric 3. Hydrology	12	
	Metric 4. Habitat	13	
	Metric 5. Special Wetland Communities	5	
	Metric 6. Plant communities, interspersion microtopography	' 7	
	TOTAL SCORE	40	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one		Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any	VEC		
of the following questions:	Vetland is		Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the
Narrative Rating Nos. 2, 3,	categorized as a		Rule 3745-1-54(C) and biological and/or functional
4, 6, 7, 8a, 9d, 10	Category 3 wetland		assessments to determine if the wetland has been over-
			categorized by the ORAM
Did you answer "Yes" to any	(YES)	NO	Evaluate the wetland using the 1) narrative criteria in OAC
of the following questions.	Wetland should be		the wetland is determined to be a Category 2 wetland using
Narrative Rating Nos. 1, 8b,	evaluated for		either of these, it should be categorized as a Category 3
9b, 9e, 11	possible Category		wetland. Detailed biological and/or functional assessments
Did you onewer "Vee" to	3 status		may also be used to determine the wetland's category.
Did you answell fes to	TES	NO	Is quantitative rating score greater than the Category 2
Narrative Rating No. 5	Wetland is		reevaluate the category of the wetland using the parrative
	categorized as a		criteria in OAC Rule 3745-1-54(C) and biological and/or
	Category 1 wetland		functional assessments to determine if the wetland has
Does the quantitative score	YES	NO	been under-categorized by the ORAM
fall within the scoring range	120		range for a particular category, the wetland should be
of a Category 1, 2, or 3	Wetland is		assigned to that category. In all instances however, the
wetland?	assigned to the		narrative criteria described in OAC Rule 3745-1-54(C) can
	appropriate		be used to clarify or change a categorization based on a
	the scoring range		
Does the quantitative score	YES	NO	Rater has the option of assigning the wetland to the higher
fall with the "gray zone" for	Watland in		of the two categories or to assign a category based on the
2 or 3 wetlands?	assigned to the		results of a nonrapid wetland assessment method, e.g.
	higher of the two		consideration of the narrative criteria in OAC rule 3745-1-
	categories or		54(C).
	assigned to a		
	detailed		
	assessments and		
	the narrative		
Does the wetland otherwise	VES		
exhibit moderate OR superior	110		A wellahu may be undercategorized using this method, but still exhibit one or more superior functions e.g. a wetlands
hydrologic OR habitat, ÓR	Wetland was	Wetland is	biotic communities may be degraded by human activities.
recreational functions AND	undercategorized	assigned to	but the wetland may still exhibit superior hydrologic
categorized as a Category 2	by this method. A	category as	functions because of its type, landscape position, size, local
wetland (in the case of	for recategorization	by the	narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are
moderate functions) or a	should be provided	ORAM.	controlling, and the under-categorization should be
Category 3 wetland (in the	on Background		corrected. A written justification with supporting reasons or
this method?	mormation Form		information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

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Ohio Rapid Assessment Method for Wetlands 10 Page Form for Wetland Categorization						
Version 5.0	Background Information Scoring Boundary Worksheet Narrative Rating Field Form Quantitative Rating ORAM Summary Worksheet Wetland Categorization Worksheet	Ohio EPA, Division of Surface Water Final: February 1, 2001				

Instructions

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

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

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

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

Background Information

Name: Matt Vollbrecht Date: 13 Professional Services Affiliation: Anagram Prive, Eden Praire Mn 55 344 Address: 16 Phone Number: - 2311 229 32 matt. Vollbrecht@ west wood ps.com e-mail address: Name of Wetland: Vegetation Communit(ies): Type 7 wooded Shamp HGM Class(es): Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc. WB-04B2 B-04A CR-48 Blue 53 ST HWY 177 0 Lat/Long or UTM Coordinate 698729.5799-4543908-300 **USGS** Quad Name Pauldin County Township Creek Blue Section and Subsection 21 Hydrologic Unit Code 4-17-13 Site Visit National Wetland Inventory Map PFOIC Ohio Wetland Inventory Map not Mappes Clay loam Sb. Samanac Soil Survey Sr Delineation report/map

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Scoring Boundary Worksheet

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

#	Steps in properly establishing scoring boundaries	done?	not applicable
step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	485	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	405	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	485	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	405	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	415	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	Yes	

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

Narrative Rating

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

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

	Meture forested wetlands is the wetland a forested wetland with	(YES)	NO
as	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	<u>A</u>
	Lake Erie coastal and tributary wetlands. Is the wetland located at	YES	(NO)
	an elevation less than 575 feet on the USGS map, adjacent to this	Go to Question 9b	Go to Question 10
9h	Does the wetland's hydrology result from measures designed to	YES	NO
55	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
96	Are Lake Erie water levels the wetland's primary hydrological influence,	YES	NO
	i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth	Go to Question 9d	Go to Question 10
	wetlands, or those dominated by submersed aquatic vegetation.	YES	NO
9d	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
	Doos the wetland have a predominance of non-native or disturbance	YES	NO
96	tolerant native plant species within its vegetation communities?	Wetland should be evaluated for possible Category 3 status	Go to Question 10
		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in	YES	
	Lucas, Fulton, Henry, or vood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within	Wetland is a Category 3 wetland.	Go to Question 11
	several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this	Go to Question 11	
- <u></u>	type of wetland and its quality.	YES	(NO)
11	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	Wetland should be evaluated for possible Category 3 status Complete Quantitative Rating	Complete Quantitative Rating

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Table 1. Characteristic plant species.

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Lythrum salicariaZygadenus elegans var. glaucusCalla palustrisCarex cryptolepisCalamagrostis canadem.Myriophyllum spicatumCacalia plantagineaCarex atlantica var. capillaceaCarex cryptolepisCalamagrostis stricNajas minorCarex flavaCarex echinataCarex strictaCarex atherodPhalaris arundinaceaCarex strilisCarex oligospermaCladium mariscoidesCarex buxbaunPhragmites australisCarex strictaCarex trispermaCalamagrostis strictaCarex strictaPotamogeton crispusDeschampsia caespitosaChamaedaphne calyculataCalamagrostis canadensisCarex sartwellRamunculus ficariaEleocharis rostellataDecodon verticillatusQuercus palustrisGentianopsis spp.Typha angustifoliaGentianopsis spp.Larix laricinaLarix laricinaLiatris spicaTypha zglaucaLobelia kalmiiNemopanthus mucronatusLysimachia quadrifion	invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Potentilla fruiticosa Sphagnum spp. Lythrum alatu Potentilla fruiticosa Sphagnum spp. Pycnanthemum virginianu Rhannus alnifolia Vaccinium macrocarpon Silphium terebinthinaceu Rhynchospora capillacea Vaccinium corymbosum Sorghastrum nuta Salix candida Vaccinium oxycoccos Sorghastrum nuta Salix myricoides Woodwardia virginica Solidago riddeli Salix serissima Xyris difformis Solidago riddeli Solidago ohioensis Toffieldia glutinosa Triglochin maritimum Triglochin palustre . Triglochin palustre . Extrementa	Lythrum salicaria Myriophyllum spicatum Najas minor Phalaris arundinacea Phragmites australis Potamogeton crispus Ramunculus ficaria Rhamnus frangula Typha angustifolia Typha xglauca	Zygadenus elegans var. glaucus Cacalia plantaginea Carex flava Carex sterilis Carex stricta Deschampsia caespitosa Eleocharis rostellata Eriophorum viridicarinatum Gentianopsis spp. Lobelia kalmii Parnassia glauca Potentilla fruticosa Rhamnus alnifolia Rhynchospora capillacea Salix candida Salix myricoides Salix serissima Solidago ohioensis Tofieldia glutinosa Triglochin maritimum Triglochin palustre .	Calla palustris Carex atlantica var. capillacea Carex echinata Carex oligosperma Carex risperma Chamaedaphne calyculata Decodon verticillatus Eriophorum virginicum Larix laricina Nemopanthus mucronatus Schechzeria palustris Sphagnum spp. Vaccinium macrocarpon Vaccinium macrocarpon Vaccinium corymbosum Vaccinium oxycoccos Woodwardia virginica Xyris difformis	Carex cryptolepis Carex lasiocarpa Carex stricta Cladium mariscoides Calamagrostis stricta Calamagrostis canadensis Quercus palustris	Calamagrostis canadensis Calamagrostis canadensis Carex atherodes Carex buxbaumii Carex pellita Carex sartwellii Gentiana andrewsii Helianthus grosseserratus Liatris spicata Lysimachia quadriflora Lythrum alatum Pycnanthemum virginianum Silphium terebinthinaceum Sorghastrum mutans Spartina pectinata Solidago riddellii

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





ORAM v. 5.0 Field Form Quantitative Rating





End of Quantitative Rating. Complete Categorization Worksheets.

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quality or in small amounts of highest quality Present in moderate or greater amounts

and of highest quality

ORAM	Summary	Worksheet
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		circle	
		answer or	
		insert	Result
		score	
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES (NO)	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	(YES) NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands –	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	4	
Kaung	Metric 2. Buffers and surrounding land use		
	Metric 3. Hydrology	9	
	Metric 4. Habitat	13	
	Metric 5. Special Wetland Communities	5	
	Metric 6. Plant communities, interspersion, microtopography	7	
a.	TOTAL SCORE	39	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

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



End of Ohio Rapid Assessment Method for Wetlands.

	Ohio Rapid Assessment Metho 10 Page Form for Wetland Cat	d for Wetlands egorization
Version 5.0	Background Information Scoring Boundary Worksheet Narrative Rating Field Form Quantitative Rating ORAM Summary Worksheet Wetland Categorization Worksheet	Ohio EPA, Division of Surface Water Final: February 1, 2001

Instructions

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

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

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

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

Background Information

Name: Matt Vollbrecht Date: Pro Fessional Services Affiliation: resturad Anagram Prive, Eden Praire Mn 55344 Address: 7699 229 - 2311 Phone Number: 320 e-mail address: matt. Vollbrecht@ west wood ps.com Name of Wetland: Type 7 - Wooded Swamp Vegetation Communit(ies): HGM Class(es): Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc. CR-48 We Hand location ц К ST Huy 114 Sec-22 NA 699979-3464-4544851-212 Lat/Long or UTM Coordinate USGS Quad Name County Pauldins Township Blue Creek Section Section and Subsection 22 Hydrologic Unit Code 4-15-13 Site Visit National Wetland Inventory Map not mapped Lc- Latty Silty Clay Ohio Wetland Inventory Map Soil Survey Delineation report/map Wettand X-04

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Wetand Size (acres, hoctares): 22.9 Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. 10.9 Count-1 Recade 40 100 100 100
Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.
inal score : 40 Category: 3

Scoring Boundary Worksheet

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

	lot an in anothe establishing scoring boundaries	done?	not applicable
#	Steps in property establishing scoring boundaries		
Step 1	proposed impact, a reference site, conservation site, etc.	Yes	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	yes	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	yes	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	Yes	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	405	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	Yes	

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

Narrative Rating

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

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

8b	Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES Wetland should be evaluated for possible Category 3 status.	NO Go to Question 9a
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at	Go to Question 9a YES	NO
	an elevation less than 575 feet on the USGS map, adjacent to this elevation or along a tributary to Lake Erie that is accessible to fish?	Go to Question 9b	Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandhar deposition wetlands, estuarine wetlands, river mouth	YES Go to Question 9d	Go to Question 10
	wetlands, or those dominated by submersed aquatic vegetation.		NO
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go-to Question 10	2
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
		Go to Question 10	NO
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be preserve). The Obio Department of Natural Resources Division of	YES Wetland is a Category 3 wetland. Go to Question 11	Go to Question 11
	Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.		
11	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	Wetland should be evaluated for possible Category 3 status Complete Quantitative Rating	Complete Quantitative Rating

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Table 1. Characteristic plant species.

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mvasive/exolic spp	ten species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria Zy Myriophyllum spicatum C Najas minor C Phalaris arundinacea C Phragmites australis C Potamogeton crispus D Ramunculus ficaria E Rhamnus frangula E Typha angustifolia G Typha xglauca La R R R R R R R R R R R R R R R R R R R	ygadenus elegans var. glaucus acalia plantaginea arex, flava arex sterilis arex stricta eschampsia caespitosa leocharis rostellata riophorum viridicarinatum entianopsis spp. obelia kalmii arnassia glauca otentilla fruticosa hamnus alnifolia hynchospora capillacea alix candida alix myricoides alix serissima ofieldia glutinosa riglochin maritimum riglochin palustre .	Calla palustris Carex atlantica var. capillacea Carex echinata Carex oligosperma Carex trisperma Chamaedaphne calyculata Decodon verticillatus Eriophorum virginicum Larix laricina Nemopanthus mucronatus Schechzeria palustris Sphagmun spp. Vaccinium macrocarpon Vaccinium corymbosum Vaccinium oxycoccos Woodwardia virginica Xyris difformis	Carex cryptolepis Carex lasiocarpa Carex stricta Cladium mariscoides Calamagrostis stricta Calamagrostis canadensis Quercus palustris	Calamagrostis canadensis Calamogrostis stricta Carex atherodes Carex buxbaumii Carex pellita Carex pellita Gentiana andrewsii Helianthus grosseserratus Liatris spicata Lysimachia quadriflora Lythrum alatum Pycnanthemum virginiamum Silphium terebinthinaceum Sorghastrum mutans Spartina pectinata Solidago riddellii

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



last revised 1 February 2001 jjm

ORAM v. 5.0 Field Form Quantitative Rating



40

End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts

and of highest quality
ORAM Summary Worksheet

) (

		circle	
		answer or	
		insort	Result
		filoert core	Rooun
			If you Catagony 3
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Calegory 5.
	Question 2. Threatened or Endangered	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES (NO)	If yes, Category 1.
	Question 6. Bogs	YES (NO)	If yes, Category 3.
	Question 7. Fens	YES (NO)	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands –	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative	Metric 1. Size	5	
Traing	Metric 2. Buffers and surrounding land use		
	Metric 3. Hydrology	8	
	Metric 4. Habitat	13	
	Metric 5. Special Wetland Communities	5	
	Metric 6. Plant communities, interspersion, microtopography	l	
	TOTAL SCORE	40	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

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



End of Ohio Rapid Assessment Method for Wetlands.

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	Ohio Rapid Assessment Method for Wetlands 10 Page Form for Wetland Categorization			
Version 5.0	Background Information Scoring Boundary Worksheet Narrative Rating Field Form Quantitative Rating ORAM Summary Worksheet Wetland Categorization Worksheet	Ohio EPA, Division of Surface Water Final: February 1, 2001		

Instructions

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

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

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

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

Background Information

Name: Mathew Vollbrecht
Date:
Affiliation: Westwood Professional Services
Address: 76 99 Anggram Drive Eden Praire Mn 55344
Phone Number: 320 239 2311
e-mail address:
Name of Wetland:
Vegetation Communit(ies):
HGM Class(es):
Location of Wetland: Include map, address, north arrow, landmarks, distances, roads, etc.
Wetter B-01
(kgs)
Ditches
CC72
Lat/Long or UTM Coordinate
USGS Quad Name
County Paulding
Township
Section and Subsection
Hydrologic Unit Code
Site Visit 5-20-13
National Wetland Inventory Map
Ohio Wetland Inventory Map
Soil Survey PC- Paulding Clan
Delineation report/map See attacked report wetland B-pl



Scoring Boundary Worksheet

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

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

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

Narrative Rating

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

		Circle ene	<u></u>
#	Question	UITCIE ONE	
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio. the Indiana Bat has	YES Wetland should be evaluated for possible Category 3 status	(NO) Go to Question 2
	had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain	YES	NO
	threatened or endangered plant or animal species?	Wetland is a Category 3 wetland.	Go to Question 3
		Go to Question 3	\wedge
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO
	Natulal Lielitaye Database as a high quality wetiand :	Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	\sim
4	Significant Breeding or Concentration Area. Does the wetland	YES	(NO)
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or 2) an acidic pond created or excavated on mined lands that has little or	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows. 2) supports acidophilic mosses.	YES	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the acidophilic mosses have species (see Table 1) is <25%2	Wetland is a Category 3 wetland	Go to Question 7
	נטעפו טו ווועמטעב טאבטופט נטבר ז מטוב זין וא געטעני	Go to Question 7	A
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of investigation appears listed in Table 1 is <25%2	Wetland is a Category 3 wetland	Go to Question 8a
		Go to Question 8a	\bigcirc
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human actioned understanding distingtion the past 80 to 100	Wetland is a Category 3 wetland.	Go to Question 8b
	years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES Wetland should be evaluated for possible Category 3 status.	NO Go to Question 9a
		Go to Question 9a	\frown
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at	YES	NO
	an elevation less than 575 feet on the USGS map, adjacent to this	Co to Question Ob	Co to Ouestion 10
	elevation, or along a tributary to Lake Erie that is accessible to fish?		NO
90	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands. or those dominated by submersed aquatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland Go to Question 10	Go to Question 9e
9e	Does the wetland have a predominance of non-native or disturbance	YES	NO
	tolerant native plant species within its vegetation communities?	Wetland should be evaluated for possible Category 3 status Go to Question 10	Go to Question 10
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in	YES	(NO)
	Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this	Wetland is a Category 3 wetland. Go to Question 11	Go to Question 11
	type of wetland and its quality.	VES	NO
11	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	Wetland should be evaluated for possible Category 3 status Complete Quantitative Rating	Complete Quantitative Rating

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Table 1. Characteristic plant species.

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

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



ORAM v. 5.0 Field Form Quantitative Rating



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End of Quantitative Rating. Complete Categorization Worksheets.

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quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality

ORAM Summary Worksheet

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		answer or	
		insert	Result
		score	ROOMI
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES (NO)	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES (NO)	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	3	
·	Metric 2. Buffers and surrounding land use)	
	Metric 3. Hydrology	6	
	Metric 4. Habitat	11	
	Metric 5. Special Wetland Communities	6	
	Metric 6. Plant communities, interspersion,	7	
	TOTAL SCORE	28	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

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Wetland Categorization Worksheet

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

Final Category Choose one Category 1 Category 2 Category 3

End of Ohio Rapid Assessment Method for Wetlands.

	Ohio Rapid Assessment Method for Wetlands 10 Page Form for Wetland Categorization			
Version 5.0	Background Information Scoring Boundary Worksheet Narrative Rating Field Form Quantitative Rating ORAM Summary Worksheet Wetland Categorization Worksheet	Ohio EPA, Division of Surface Water Final: February 1, 2001		

Instructions

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

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

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

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

Name: Mathew Vollbrecht
Date:
Affiliation: Westwood Professional Services
Address: 76 99 Angeren Drive Eden Prair Mn 55344
Phone Number: 320 229 2311
e-mail address:
Name of Wetland: 11-03 The attracted be part
Vegetation Communit(ies): Type 7 broaded Swamp with an area do
HGM Class(es): Type 2 het meadow fring
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
U U CR60
eet
wetter /
Prout
CR48 Sec 15- latter Tup
Lat/Long or UTM Coordinate
USGS Quad Name Latty
County Paulding
Township Latty
Section and Subsection Sec 15
Hydrologic Unit Code
Site Visit 5-20-13
National Wetland Inventory Map PFOIC
Ohio Wetland Inventory Map not mapped
Soil Survey Np B2- Nappanee Silty Clay Loam 2-6% eroded
Delineation report/map See attached Report - hetland U-03

Background Information



Scoring Boundary Worksheet

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

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

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

Narrative Rating

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

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

8b Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally YES NO	<u> </u>
deciduous trees with large diameters at breast height (dbh), generally Wetland should be Go	0
deciduous liees with large diameters at breast height (ubil), generally violating of the	io to Question 9a
diameters greater than 45cm (17.7in) dbh?	
Category 3 status.	
	_
Go to Question 9a	<u>}</u>
an elevation less than 575 feet on the USGS man, adjacent to this	9
elevation, or along a tributary to Lake Erie that is accessible to fish? Go to Question 9b Go	to Question 10
9b Does the wetland's hydrology result from measures designed to YES NO	0
prevent erosion and the loss of aquatic plants, i.e. the wetland is	to to Question 9c
partially hydrologically restricted from Lake Erie due to lakeward of vehicled should be Go	
Category 3 status	
Go to Question 10	10
9c Are Lake Erie water levels the wetland's primary hydrological influence, YES NO	
border alterations) or the wetland can be characterized as an Go to Question 9d Go	So to Question 10
"estuarine" wetland with lake and river influenced hydrology. These	
include sandbar deposition wetlands, estuarine wetlands, river mouth	
wetlands, or those dominated by submersed aquatic vegetation.	10
9d Does the wetland have a predominance of halive species within its TES	
Vegetation communities, although non native of distance telefant	to Ouestion 9e
ative species can also be present?	
native species can also be present? Vvetland is a Category Go 3 wetland	
native species can also be present? 3 wetland Go to Question 10	
native species can also be present? Wetland is a Category 3 wetland Go 9e Does the wetland have a predominance of non-native or disturbance YES NC	10
native species can also be present? Wetland is a Category 3 wetland Go 9e Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities? YES NC	
native species can also be present? Wetland is a Category 3 wetland Go 9e Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities? YES NC Wetland is a Category Go Go Go Go 9e Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities? YES NC	IO Go to Question 10
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Table 1. Characteristic plant species.

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

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



ORAM v. 5.0 Field Form Quantitative Rating





End of Quantitative Rating. Complete Categorization Worksheets.

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quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality

ORAM Summary Worksheet

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		answeror	
		incort	Popult
		msen	Result
		score	
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES (NO)	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	VES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES (NO)	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	Ч	
-	Metric 2. Buffers and surrounding land use	l	
	Metric 3. Hydrology		
	Metric 4. Habitat	16	
	Metric 5. Special Wetland Communities	5	
	Metric 6. Plant communities, interspersion, microtopography	13	
	TOTAL SCORE	50	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

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

Final Category Choose one Category 1 Category 2 Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Choop Primary Headwater Habitat Evaluation Form	,O
SITE NAME/LOCATION <u>MUON:ouine</u> SITE NUMBER <u>A-OL</u> LENGTH OF STREAM REACH (1) <u>360</u> LAT. LONG LAT. LONG RIVER CODE RIVER CODE RIVER CODE RIVER MILE	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Insti- STREAM CHANNEL INONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO.REC MODIFICATIONS:	uctions OVERY
1. SUBSTRATE (Estimate percent of every type of substrate present, Check ONLY two predominant substrate TYPE boxes (Max of 40). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE BLDR SLABS [16 pts] PERCENT TYPE BUDR SLABS [16 pts] PERCENT SILT [3 pt] PERCENT BOULDER (>256 mm) [16 pts] Image: Complex score is sum of boxes a score is s	HHEI Metric Points Substrate Max = 40
Total of Percentages of Bidr Slabs, Boulder, Cobble, Bedrock (A) (B) (B) SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: TOTAL NUMBER OF SUBSTRATE TYPES: (C) 2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts of storm water pipes) (Check ONLY one box): 2. So centimeters [20 pts] > 5 cm - 10 cm [15 pts] 2. > 22 5 cm [13 p ts] < 5 cm [15 pts]	A+B Pool Depth Max = 30
COMMENTS MAXIMUM POOL DEPTH (centimeters): 30 3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): > • + 0 meters (> 13) [30 pts] • > > 1.0 m < 1.5 m (> 3'3'' - 4'8'') [16 pts] • > 3.0 m < 4 0 m (> 9'7' - 13) [25 pts] • > > 1.0 m (≤ 3'3'') [5 pts] • > 1.5 m < 3.0 m (> 4'8'' = 9'7') [20 pts] • > 1.0 m (≤ 3'3'') [5 pts]	Bankfull Width Max=30
COMMENTSAVERAGE BANKFULL WIDTH (meters)	20
RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream A RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) L R Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservation Tillage Image: Conservat	
FLOW REGIME (At Time of Evaluation) (Check ONLY one box); Stream Flowing Moist Channel, isolated pools, no flow (Intermittent) Subsurface flow with isolated pools (Interstitial) Dry channel, no water (Ephemeral) COMMENTS Comments	
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 1.0 2.0 3.0 0.5 1.5 2.5 3.3	
STREAM GRADIENT ESTIMATE Flat (0.5 m/100 m) Flat to Moderate I Moderate (2 m/100 m) Moderate to Severe Severe Severe (10 m/100	ît)

Quadrangle Name: NRCS Soil Map Page: NRCS Soil Map Stream Order	
Quadrangle Name: NRCS Soil Map Page: NRCS Soil Map Stream Older	
MISCELLANEOUS	
Flow Conditions? (Y/N): Date of last precipitation:	
ograph Information:	
ted Turbidity? (Y/N): <u>N</u> Canopy (% open): <u>(OS 7</u> 0 pc/s	
samples collected for water chemistry? (Y/N): (Note lab sample no. or id. and attach results) Lab Number:	
Measures: Temp (°C) NA Dissolved Oxygen (mg/) NA pH (S.U.) NA Conductivity (umhos/cm) NA	<u></u>
sampling reach representative of the stream (Y/N) If not, please explain	
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A VOID AND A VOID A VOI	
iormed? (Y/N):	
iormed? (Y/N): Youcher? iD number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) i Observed? (Y/N) Voucher? (Y/N) js or Tadpoles Observed? (Y/N) Voucher? (Y/N) meents Regarding Biology:	······································
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formed? (Y/N): Youcher? (If Yes, Record all observations, Voucher?, Voucher?, Voucher?, Ipclude appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) 10 Observed? (Y/N) Noucher? (Y/N) 10 observed? (Y/N) Voucher? (Y/N) 11 observed? (Y/N) Voucher? (Y/N) 12 or Tadpoles Observed? (Y/N) Voucher? (Y/N) 13 or Tadpoles Observed? (Y/N) Voucher? (Y/N) 14 or Tadpoles Observed? (Y/N) Voucher? (Y/N) 15 or Tadpoles Observed? (Y/N) Voucher? (Y/N) 16 or Tadpoles Observed? (Y/N) Voucher? (Y/N) 17 or Tadpoles Observed? (Y/N) Voucher? (Y/N) 18 or Tadpoles Observed? (Y/N) Voucher? (Y/N) 19 or Tadpoles Observed? (Y/N) Voucher? (Y/N) 10 numberts Regarding Biology: Include Macroin Vertebrates Observed? (Y/N) 10 numberts Regarding Biology: Include Important landmarks and other features of interest for site evaluation and a narrative description of the stream's I 10 numberts Regarding Biology: Include Important landmarks and other features of interest for site evaluation and a narrative description of the stream's I): location
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formed? (Y/N):	

June 20, 2008 Revision





Stream Drawing:

ChieFA Primary Headwater Habitat Evaluation Form HHEI Score (sum of metrics 1, 2, 3) :	40
SITE NAME/LOCATION	<u>L</u> ructions OVERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 40). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE BLDR SLABS [16 pts] PERCENT PERCENT BOULDER (>256 mm) [16 pts] PERCENT SILT [3 pt] PERCENT BEDROCK [16 pt] BEDROCK [16 pt] COBBLE (65-256 mm) [12 pts] FINE DETRITUS. [3 pts] PINE DETRITUS. [3 pts] GRAVEL (2-64 mm) [9 pts] MUCK [0 pts] MUCK [0 pts] PINE Total of Percentages of O (A) O Bidr Slabs, Boulder, Cobble, Bedrock O (A) O SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: TOTAL NUMBER OF SUBSTRATE TYPES: TOTAL NUMBER OF SUBSTRATE TYPES:	HHEI Metric Points Substrate Max = 40 O Baceloans A + B
 MaxImum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from foad culverts or storm water pipes) (Check ONLY one box): 30 centimeters [20 pts] 52 cm + 10 cm [15 pts] 52 cm + 10 cm [15 pts] 52 cm + 10 cm [15 pts] 50 cm + 10 cm [15 pts] 51 cm + 30 m (> 0 7 + 13) [25 pts] 51 cm + 30 m (> 4 8' = 9 7') [20 pts] 51 cm + 30 m (> 4 8' = 9 7') [20 pts] COMMENTS AVERAGE BANKFULL WIDTH (meters) 	Peol Depth Max = 30 JS Bankfull Width Max=30 IS
This Information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream Are RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) L R (Per Bank) L R Moderate 5-10m Immature Forest, Wettand Moderate 5-10m Immature Forest, Shrub or Old Moderate 5-10m Immature Forest, Shrub or Old Moderate 5-10m Residential, Park, New Field Moderate 5-10m Residential, Park, New Field Narrow <5m	
None 1.0 2.0 3.0 0.5 1.5 2.5 53 STREAM GRADIENT ESTIMATE Flat (0.5 fr/100 h) Øverate to Severe Severe (10 h/10) ftj

DOWNSTREAM DESIGNATED USE(S) WWH Name: CWH Name: CWH Name: MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTER	Distance from Evaluated Stream Distance from Evaluated Stream Distance from Evaluated Stream
WWH Name:	Distance from Evaluated Stream Distance from Evaluated Stream Distance from Evaluated Stream
CWH Name:	Distance from Evaluated Stream
D EWH Name:	
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIF	
Nonco Out data de Norme I	RE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION
	IRCS Soil Map Page: NRCS Soil Map Stream Order
County: Paulding Township	p / Ċitý
MISCELLANEOUS	
Base Flow Conditions? (Y/N); C Date of last precipitation:	-14 Quantity: 1/4
	- no Canopy
Elevated jurbidity((Y/N): Canopy (vo open):	
Were samples collected for water chemistry? (Y/N): (Note lab sa	ample no. or iq. and attach results) Lap Number
Field Measures: Temp (°C) Dissolved Oxygen (mg/l)	pH (S.U.) Conductivity (µmhos/cm)
Is the sampling reach representative of the stream (Y/N) / If not, ple	ease explain:
BIOTIC EVALUATION Performed? (Y/N): (If Yes, Record all observations. Voucher of ID number. Include appropriate field data s	collections optional. NOTE: all voucher samples must be labeled with the sit sheets from the Primary Headwater Habitat Assessment Manual)
Fish Observed? (Y/N) Voucher? (Y/N) Salamanders Obs Frogs or Tadpoles Observed? (Y/N) Voucher? (Y/N) Aquatic Comments Regarding Biology:	served? (Y/N) Voucher? (Y/N) Macroinvertebrates Observed? (Y/N) Voucher? (Y/N)
a an an ann an ann an an ann an ann ann	
DRAWING AND NARRATIVE DESCRIPTION Of Include important landmarks and other features of interest for s	OF STREAM REACH (This <u>must</u> be completed): site evaluation and a narrative description of the stream's location
FLOW -	
Cropped	Freld

ChieEPA	Qualitative Habita and Use Assess	at Evaluation Index ment Field Sheet	QHEI Score:
Stream & Location: AA	0		M:Date: 4_1_151,0613
	Scorers	s Full Name & Affiliation: Lat./ Long.:	MCV Westword
1] SUBSTRATE Check ONLY Two	substrate TYPE BOXES;	(NAD 83 - decimal °) •	_ 18 location
estimate % or not BEST TYPES POOL RIFF	e every type present LE OTHER TYPES POOL DETRITUS [3] DETRITUS [3] MUCK [2] ARTIFICIAL [0] (Score natural substra 4 or more [2] sludge from poin 3 or less [0]	Check ON ORIGIN LIMESTONE [1] WETLANDS [0] HARDPAN [0] SANDSTONE [0] LACUSTURINE [0] SHALE [-1] COAL FINES [-2]	E (Or 2 & average) QUALITY HEAVY [2] SILT MODERATE [-1] ODEONE EXTENSIVE [-2] MODERATE [-1] MODERATE [-1] NORMAL [0] NONE [1]
2] INSTREAM COVER Indicate p quality; 2 quality: 3-Highest quality in moderate	presence 0 to 3: 0-Absent; 1-Very -Moderate amounts, but not of hi	/ small amounts or if more common of ghest quality or in small amounts of me boulders in deep or fast water is	of marginal AMOUNT highest Check ONE (Or 2 & average)
diameter log that is stable, well develo O UNDERCUT BANKS [1] O OVERHANGING VEGETATION I SHALLOWS (IN SLOW WATEF O ROOTMATS [1] Commonts	ped rootwad in dece / fast water POOLS > 70cm [2] [1]ROOTWADS [1]] [1]BOULDERS [1]	or deep, well-defined, functional po OXBOWS, BACKWATERS AQUATIC MACROPHYTE LOGS OR WOODY DEBR	Sols. □ EXTENSIVE >75% [11] 5 [1] □ MODERATE 25-75% [7] 8 [1] □ SPARSE 5-<25% [3] IS [1] □ NEARLY ABSENT <5% [1] Cover
comments			Maximum 20
3] CHANNEL MORPHOLOGY SINUOSITY DEVELOPME HIGH [4] EXCELLENT MODERATE [3] GOOD [5] LOW [2] FAIR [3] NONE [1] POOR [1] Comments Comments	Check ONE in each category (Or INT CHANNELIZATIO [7] [] [NONE [6] [] RECOVERED [4] [] RECOVERING [3] [] RECENT OR NO REC	2 & average) DN STABILITY HIGH [3] MODERATE [2] COVERY [1]	Channel Maximum 20
4] BANK EROSION AND RIPA River right looking downstream		ach category for <i>EACH BANK</i> (Or 2	per bank & average)
	DE > 50m [4] DERATE 10-50m [3] RROW 5-10m [2] RY NARROW < 5m [1] NE [0] R X X Q Q	OREST, SWAMP [3] HRUB OR OLD FIELD [2] ESIDENTIAL, PARK, NEW FIELD [1 ENCED PASTURE [1] PEN PASTURE, ROWCROP [0]	R CONSERVATION TILLAGE [1] URBAN OR INDUSTRIAL [0] MINING / CONSTRUCTION [0] Indicate predominant land use(s) past 100m riparian. Riparian
Comments			Maximum 10
5] <i>POOL / GLIDE AND RIFFLE</i> MAXIMUM DEPTH C Check ONE (O//LY!) Chec □ > 1m [6] □ POOLV □ 0.7<1m [4] □ POOLV □ 0.4<0.7m [2] □ POOLV □ 0.4<0.7m [2] □ POOLV □ 0.2<0.4m [1] □ < 0.2m [0] Comments	E / RUN QUALITY HANNEL WIDTH k ONE (Or 2 & average) VIDTH > RIFFLE WIDTH [2] VIDTH = RIFFLE WIDTH [1] VIDTH > RIFFLE WIDTH [0]	CURRENT VELOCITY Check ALL that apply TORRENTIAL [-1] SLOW [1] VERY FAST [1] INTERSTITIA FAST [1] INTERMITTE MODERATE [1] EDDIES [1] Indicate for reach - pools and riffle	LE [-1] Recreation Potential Primary Contact Secondary Contact (circle one and comment on back) RT: [-2] S. Pool / Current Maximum 12
Indicate for functional riff of riffle-obligate species:	les; Best areas must be Check ONE (large enough to support a Or 2 & average).	population
RIFFLE DEPTH RU BEST AREAS > 10cm [2] [MAXI BEST AREAS 5-10cm [1] [MAXI BEST AREAS < 5cm [metric=0] Comments	IN DEPTH RIFFLE / MUM > 50cm [2] STABLE (e MUM < 50cm [1] MOD. STAI UNSTABLE	RUN SUBSTRATE RIFFL g., Cobble, Boulder) [2] BLE (e.g., Large Gravel) [1] c (e.g., Fine Gravel, Sand) [0]	E / RUN EMBEDDEDNESS
6] GRADIENT ((VERY LOW:= LOW:[2-4] MODERATE [6=10] HIGH = VERY HIGH [10=6]	%POOL: 0 % %RUN: 0 %	GLIDE: 100 Gradient RIFFLE: 0 Maximum 10

-



Comment RE: Reach consistency/ Is reach typical of steam?, Recreation/ Observed - Inferred, Other/ Sampling observations, Concerns, Access directions, etc.

Stream Drawing:

HHEI Score (sum of metrics 1, 2, 3) :	
SITE NUMBER RIVER BASIN Prairie Chef DRAINAGE AREA (mi?) ~ 2 LENGTH OF STREAM REACH (n) ZOO LAT LONG RIVER CODE RIVER MILE DATE 4-17-13 SCORER COMMENTS	D
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructi STREAM CHANNEL INONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVER MODIFICATIONS:	ons RY
1. SUBSTRATE (Estimate percent of every type of substrate present, Check ONLY two predominant substrate TYPE boxes (Max of 40). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. Image: Check of the type of type of substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE BLDR SLABS [16 pts] PERCENT TYPE BOULDER (>256 mm) [16 pts] Image: Check of the type of	HEI letric olnts bstrate ax = 40 18
2. MaxImum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes). (Check ONLY one box): > 5 cm (15 pts) 2. MaxImum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes). (Check ONLY one box): > 5 cm (15 pts) 2. > 30 centimeters (20 pts) > 5 cm (15 pts) > 22.5 - 30 cm (130 pts) > 22.5 cm (25 pts) 2. > 4.0 cm (25 pts) No.WATER OR MOIST CHANNEL [0 pts] Zo 3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): Zo 3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): Bay	I Depth ix = 30 C
> 3.0 m - 40 m (>9/7* 13) [25 pts] Image: state st	ix=30 ろひ
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY GARIAN WIDTH RIPARIAN WIDTH FLOODPLAIN QUALITY GARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) L R Conservation Tillage Immature Forest, Wetland Immature Forest, Wetland Immature Forest, Shrub or Old Immature Forest, Shrub or Old Immature Forest, Shrub or Old Moderate 5-10m Immature Forest, Shrub or Old Moderate 5-10m Immature Forest, Shrub or Old Moderate 5-10m Immature Forest, Shrub or Old Moderate 5-10m Immature Forest, Shrub or Old Moderate 5-10m Immature Forest, Shrub or Old Moderate 5-10m Immature Forest, Shrub or Old Immature Forest, Shrub or Old Immature Fore	
FLOW REGIME (At Time of Evaluation) (Check ONLY one box); Stream Flowing Image: Stream Flowing Subsurface flow with isolated pools (Interstitial) Image: Stream Flowing COMMENTS Image: Stream Flowing	
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 1.0 2.0 3.0 0.5 0 1.5 0 2.5 0 53 STREAM GRADIENT ESTIMATE Flat (05 ft/100 ft) 1 Flat to Moderate 0 Moderate (2 ft/100 ft) 0 Moderate to Severe 0 Severe (10 ft/100 ft)	

DDITIONAL STREAM INFOR	MATION (This Information Must Als	o be Completed):		
	7 - 🕅 Yes 🗍 No QHEI Score	19_(If Yes, Attac	h Completed QHEI Form)	
	SIGNATED USE(S)			and the second s
J WWH Name:			_ Distance from Evaluated Stream	
J CWH Name:			Distance from Evaluated Stream	
	COPIES OF MAPS, INCLUDING THE	NTIRE WATERSHED	AREA. CLEARLY MARK THE SITE LOCATIO	Ń
MAPPING, AT ACT		NRCS Soil Map F	age: NRCS Soil Map Stream Orde	er
	Tow	nship / City:		
	<u> </u>	······	<u>. </u>	
Base Flow Conditions? (Y/N):_	T Date of last precipitation:	1-16-13	Quantity:	
Photograph Information:				
Elevated Turbidity? (Y/N):	Canopy (% open): 10	10-open		
Nere samples collected for wa	ater chemistry? (Y/N): <u>M</u> (Note	ab sample no. or id.	and attach results) Lab Number:	
Field Measures: Temp (°C	;) Dissolved Oxygen (mg/l)	pH (S.U.)	Conductivity (µmhos/cm)	
Is the sampling reach represe	intative of the stream (Y/N)	ot, please explain:		i
			<u></u>	
BIOTIC EVALUAT Performed? (Y/N): Eish Observert? (Y/N)	<u>TON</u> (If Yes, Record all observations, Vou ID number, Include appropriate field Voucher? (Y/N) Salamander	cher collections option lata sheets from the P s Observed? (Y/N)	al. NOTE: all voucher samples must be labeled imary Headwater Habitat Assessment Manual Voucher? (Y/N)	d with the site)
Frogs or Tadpoles Observed Comments Regarding Biology	? (Y/N) Voucher? (Y/N) Aq y:	uatic Macroinvertebra	ates Observed? (Y/N) Voucher? (Y/N)	
DRAWING A	AND NARRATIVE DESCRIPTI	ON OF STREAM	REACH (This <u>must</u> be completed	d):
Include Important Ian	ndmarks and other features of interes	t for site evaluation :	and a narrative description of the stream's	location
	Praine		Cropped Field	N

June 20, 2008 Revision

PHWH Form Page - 2

Ohie EPA	Qualitative Habita and Use Assessn	t Evaluation Index nent Field Sheet	QHEI Score: [49]
Stream & Location: <u>A</u> A - c	> D		M:Date: <u>4 16</u> 06 13
River Coder	Scorers	Full Name & Affiliation: <u>M</u> Lat./ Long.:	10 West west
11 SUBSTRATE Check ONLY Two	substrate TYPE BOXES;	<u>. (NAD 83 - decimal °) *</u> Check ONE	(Or 2 & average)
estimate % or no BEST TYPES POOL RIFF BLDR/SLABS [10] BOULDER [9] COBBLE [8] GRAVEL [7] BEDROCK [5] NUMBER OF BEST TYPES: E Comments	te every type present CLE OTHER TYPES POOL DETRITUS [3] DETRITUS [3] MUCK [2] CARTIFICIAL [0] (Score natural substrate (Score natural substrate 4 or more [2] sludge from point- 3 or less [0]	RIFFLE ORIGIN CINECK ONLE ORIGIN LIMESTONE [1] CINES [1] CINE	QUALITY UHEAVY [2] SILT ONORMAL [0] DEON ORMAL [0] MODERATE [-1] MODERATE [-1] MODERATE [-1] MODERATE [-1] MAXIMUM 20 MAXIMUM
2] INSTREAM COVER Indicate quality; 3-Highest quality in moderate diameter log that is stable, well devel UNDERCUT BANKS [1] OVERHANGING VEGETATION O SHALLOWS (IN SLOW WATE ROOTMATS [1] Comments	presence 0 to 3: 0-Absent; 1-Very 2-Moderate amounts, but not of hig or greater amounts (e.g., very larg loped rootwad in deep / fast water, N.[1] POOLS > 70cm [2] ROOTWADS [1] R) [1] BOULDERS [1]	small amounts or if more common of hest quality or in small amounts of h ge boulders in deep or fast water, lar or deep, well-defined, functional poo OXEOWS, BACKWATERS O AQUATIC MACROPHYTES O LOGS OR WOODY DEBRI	f marginal nighest AMOUNT nighest Check:ONE (Or 2 & average) ols. EXTENSIVE >75% [11] [1] MODERATE 25:75% [7] 3 [1] SPARSE 5-25% [3] S [1] NEARLY ABSENT <5% [1]
3] CHANNEL MORPHOLOGY SINUOSITY DEVELOPM HIGH [4] EXCELLEN MODERATE [3] GOOD [5] LOW [2] FAIR [3] NONE [1] POOR [1] Comments	Check ONE in each category (Or ENT CHANNELIZATIC T [7] I NONE [6] RECOVERED [4] RECOVERING [3] RECENT OR NO REC	2 & average) N STABILITY HIGH [3] MODERATE [2] LOW [1] OVERY [1]	Channel Maximum 20
4] BANK EROSION AND RIP River right looking downstream EROSION Comments	ARIAN ZONE Check ONE in e. RIPARIAN WIDTH Image: Check ONE in e. JDE > 50m [4] Image: Check ONE in e. IODERATE 10.50m [3] Image: Check ONE in e. ODERATE 10.50m [3] Image: Check ONE in e. ARROW 5.10m [2] Image: Check ONE in e. ERY NARROW 5.10m [2] Image: Check ONE in e. ONE [0] Image: Check ONE in e.	ach category for <i>EACH BANK</i> (Or 2 / FLOOD PLAIN QUALITY DREST, SWAMP [3] -RUB OR OLD FIELD [2] ESIDENTIAL, PARK, NEW FIELD [1] ENCED PASTURE [1] PEN PASTURE, ROWCROP [0]	per bank & average)
5] <i>POOL / GLIDE AND RIFFL</i> MAXIMUM DEPTH Check ONE (<i>ONLYI</i>) Che Check ONE (<i>ONLYI</i>) Che 0.7<1m [6] POOL 0.7<1m [4] POOL 0.4<0.7m [2] POOL 0.2<0.4m [1] 0<0.2m [0] Comments	LE / RUN QUALITY CHANNEL WIDTH eck ONE (Or 2 & average) WIDTH > RIFFLE WIDTH [2] WIDTH = RIFFLE WIDTH [1] WIDTH > RIFFLE WIDTH [0] WIDTH [0] WIDTH > RIFFLE WIDTH [0] WIDTH [0] WIDTH [0] WIDTH > RIFFLE WIDTH [0] WIDTH [0] WIDTH > RIFFLE WIDTH [0] WIDTH [0]	CURRENT VELOCITY Check ALL that apply TORRENTIAL [-1] SLOW [1] VERY FAST [1] INTERSTITIA FAST [1] INTERMITTEI MODERATE [1] EDDIES [1] Indicate for reach - pools and riffled	L [-1] NT: [-2] Recreation Potential <i>Primary Contact</i> <i>Secondary Contact</i> (circle one and comment on back) (circle one and comment on back) <i>Pool / Current</i> Maximum 12
Indicate for functional ri of riffle-obligate species RIFFLE DEPTH R BESTAREAS>10cm [2] MA BESTAREAS5-10cm [1] MA BESTAREAS 5.50cm [metric=0] Comments	iffles; Best areas must be Check ONE (RUN DEPTH RIFFLE / XIMUM > 50cm [2] STABLE (c XIMUM < 50cm [1] MOD. STA UNSTABLE	large enough to support a p Or 2 & average). RUN SUBSTRATE RIFFL ig., Cobble, Boulder) [2] BLE (e.g., Large Gravel) [1] c (e.g., Fine Gravel, Sand) [0]	Population E / RUN EMBEDDEDNESS NONE [2] LOW [1] MODERATE [0] MODERATE [0] MAXIMUM B MAXIMUM B COURSE (U.D.)
DRAINAGE AREA (25 mi ²) EPA 4520	☑ VERY LOW - LOW [2-4] ☐ MODERATE [6-10] ☐ HIGH - VERY HIGH [10-6]	%POOL:(30) % %RUN: (30)%	GLIDE: (40) Gradient RIFFLE: Maximum 10 06/16/06

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ChieFA Primary Headwater Habitat Evaluation Form HHEI Score (sum of metrics 1, 2, 3) :	23
SITE NAME/LOCATION	L uctions overy
MODIFICATIONS: 1. SUBSTRATE (Estimate percent of every type of substrate present, Check ONLY two predominant substrate TYPE boxes (Max of 40), Add total number of significant substrate types found (Max of 6), Final metric score is sum of boxes A & B. TYPE Image: Substrate type of substrate types found (Max of 6), Final metric score is sum of boxes A & B. TYPE Image: Substrate type of substrate types found (Max of 6), Final metric score is sum of boxes A & B. TYPE Image: Substrate type of substrate types found (Max of 6), Final metric score is sum of boxes A & B. TYPE Image: Substrate type of substrate types found (Max of 6), Final metric score is sum of boxes A & B. Image: Substrate type of substrate types found (Max of 6), Final metric score is sum of boxes A & B. Image: Substrate type of substrate types found (Max of 6), Final metric score is sum of boxes A & B. Image: Substrate type of substrate types found (Max of 6), Final metric score is sum of boxes A & B. Image: Substrate type of substrate types found (Max of 6), Final metric score is sum of boxes A & B. Image: Substrate type of substrate types found (Max of 6), Final metric score is sum of boxes A & B. Image: Substrate type of substrate types found (Max of 6), Final metric score is sum of boxes A & B. Image: Substrate type of substrate types found (Max of 6), Final metric score is sum of boxes A & B. Image: Substrate type of substrate types found (Max of 6), Final metric score is sum of boxes A & B. <td>HHEI Metric Points Substrate Max = 40 3</td>	HHEI Metric Points Substrate Max = 40 3
Total of Percentages of Bidr Slabs, Boulder, Cobble, Bedrock (A) (B) Score OF TWO MOST PREDOMINATE SUBSTRATE TYPES: TOTAL NUMBER OF SUBSTRATE TYPES: 2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): 2. So centimeters [20 pts] 25 cm - 10 cm [15 pts] 3.0 centimeters [20 pts] 25 cm [5 pts] 3.10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0 pts] 3.10 - 22.5 cm [25 pts] MAXIMUM POOL DEPTH (centimeters):	A + B Pool Depth Max = 30
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): > 4.0 meters (> 13) [30 pts] > 10 m - 1.5 m (> 3 3 * 4 8") [15 pts] > 30 m - 40 m (> 9'7' - 13) [25 pts] At (> 1.0 m (< 3 3 *) [5 pts]	Bankfull Width Max=30
This Information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream of RIPARIAN WIDTH L R (Per Bank) L R (Most Predominant per Bank) L R I R (Per Bank) L R (Most Predominant per Bank) L R I Wide >10m I R (Most Predominant per Bank) L R I Moderate 5-10m I R (Most Predominant per Bank) L R Moderate 5-10m I R Mature Forest, Wetland I Conservation Tillage Moderate 5-10m I Residential, Park; New Field Mature, Cope Pasture, Row Crop None I Residential, Park; New Field Mature, Crop Mining or Construction COMMENTS E Fenced Pasture Immining or Construction	
FLOW REGIME (Al Time of Evaluation) (Check ONLY one box): Stream Flowing Moist Channel, isolated pools, no flow (Intermittent) Subsurface flow with Isolated pools (Interstitial) Dry channel, no water (Ephemeral) COMMENTS SiNUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 1.0 2.0 3.0 0.5 1.5 2.5 33	
STREAM GRADIENT ESTIMATE Flat (03 ft/100 it) Flat to Moderate I Moderate (2 ft/100 it) GModerate to Severe Severe (10 ft/10	0 ft)

	· · · · · · · · · · · · · · · · · · ·			
	D USE(S)	Distance from Evaluated Stream		
U WWH Name:		Distance from Evaluated Stream	· · · · · · · · · · · · · · · · · · ·	
EWH Name:		Distance from Evaluated Stream _		
MAPPING ATTACH COPIES	OF MAPS, INCLUDING THE ENTIRE WATE	RSHED AREA. CLEARLY MARK THE SITE L	OCATION	
			am Örder	
USGS Quadrangle Name:	NRCS S0			
County: Paulding	Township / City:		 	
MISCELLANEOUS				
Poise Flow Conditions? (Y/N):	Date of last precipitation: $(4 -)b - 1$	3 Quantity: 1/2		
Base Flow Conditions: (1714)				
Photograph Information:				
Elevated Turbidity? (Y/N):	Canopy (% open): 100 10 0	pen		
Were samples collected for water chem	istry? (Y/N): <u>N</u> (Note lab sample no	, or id, and attach results) Lab Number:		
		S.U.)	and the second	
Lieio Wesanies: Leiub (.C)		ner er en son en		
Is the sampling reach representative of	the stream (Y/N) 1 If not, please exp		<u> </u>	
	<u></u>			
Additional comments/description of pol	ution impacts:	a na ang ang ang ang ang ang ang ang ang	<u>n na here en en</u>	
BIOTIC EVALUATION Performed? (Y/N): (If Yes, ID num	Record all observations. Voucher collection ber. Include appropriate field data sheets fro	s optional. NOTE: all voucher samples must be m the Primary Headwater Habitat Assessment Y/N) Voucher? (Y/N)	e labeled with the site Manual)	
BIOTIC EVALUATION Performed? (Y/N): (If Yes, ID num Fish Observed? (Y/N) Vouchu Frogs of Tadpoles Observed? (Y/N) Comments Regarding Biology:	Record all observations. Voucher collection ber. Include appropriate field data sheets fro er? (Y/N) Salamanders Observed? Voucher? (Y/N) Aquatic Macroin	s optional. NOTE: all voucher samples must be m the Primary Headwater Habitat Assessment Y/N) Voucher? (Y/N) vertebrates Observed? (Y/N) Voucher	e labeled with the site Manual) ? (Y/N)	
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BIOTIC EVALUATION Performed? (Y/N): (If Yes, ID num Fish Observed? (Y/N) Voucher Frogs of Tadpoles Observed? (Y/N) Comments Regarding Biology: Comments Regarding Biology: DRAWING AND NA Include Important landmarks a	Record all observations. Voucher collection ber. Include appropriate field data sheets fro er? (Y/N) Salamanders Observed? Voucher? (Y/N) Aquatic Macroin RRATIVE DESCRIPTION OF STI nd other features of interest for site eval	s optional. NOTE: all voucher samples must be m the Primary Headwater Habitat Assessment Y/N) Voucher? (Y/N) vertebrates Observed? (Y/N) Voucher REAM REACH (This <u>must</u> be com uation and a narrative description of the sl	e labeled with the site Manual) ? (Y/N) gleted): tream's location	
BIOTIC EVALUATION Performed? (Y/N): (If Yes, ID num Fish Observed? (Y/N) Vouche Frogs or Tadpoles Observed? (Y/N) Comments Regarding Biology: DRAWING AND NA Include important landmarks a	Record all observations. Voucher collection ber. Include appropriate field data sheets fro er? (Y/N) Salamanders Observed? Voucher? (Y/N) Aquatic Macroin RRATIVE DESCRIPTION OF STI nd other features of interest for site eval	s optional. NOTE: all voucher samples must be m the Primary Headwater Habitat Assessment Y/N) Voucher? (Y/N) vertebrates Observed? (Y/N) Voucher REAM REACH (This <u>must</u> be com uation and a narrative description of the st	s labeled with the site Manual) ? (Y/N) (Y/N) pleted): tream's location	
BIOTIC EVALUATION Performed? (Y/N): (If Yes, ID num Fish Observed? (Y/N) Vouche Frogs or Tadpoles Observed? (Y/N) Comments Regarding Biology: DRAWING AND NA Include Important landmarks a	Record all observations. Voucher collection ber. Include appropriate field data sheets fro er? (Y/N) Salamanders Observed? Voucher? (Y/N) Aquatic Macroin RRATIVE DESCRIPTION OF STI nd other features of interest for site eval	s optional. NOTE: all voucher samples must be m the Primary Headwater Habitat Assessment Y/N) Voucher? (Y/N) vertebrates Observed? (Y/N) Voucher REAM REACH (This <u>must</u> be com uation and a narrative description of the st	a labeled with the site Manual) ? (Y/N) pleted): tream's location	
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BIOTIC EVALUATION Performed? (Y/N): (If Yes, ID num Fish Observed? (Y/N) Vouche Frogs or Tadpoles Observed? (Y/N) Comments Regarding Biology: DRAWING AND NA Include Important landmarks a FLOW	Record all observations. Voucher collection ber. Include appropriate field data sheets fro ar? (Y/N)Salamanders Observed? Voucher? (Y/N)Aquiatic Macroin RRATIVE DESCRIPTION OF STI nd other features of interest for site eval Cropped F Road Litch Y Road 13	s optional. NOTE: all voucher samples must be m the Primary Headwater Habitat Assessment Y/N) Voucher? (Y/N) Voucher vertebrates Observed? (Y/N) Voucher REAM REACH (This <u>must</u> be com uation and a narrative description of the st -1 C d	a labeled with the site Manual) ? (Y/N) pleted): tream's location	
BIOTIC EVALUATION Performed? (Y/N): (If Yes, ID num Fish Observed? (Y/N) Voucher Frogs of Tadpoles Observed? (Y/N) Comments Regarding Biology: DRAWING AND NA Include Important landmarks a FLOW	Record all observations. Voucher collection ber. Include appropriate field data sheets fro ar? (Y/N)Salamanders Observed? Voucher? (Y/N)Aquatic Macroin RRATIVE DESCRIPTION OF STI nd other features of interest for site eval CCOPPED 7 Road 2:4ch Koad 2:4ch Y Road 13	s optional. NOTE: all voucher samples must be m the Primary Headwater Habitat Assessment Y/N) Voucher? (Y/N) Voucher vertebrates Observed? (Y/N) Voucher REAM REACH (This <u>must</u> be com uation and a narrative description of the st -1 CD	s labeled with the site Manual) ? (Y/N) pleted): tream's location	
BIOTIC EVALUATION Performed? (Y/N): (If Yes, ID num Fish Observed? (Y/N) Voucher Frogs of Tadpoles Observed? (Y/N) Comments Regarding Biology: DRAWING AND NA Include Important landmarks a FLOW	Record all observations. Voucher collection ber. include appropriate field data sheets fro sr? (Y/N)Salamanders Observed? Voucher? (Y/N)Aquatic Macroin RRATIVE DESCRIPTION OF STI nd other features of interest for site eval Cropped F Road Litch Y Road Litch Y Road 13 PHWH Form Pag	s optional. NOTE: all voucher samples must be m the Primary Headwater Habitat Assessment (Y/N) Voucher? (Y/N) Voucher vertebrates Observed? (Y/N) Voucher REAM REACH (This <u>must</u> be com uation and a narrative description of the st -1 Cd -1 Cd 10 - 2	e labeled with the site Manual) ? (Y/N) pleted): tream's location	

ChieEPA	Qualitative Habi and Use Asses	tat Evaluation Index sment Field Sheet	QHEI Score:	20
Stream & Location: _	BB-01		M:Date: 4_	1610613
River Code:	Score STORET #:	ers Full Name & Affiliation: Lat./ Long.: (NAD 83 - decimal °) •	18	Office verified location
1] SUBSTRATE Check ONLYTW estimate % or no BEST TYPES POOL RIF BEDR /SLABS [10] BOULDER [9] COBBLE [8] COBBLE [8] BEDROCK [5] NUMBER OF BEST TYPES: Comments	o substrate TYPE BOXES; ote every type present FLE OTHER TYPES PC I HARDPAN [4] I DETRITUS [3] I MUCK [2] I ARTIFICIAL [0] (Score natural subs) I for more [2] Store root point	Check ON OCL RIFFLE ULIMESTONE [1] UTILLS [1	E (Or 2 & average) QUALIT HEAVY [2] SILT MODERATE FREE [1] DEON E [1]	Y [[-1] [12] [12] [-1] Maximum 20
2] INSTREAM COVER Indicate quality; quality; 3-Highest quality in moderal diameter log that is stable, well deve UNDERCUT BANKS [1] O OVERHANGING VEGETATIO SHALLOWS (IN SLOW WAT O ROOTMATS [1] Comments	e presence 0 to 3: 0-Absent; 1-\ 2-Moderate amounts, but not o e or greater amounts (e.g., very sloped rootwad in deep / fast wa potential of the state of the state of the state potential of the state	Very small amounts or if more common if highest quality or in small amounts or large boulders in deep or fast water, la ater, or deep, well-defined, functional p [2] [OXBOWS, BACKWATER AQUATIC MACROPHYTI LOGS OR WOODY DEBI	of marginal AMOUI f highest large Check ONE (Or 2 ools. EXTENSIVE > S [1] MODERATE 2 ES [1] SPARSE 5<24 RIS [1] NEARLY ABSI Ma	NT 2 & average) 75% [11] 5-75% [7] 5% [3] ENT <5% [1] Cover 20
3] CHANNEL MORPHOLOG SINUOSITY DEVELOPM HIGH [4] EXCELLE MODERATE [3] GOOD [5] LOW [2] FAIR [3] NONE [1] POOR [1] Comments Comments	Check ONE in each category AENT CHANNELIZA NT[7] INONE [6] RECOVERED [4] RECOVERING [3] RECOVERING [3]	(Or 2 & average) TION STABILITY HIGH [3] MODERATE [2] A LOW [1] RECOVERY [1]	C M	Channel laximum 20
4] BANK EROSION AND RI River right looking downstream REROSION RONE/LITTLE [3] MODERATE [2] K HEAVY/SEVERE [1] Comments	PARIAN ZONE Check ONE RIPARIAN WIDTH III WIDE > 50m [4] III MODERATE 10-50m [3] III NARROW 5-10m [2] III VERY NARROW < 5m [1]	in each category for EACH BANK (Or R FLOOD PLAIN QUALIT POREST, SWAMP [3] SHRUB OR OLD FIELD [2] RESIDENTIAL PARK, NEW FIELD FENCED PASTURE [1] OPEN PASTURE, ROWCROP [0]	2 per bank & average) Y R D CONSERVATION D URBAN OR IND III D MINING / CONST Indicate predominant lar past 100m riparian.	TILLAGE [1] USTRIAL [0] RUCTION [0] nd use(s) Riparian laximum 10
5] POOL / GLIDE AND RIFF MAXIMUM DEPTH Check ONE (ONL/Y) C □ > 1m [6] □ POC □ 0.7<1m [4] □ POC □ 0.4<0.7m [2] ☑ POC □ 0.4<0.7m [2] ☑ POC □ 0.4<0.7m [1] □ < 0.2m [0] Comments	FLE / RUN QUALITY CHANNEL WIDTH heck ONE (Or 2 & average) DE WIDTH > RIFFLE WIDTH [2] DE WIDTH = RIFFLE WIDTH [1] DE WIDTH > RIFFLE WIDTH [0]	CURRENT VELOCITY Check ALL that apply TORRENTIAL [-1] SLOW [1] VERY FAST [1] INTERSTI FAST [1] INTERSTI MODERATE [1] EDDIES [1] Indicate for reach - pools and rif	TAL [-1] [ENT [-2]] [les.]	Potential Contact Contact Contact Maximum 12
Indicate for functional of riffle-obligate specie RIFFLE DEPTH BESTAREAS > 10cm [2] UM BESTAREAS > 10cm [1] UM BESTAREAS < 5cm [metric=0] Comments	riffles; Best areas must es: Check C RUN DEPTH RIFF AXIMUM > 50cm [2] ☐ STAB IAXIMUM < 50cm [1] ☐ MOD ☐ UNST	be large enough to support DNE (Or 2 & average). LE / RUN SUBSTRATE RIFI LE (e.g., Cobble; Boulder) [2] STABLE (e.g., Large Gravel) [1] ABLE (e.g., Fine Gravel, Sand) [0]	a population FLE / RUN EMBEDDE DNONE [2] LOW [1] MODERATE [0] EXTENSIVE [-1]	RIFFLE [metric=0]
6] <i>GRADIENT</i> () ft/mi) DRAINAGE AREA (VERY LOW - LOW [2-4] MODERATE [6-10] HIGH - VERY HIGH [10-6	%POOL: () %RUN: ()	%GLIDE:	Gradient Maximum 10 06/16/06



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ChipEPA Primary Headwater Habitat Evaluation Form HHEL Score (sum of metrics 1, 2, 3) :	59
SITE NAME/LOCATION	<u>75</u> ructions
STREAM CHANNEL IN NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OF NO REC MODIFICATIONS:	OVERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 40). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE BLDR SLABS [16 pts] PERCENT TYPE SILT [3 pt] PERCENT BEDROCK [16 pt] BEDROCK [16 pt] DERCENT SILT [3 pt] PERCENT PERCENT COBBLE (65-256 mm) [16 pts] DERCENT TYPE SILT [3 pt] PERCENT PERCENT COBBLE (65-256 mm) [12 pts] DERCENT DERCENT SILT [3 pt] PERCENT PERCENT SAND (<2 mm) [6 pts]	HHEI Metric Points Substrate Max = 40
MaxImum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from foed culverts of storm water pipes). (Check ONLY one box): So centimeters [20 pts] So centime	Pool Depth Max=30 ZO
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): > 40 meters (> 13) [30 pts] □ > 10 m - 1.5 m (> 3 3 - 4 8) [15 pts] □ > 30 m - 40 m (> 9 7' - 13) [25 pts] □ > 10 m (≤ 3 3') [5 pts] □ > 1.5 m = 3.0 m (> 4 8' ≤ 9' 7') [20 pts] □ > 1.0 m (≤ 3' 3') [5 pts] COMMENTS	Bankfull Width Max=30 30
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY Short E: River Left (L) and Right (R) as looking downstream Ar RIPARIAN WIDTH FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream Ar L R (Per Bank) L R O Wide >10m Immature Forest, Wetland Immature Forest, Shrub or Old Orban of Industrial Moderate 5-10m Immature Forest, Shrub or Old Immature, Conservation Tillage Open Pasture, Row RIM Immature Residential, Park, New Field Immature, Copp Open Pasture, Row None Immature Fenced Pasture Immature Mining or Construction	
FLOW REGIME (At Time of Evaluation) (Check ONLY one box); Stream Flowing Image: Stream Flowing Subsurface flow with isolated pools (Interstitial) Image: Stream Flowing COMMENTS Image: Stream Flowing	
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 3.0 0.5 1.0 2.0 3.0 STREAM GRADIENT ESTIMATE Flat (0.5 1/100 h) Flat to Moderate I Moderate (2 1/100 ft) Moderate to Severe Severe Severe (10 ft/l)	0 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Complet	<u>ed):</u>
	, Attach Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S)	Distance from Evaluated Stream
□ CWH Name:	Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATER	SHED AREA. CLEARLY MARK THE SITE LOCATION
USGS Quadrangle Name: NRCS Soil	Map Page: NRCS Soil Map Stream Order
County: Paulding Township / City	
MIŚCELLANEOUŚ	
Base Flow Conditions? (Y/N): Date of last precipitation:	Quantity: <u>a 5 '</u>
Photograph Information:	
Elevated Turbidity? (Y/N): K Canopy (% open): 100% open	3NV
Were samples collected for water chemistry? (Y/N): (Note lab sample no.	or id. and attach results) Lab Number
Field Measures: Temp (°C) Dissolved Oxygen (mg/l) PH (S	;U.)Conductivity (µmhos/cm)
Is the sampling reach representative of the stream (Y/N)_Y If not, please expla	in:
1 <u>1</u>	
Additional comments/description of pollution impacts:	n an an an an an ann an Anna an Anna. Anna an Anna an Anna.
BIOTIC EVALUATION Performed? (Y/N):	optional. NOTE: all voucher samples must be labeled with the site the Primary Headwater Habitat Assessment Manual) //N) Voucher? (Y/N) ertebrates Observed? (Y/N) Voucher? (Y/N)
DRAWING AND NARRATIVE DESCRIPTION OF STR Include Important landmarks and other features of interest for site evalu	EAM REACH (This <u>must</u> be completed): ation and a narrative description of the stream's location
FLOW Stream Cropped	field
PHWH Form Page	e ÷ 2

June 20, 2008 Revision

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ChieEPA	Qualitative and Use A	e Habitat Ev Assessmen	aluation Index t Field Sheet	QHEI S	core: 53
Stream & Location:	ABB- 02			RM:	Date: <u>4</u>] <u>6</u>] 06 13
	STORET #:	Scorers Full Lat	Name & Affiliation: ./ Long.:	<u></u>	Office verified
River Code:	ONLY Two substrate TYPE BC	<u> (NAD 8</u>)XES;	<u>13 - decimal °) — — • — — — — — — — — — — — — — — — — </u>	$- \frac{10}{28} = - \frac{1}{28}$	
BEST TYPES BEST TYPES BEDR /SLABS [10] BOULDER [9] COBBLE [8] BEDROCK [5] DEBDROCK [5] NUMBER OF BEST T	Ate % or note every type present OOL RIFFLE OTHER T OOL RIFFLE HARDP/ Image:	AN [4] POOL RIFFI AN [4] US [3] 2] DIAL: [0] matural substrates; ignored dge from point-source	Check OF ORIGIN LIMESTONE [1] WILLS [1] WILLS [1] HARDPAN [0] SANDSTONE [0] OF RIP/RAP [0] es) LACUSTURINE [0] SHALE [-1]		Jeo QUALITY IEAVY [-2] IODERATE [-1] IORMAL [0] IXTENSIVE [-2] IODERATE [-1] IORMAL [0] IORMAL [0] IORMAL [0]
Comments			COAL FINES [-2]		
2] INSTREAM COVE quality; 3-Highest quality i djameter log that is stable UNDERCUT BANK OVERHANGING VE SHALLOWS (IN SL IROOTMATS [1] Comments	Indicate presence 0 to 3: 0-, quality; 2-Moderate amounts in moderate or greater amounts well developed rootwad in dev S [1] GETATION [1] OW WATER) [1]	Absent; 1-Very small s, but not of highest c o (e.g., very large bou op / fast water, or dec S > 70cm [2] [WADS [1] DERS [1]	amounts or if more common quality or in small amounts ulders in deep or fast water, ep, well-defined, functional OXBOWS, BACKWATE AQUATIC MACROPHY LOGS OR WOODY DEE	n of marginal of highest large Check pools. EX RS [1] X MO RS [1] SP/ BRIS [1] NE	AMOUNT CONE (Or 2 & average) TENSIVE >75% [11] DERATE 25:75% [7] ARES 5:<25% [3] ARLY ABSENT <5% [1] Cover Maximum 20
3] CHANNEL MORPH	HOLOGY Check ONE in eac	h category (Or 2 & a	verage)		
SINUOSITY DEV HIGH [4] MODERATE [3] X LOW [2] NONE [1] Comments	VELOPMENT CHAM EXCELLENT [7] INONE [GOOD [5] IRECOV FAIR [3] X RECOV POOR [1] IRECEN	INELIZATION 6] ERED [4] ERING [3] T OR NO RECOVEF	STABILITY HiGH [3] MODERATE [2] LOW [1] YY [1]		Channel Maximum 20
4] BANK EROSION	AND RIPARIAN ZONE	Check ONE in each ca	ategory for EACH BANK (O	r 2 per bank & ave	erage)
	**** RIPARIAN WID I WIDE > 50m [4] MODERATE 10-50m MORROW 5-10m [2] VERY NARROW < 5 NONE [0]	H L R F □ □ FORES 13] □ □ SHRUE □ □ RESIDE m [1] □ □ FENCE X X OPEN I	ICOOD FLAIN GOAL T, SWAMP [3] 3 OR OLD FIELD [2] ENTIAL, PARK, NEW FIELD ID PASTURE [1] PASTURE, ROWGROP [0]	L R CONS U URBA [1] U URBA Indicate prec past 100m ri	ERVATION TILLAGE [1] N OR INDUSTRIAL [0] G / CONSTRUCTION [0] ominant land use(s) parian. Riparian
Comments					Maximum 10
5] POOL / GLIDE AI MAXIMUM DEPTH Check ONE (O//L/Y) > 1m [6] 0.7 < 1m [4] 0.4 < 0.7m [2] 0.2 < 0.4m [1] 0.2 < 0.2m [0] Comments	ND RIFFLE / RUN QUAL H CHANNEL WID Check ONE (Or 2 & au POOL WIDTH > RIFFLE V POOL WIDTH = RIFFLE V POOL WIDTH > RIFFLE V	./TY DTH C MDTH [2] □TORF MDTH [2] □TORF MDTH [1] □VER MDTH [0] □FAST XMOD Indi	CURRENT VELOCITY Check ALL that apply RENTIAL [-1] SLOW [1] FAST [1] INTERSTI [1] INTERMIT ERATE [1] EDDIES [icate for reach - pools and r	TIAL [-1] TIAL [-1] TIENT [-2] I] iffles.	ecreation Potential Primary Contact econdary Contact ble one and comment on back) Pool / Current Maximum 12
Indicate for fun	nctional riffles; Best are	as must be larg	e enough to support	a population	NO RIFFLE [metric=0]
of riffle-obligat RIFFLE DEPTH BEST AREAS > 10cm BEST AREAS > 10cm BEST AREAS > 510cm BEST AREAS < 5cm Imetric	e species: RUN DEPTH [2] ☐ MAXIMUM > 50cm [2] [1] ☐ MAXIMUM < 50cm [1] =0]	RIFFLE / RU	N SUBSTRATE RIF Sobble, Boulder) [2] (é.g., Large Gravel) [1] J., Fine Gravel, Sand) [0]	FLE / RUN E NONE LOW MODE EXTE	MBEDDEDNESS [2] 1] RATE [0] VSIVE [-1] Maximum 8
6] <i>GRADIENT</i> (DRAINAGE ARI ()	l ft/mi) ⊡ VERY LOW L EA MODERATE [6 ζ mi²) ⊡ HIGH-VERY I	OW [2-4] -10] IIGH [10-6]	%POOL:[<u>7</u>] %RUN: (<u>4</u>]))%GLIDE:(^l)%RIFFLE:(Gradient Maximum 10
EPA 4520					00/10/00



ChieFPA Primary Headwater Habitat Evaluation Form HHEI Score (sum of metrics 1, 2, 3) :	3
SITE NAME/LOCATION	2 ctions very
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 40). Add total number of significant substrate types found (Max of 6). Final metric score is sum of boxes A & B. TYPE BLDR SLABS [16 pts] BUDR SLABS [16 pts] BUDR SLABS [16 pts] BEDROCK [16 pt] BEDROCK [16 pt] COBBLE (65-256 mm) [12 pts] GRAVEL (2-64 mm) [19 pts] GRAVEL (2-64 mm) [6 pts] Total of Percentages of Bidr Slabs, Boulder, Cobble, Bedrock SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: (A) (B) SOCRE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: (A) (Check ONLY dualtion reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY dualtion reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): S0 centimeters [20 pts] S0 centimeters [20	HHEI Metric Points Substrate Max = 40 3 Bacasas A + B Pool Depth Max = 30
. >10 = 22.5 cm [25 pts] . NO.WATER OR MOIST CHANNEL [0 pts] . MAXIMUM POOL DEPTH (centimeters): . MAXIMUM POOL DEPTH (centimeters): . MAXIMUM POOL DEPTH (centimeters): . SAOmeters (> 13) [30 pts] . > 1.0 m < 1.5 m (> 3.3° - 4.8") [45 pts] . > 1.0 m (< 3° 3°) [5 pts]	Image: Second system Banktull Width Max=30 IS
Information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY RIPARIAN WIDTH FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream frequency L R (Per Bank) L R (Most Predominant per Bank) L R L R (Per Bank) L R (Most Predominant per Bank) L R L Wide >10m Immature Forest, Wetland Immature Forest, Wetland Immature Forest, Shrub or Old Immature Fore	
Stream Flowing Subsurface flow with Isolated pools (Interstitial) Model Channel, Isolated pools, no flow (Intermittent) Dry channel, no water (Ephemeral) Dry channel, no water (Ephemeral) Sinuosity (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 1.0 0.5 1.5 STREAM GRADIENT ESTIMATE Moderate (2 f/100 ft) Flat (05 m/100 h) Flat to Moderate	ţĵ

DOWNERSEND DESIGNATED USE(8) Distance from Evaluated Stream DOWNERSEND DESIGNATED USE(8) Distance from Evaluated Stream DOWNERSEND DESIGNATED USE(8) Distance from Evaluated Stream DEVENTION OF EVALUATED STREAM DESIGNATED USE(8) Distance from Evaluated Stream BEAPTING: ATTACH COPIES OF MAPS, INCLUDING THE ENTRE WATERSHED AREA. CLEARLY MARK THE STE LECATION SGB Clearengies Name:		(If Yes Attach Completed QHEI Form)
Distance from Evaluated Stream CMM Name: Distance from Evaluated Stream MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE <u>BITINE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION</u> SIGS Countering in Name: MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE <u>BITINE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION</u> SIGS Countering in Name: NRCS Soil Map Page: NINCELLAREOUS Y Date of last precipitation: 4-144 - 13 Country: Y Date of last precipitation: 4-244 - 13 Country: Y Date of last precipitation: 4-25* Notograph Information: Y Date of last precipitation: 4-244 - 13 Conductivity (Umhod/cm) Y Date of last precipitation: 4-244 - 13 Conductivity (Umhod/cm) Y Date of last precipitation: 4-244 - 13 Conductivity (Umhod/cm) Y Distance from Structure Conductivity (Umhod/cm) Massure: Terry (Ch) Distance explain: Distance dista precipitation: Y Y Distance from Structure Y Y Massing reach repres		True tradition and training
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EWH Name:	CWH Name:	Distance from Evaluated Stream
IMAPPING: ATTACH COPIES OF MAPS, INCLUDING THE <u>BITRE</u> WATERSHED AREA. CLEARLY WARK THE SITE LOCATION IGS Quadragie Name:	EWH Name:	Distance from Evaluated Stream
IdS Quadragie Name: NRCS Soil Map Page: NRCS Soil Map Stream Order Inty: PCUL inty: Township / City: MISCELLANEOUS Y Date of last precipitation: 4-M -13 Quantity: 25** Integration of pow Conditions? (YN): Date of last precipitation: 4-M -13 Quantity: 25** extend Turbidity? (YAB: Campy (% open):	MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE	WATERSHED AREA. CLEARLY MARK THE SITE LOCATION
InitioCELLANEOUS Y Date of last precipitation: 4-14-13 Quantity		CS Soll Map Page: NRCS Soll Map Stream Order
MISCELLANEOUS	unity: <u>Faulding</u> Township/	Ċltý:
see Flow Conditions? (Y/N): Date of test precipitation: Cuantity: extend Turbidity? (Y/N): Candpy (% open): ere samples collected for water chemistry? (Y/N): (Note lab sample no. or id. sind ettach results) Lab Number: ere samples collected for water chemistry? (Y/N): (Note lab sample no. or id. sind ettach results) Lab Number: ettach representative of the stream (Y/N) If not, please explain: dialonal comments/description of pollution impacts:		11/10 25"
extered Turbidity? (YAN):	se Flow Conditions? (Y/N): Date of last precipitation:	<u>19 -15</u> Quantity:
eveled Turbidity? (Y/N): Candpy (% open): are samples collected for water chemistry? (Y/N): (Note tab sample no. or id. and ettach results) Lab Number: eld Messures: Temp (*C) Dissolved Oxygen (mg/) PH (S.U.) Conductivity (umhos/om) the sampling reach representative of the stream (Y/N) (I' not, please explain: ddllonal comments/description of pollution Impacts: <u>BIONE EVALUATION</u> erformed? (Y/N): (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be tabeled with the effe (D number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Menuel) ish Observed? (Y/N) Voucher? (Y/N) Salamanders Observed? (Y/N) Voucher? (Y/N) Voucher? (Y/N) comments Regarding Biology DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed): Include Important landmarks and other features of interest for site evaluation and a narrative description of the stream's location 	otograph Information:	
ere samples collected for water chemistry? (Y/N):	evated Turbidity? (Y/N): Canopy (% open):	-
aid Meásurés: Temp (°C)Dissolved Oxigen (mg/l)PH (S.U)Conductivity (umhos/om)	ere samples collected for water chemistry? (Y/N): (Note lab sam	ple no. or id. and attach results) Lab Number:
the sampling reach representative of the stream (Y/N) [If not, please explain:	eld Measures: Temp (°C) Dissolved Oxygen (mg/l)	_ pH (S.U.) Conductivity (Limhos/cm)
dditional comments/description of pollution Impacts: BiOTIC EVALUATION erformed? (Y/N):	the sampling reach representative of the stream (Y/N)_ $_$. If not, pleas	şe explain:
dditional comments//description of pollution Impacts: EiOTIC EVALUATION verformed? (Y/N):		
BiOTIC EVALUATION Performed? (Y/N): (if Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) rish Observed? (Y/N): Voucher? (Y/N): Voucher? (Y/N): rish Observed? (Y/N): Voucher? (Y/N): Voucher? (Y/N): voucher? (Y/N): Voucher? (Y/N): Voucher? (Y/N): comments Regarding Biology:	dditional comments/description of pollution impacts:	
Flow District induce appropriate induces used and stream with the time) (reducer? (Y/N)	BIOTIC EVALUATION erformed? (Y/N): (If Yes, Record all observations. Voucher coll	lections optional. NOTE: all voucher samples must be labeled with the site
DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This <u>must</u> be completed): Include Important landmarks and other features of interest for site evaluation and a narrative description of the stream's location Crapped Fictor Diffch Diffch Chapped Fictor	sh Observed? (Y/N) Voucher? (Y/N) Salamanders Obser rogs of Tadpoles Observed? (Y/N) Voucher? (Y/N) Aquatic Mi	rved? (Y/N) Voucher? (Y/N) lácróinveitebrates Obsérvéd? (Y/N) Voucher? (Y/N)
DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This <u>must</u> be completed): Include Important landmarks and other features of interest for site evaluation and a narrative description of the stream's location CHOPPer Fich FLOW Diffch Chopper Fich Chopper Fich Ch	omments Regarding Biology	
DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This <u>must</u> be completed): Include Important landmarks and other features of interest for site evaluation and a narrative description of the stream's location Cropped Field FLOW Diffeh Diffeh Cropped Field Diffeh		
DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This <u>must</u> be completed): Include Important landmarks and other features of interest for site evaluation and a narrative description of the stream's location Cropped Face FLOW Ditch Cropped Face Ditch		
FLOW Ditch Ditch Cropped Field NA	DRAWING AND NARRATIVE DESCRIPTION OF Include Important landmarks and other features of interest for sit	F STREAM REACH (This <u>must</u> be completed): te evaluation and a narrative description of the stream's location
FLOW Ditch Crooped Field NA	Cropped	fald
Ditch Cropped Field NA		/
Cropped Field NA	Ditch	
	Cropped	1 Field NA

June 20, 2008 Revision

PHWH Form Page

ChieFA	Qualitative Habitat Evand Use Assessmer	valuation Index nt Field Sheet	QHEI Score:	
Stream & Location: (- 0	\`	RM:	Date:_4	151813
	Scorers Ful	Name & Affiliation: M	CV - Weste	Office verified
River Code:		11./ LONG.: [) 83 - decimal °) * [8	location 🗆
1] SUBSTRATE Check ONLY Two estimate % or not BEST TYPES POOL RIFF BEDR/SLABS [10] BOULDER [9] COBBLE [8] GRAVEL [7] BEDROCK [5] NUMBER OF BEST TYPES: E Comments	substrate TYPE BOXES, ⇒ every type present LE OTHER TYPES POOL RIFF D DETRITUS [3] D MUCK [2] MUCK [2] ARTIFICIAL [0] (Score natural substrates; ig]4 or more [2] sludge from point-sour (3 or less [0]	Check ONE (1) LIMESTONE [1] LIMESTONE [1] CHARDPAN [0] SANDSTONE [0] NOTE RIP/RAP [0] SHALE [-1] COAL FINES [-2]	Or 2 & average) QUALI HEAVY [-2 SILT MODERA NORMAL FREE [1] DEON CATENSIN MODERA NORMAL NONE [1]	TY [] [0] [] [] [0] [0] [0] [0] [
2] INSTREAM COVER Indicate quality; 3-Highest guality in moderate	presence 0 to 3: 0-Absent; 1-Very sma 2-Moderate amounts, but not of highest or greater amounts (e.g., very large br	Il amounts or if more common of r t quality or in small amounts of hig oulders in deep or fast water, larg	narginal AMOU ghest Check ONE (O	JNT r 2 & average) \$75% [11]
diameter log that is stable, well devel O UNDERCUT BANKS [1] O OVERHANGING VEGETATION O SHALLOWS (IN SLOW WATE O BROOTMATS [1]	oped rootwad in deep / fast water, or do POOLS > 70cm [2] R) [1] BOULDERS [1]	eep, well-defined, functional pool D IOXBOWS, BACKWATERS [AQUATIC MACROPHYTES LOGS OR WOODY DEBRIS	s. ☐ EATEROIDE 1] ☐ MODERATE [1] ☑ SPARSE 5-< [1] ☐ NEARLY AB	25.75% [7] 25% [3] SENT <5% [1] Cover
Comments			I	Maximum 9
3] CHANNEL MORPHOLOGY SINUOSITY DEVELOPM HIGH [4] EXCELLEN MODERATE [3] GOOD [5]	Check ONE in each category (Or 2 & 5 ENT CHANNELIZATION T[7] I NONE [6] REGOVERED [4]	average) STABILITY HIGH [3] MODERATE [2]		
LOW [2] FAIR [3] Anone [1] Anone [1] Comments		RY [1]		Channel Maximum 20
4] BANK EROSION AND RIF	ARIAN ZONE Check ONE in each	category for EACH BANK (Or 2 p FLOOD PLAIN QUALITY	er bank & average)	
	IDE > 50m [4] □ □ □ FORE IODERATE 10-50m [3] □ □ □ SHRU JARROW 5-10m [2] □ □ RESIE ERY NARROW < 5m [1]	EST, SWAMP [3] JB OR OLD FIELD [2] DENTIAL, PARK, NEW FIELD [1] ED PASTURE [1] I PASTURE, ROWCROP [0]	CONSERVATIC CONSERVATIC URBAN OR IN URBAN OR IN URBAN OR IN Inicicate predominant la past 100m riperian.	N TILLAGE [1] DUSTRIAL [0] STRUCTION [0] and use(s) Riparian
Comments	and a second			Maximum 10
5] <i>POOL / GLIDE AND RIFFI</i> MAXIMUM DEPTH Check ONE (ONLYI) Ch □ > 1m [6] □ POO □ 0 (7 < 1m [4]	.E / RUN QUALITY CHANNEL WIDTH eck ONE (Or 2 & average) WIDTH > RIFFLE WIDTH [2] WIDTH = RIFFLE WIDTH [1] WIDTH > RIFFLE WIDTH [1] WIDTH > RIFFLE WIDTH [1] WIDTH > RIFFLE WIDTH [1]	CURRENT VELOCITY Check ALL that apply RENTIAL [-1] SLOW [1] RY FAST [1] INTERSTITIAL ST [1] INTERMITTEN	[-1] Frinary Seconda (circle one and c	n Potential <i>Contact</i> ry Contact romment on back)
X 0.2<0.4m [1] □ < 0:2m [0] Comments		DERATE [1] DEDDIES [1] dicate for reach - pools and riffles		Pool / Current Maximum 12
Indicate for functional r of riffle-obligate specie	iffles; Best areas must be lar s: Check ONE (Or RUN DEPTH RIFFLE / R	ge enough to support a p 2 & average). UN SUBSTRATE RIFFL	e / RUN EMBEDD	RIFFLE [metric=0]
□ BEST AREAS > 10cm [2]. □ M □ BEST AREAS > 10cm [1] □ M □ BEST AREAS < 5cm [metric=0] Comments	\XIMUM > 50cm [2] □ STABLE (e.g. \XIMUM < 50cm [1] □ MOD. STABLE □ UNSTABLE (e	- Cobble, Boulder) [2] E (é.g., Large Gravel) [1] .g., Fine Gravel, Sand) [0]	☐ NONE [2] ☐ LOW [1] ☐ MODERATE [0 ☐ EXTENSIVE [-1	Riffle / Run 1 Maximum 8
6] GRADIENT (2 fl/mi) DRAINAGE AREA (2 mi ²)	VERY LOW = LOW [2-4] MODERATE [6-10] HIGH = VERY HIGH [10-6]	%POOL: 0 % %RUN: 0%	GLIDE:	Gradient Maximum 10
EPA 4520				00/01/00



SITE NAME/LOCATION CC-01 SITE NUMBER RIVER BASIN Dos DATE COMMENTS DATE COMMENT DATE	
STREAM CHANNEL INONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVERY MODIFICATIONS: SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY lwo predominant substrate TYPE boxes (Max of 40). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. Image: Comparison of boxes A & B. YPE BLDR SLABS [16 pis] PERCENT TYPE SILT [3 pi] PERCENT BEDROCK [16 pis] PERCENT TYPE SILT [3 pi] Substrate Substrate COBBLE (65 256 mm) [12 pis] PERCENT TYPE SILT [3 pis] Substrate BEDROCK [18 pi] PERCENT TYPE SILT [3 pis] Substrate COBBLE (65 256 mm) [12 pis] PERCENT TYPE Substrate Substrate BEDROCK [18 pi] Pis] Pine DETRITUS [3 pis] Substrate CAR VEL (2-64 mm) [19 pis] Pis] ATTIFICIAL [3 pis] Substrate Substrate SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: TOTAL NUMBER OF SUBSTRATE TYPES: TOTAL NUMBER OF SUBSTRATE TYPES: Substrate 2. MaxImum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avold plunge bools from road culverts or storm water pip	
1. SUBSTRATE (Estimate percent of every type of substrate present, Check ONLY two predominant substrate TYPE boxes (Max of 40). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. HHI Metric 1. BLDR SLABS [16 pts] BOULDER (>256 mm) [16 pts] BEDROCK [16 pt] BEDROCK [16 pt] BEDROCK [16 pt] BEDROCK [16 pt] BEDROCK [16 pt] BEDROCK [16 pts] BEDROCK [264 mm) [19 pts] BIdr Slabs, Boulder, Coble, Bedrock [4] Bidr Slabs, Boulder, Coble, Bedrock [4] SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 300 centimeters [20 pts] Sand _22.5 side missing pool from foad culverts or storm water pipes) (Check ONLY one box): Side centimeters [20 pts] Sand _22.5 side missing pool from foad culverts or storm water pipes) (Check ONLY one box): Side storm [15 pts] Side side missing pool from foad culverts or storm water pipes) (Check ONLY one box): Side storm [15 pts] Side side missing pool from foad culverts or storm water pipes) (Check ONLY one box): Side storm [15 pts] Side side missing pool from foad culverts or storm water pipes) (Check ONLY one box): Side storm [15 pts] Side side missing pool from foad culverts or storm water pipes) (Check ONLY one box): Side storm [15 pts] Side side storm [15 pts] Side storm [15 pts] Side	
2. MaxImum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from toad culverts of storm water pipes). (Check ONLY one box): Pool De Max = 0 (Check ONLY one box): > 30 centimeters [20 pts] > 5 cm (10 cm [15 pts]) Max = 0 (Check ONLY one box): > 22.5 = 30 cm [30 pts] > 5 cm (5 pts] > 5 cm (5 pts] > 10 = 22.5 cm [25 pts] > NO WATER OR MOIST CHANNEL [0 pts] > 5 cm [15 pts] COMMENTS MAXIMUM POOL DEPTH (centimeters): > 5 cm [15 pts]	il IC ts ate
	pth 30
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): Bankfi > 4.0 meters (> 13) [30 pts] > 10 m - 1.5 m (> 3 3' - 4'8'') [15 pts] Width > 3.0 m - 40 m (> 9' 7' - 13') [25 pts] > 10 m (< 3' 3') [5 pts]	
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY Another information Another information RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) L R Image: Information information Image: Information information Image: Information Image: Information L R (Per Bank) L R (Most Predominant per Bank) L R Image: Information I	
FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Subsurface flow with isolated pools (Interstitial) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of absorbin, (Check ONLY are the one)	
None 1.0 2.0 3.0 0.5 1.5 2.5 53 STREAM GRADIENT ESTIMATE Moderate (2.0/100.ft) Moderate to Severe Severe (10.10/100.ft)	

ADDITIONAL STREAM INFORMATION (This information Must Also be Completed):	
QHEI PERFORMED? - DY Yes DNo QHEI Score 24 (If Yes, Atta	ach Completed QHEL Form)
DOWNSTREAM DESIGNATED USE(S)	
	Distance from Evaluated Stream
CWH Name:	Distance from Evaluated Stream
U EWH Name:	
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE <u>ENTIRE</u> WATERSHED) AREA. CLEARLY MARK THE SITE LOCATION
USGS Quadrangle Name: NRCS Soli Map	Page: NRCS Soil Map Stream Order
county: <u>Pauldins</u> Township/City:	······································
MISCELLANEOUS	
Base Flow Conditions? (Y/N): Date of last precipitation:	Quantity:Quantity:
Photograph Information: See attached teport	
Elevated Turbidity (Y/N): Canopy (% open): 100% open	~
Ware complex collected for water chemistry? (Y/N): N (Note lab sample no. of id.	and attach results) Lab Number
	Conductivity (umbos/cm)
Fleid Measures: Temp (°C) Dissolved Oxygen (mg/n) ph (C.C.)	
Is the sampling reach representative of the stream (Y/N) If not, please explain;	<u> </u>
Additional comments/description of pollution impacts	e na se se na mana a server a constructiva e constructiva e a constructiva e a constructiva e a constructiva e En esta e constructiva e constructiva e a constructiva e a constructiva e a constructiva e constructiva e const En esta e constructiva e constructiva e a constructiva e a constructiva e a constructiva e constructiva e const
and a state of the second state	and an end of the second and a second s
BIOTIC EVALUATION	
Performed? (Y/N): (If Yes, Record all observations. Voucher collections option	hal. NOTE: all youcher samples must be labeled with the site
ID number. Include appropriate field data sheets from the	Primary Headwater Hapitat Assessment wanuan
Fish Observed? (Y/N) Voucher? (Y/N) Salamanders Observed? (Y/N) Frade or Tadioles Observed? (Y/N) Voucher? (Y/N) Aduatic Macroinverteb	Voucher? (Y/N) rates Observed? (Y/N) Voucher? (Y/N)
Comments Regarding Biology	
	······································
Manufacture Information and Annual Information and Annual Information	
DRAWING AND NARRATIVE DESCRIPTION OF STREAM	I REACH (This <u>must</u> be completed):
Include Important landmarks and other features of interest for site evaluation	i and a narrative description of the stream's location
Croppe to	
	TODIEL Och
Check	ahur Crew
FLOW C C	Crossin
	\wedge
CVOPPU	field
Q B	

June 20, 2008 Revision

PHWH Form Page - 2

NM

ChieFA Qua and	alitative Habitat Evaluation In I Use Assessment Field She	et QHEI Score: 24
Stream & Location: Dos Run	- CC-01	RM:Date: <u>4 16</u> 1 96 13
Biyar Cada:ST(Scorers Full Name & Affilia ORET #: Lat./ Long.:	tion: YNCV - West weiffied
River Code . - <	Ite TYPE BOXES; (NAD 83-decimal *)	heck ONE (Or 2 & average) N QUALITY [1] HEAVY [-2] [1] MODERATE [-1] [1] FREE [1] [1] FREE [1] [1] MODERATE [-1] [1] MODERATE [-1] [1] MODERATE [-1] [1] MODERATE [-1] [1] MODERATE [-1] [2] MODERATE [-1] [2] MONE [1]
2] INSTREAM COVER Indicate presenc quality; 3-Highest quality in moderate or great diameter log that is stable, well developed roc O UNDERCUT BANKS [1] O OVERHANGING VEGETATION [1] O SHALLOWS (IN SLOW WATER) [1] O IRCOTMATS [1] Comments	e 0 to 3: 0-Absent; 1-Very small amounts or if more ate amounts, but not of highest quality or in small ar ter amounts (e.g., very large boulders in deep or fas otwad in deep / fast water, or deep, well-defined, fur <u>O</u> POOLS > 70cm [2] <u>O</u> ROOTWADS [1] <u>O</u> BOULDERS [1] <u>O</u> LOGS OR WOO	common of marginal nounts of highest st water, large ictional pools. Check ONE (Or 2 & average) ictional pools. EXTENSIVE >75% [11] KWATERS [1] MODERATE 25:75% [7] KOPHYTES [1] SPARSE 5-<25% [3]
3] CHANNEL MORPHOLOGY Check of SINUOSITY DEVELOPMENT □ HIGH [4] □ EXCELLENT [7] □ MODERATE [3] □ GOOD [5] □ LOW [2] [1] ▲ NONE [1] □ POOR [1] Comments	ONE in each category (Or 2 & average) CHANNELIZATION STABILI CHANNELIZATION INONE [6] CHANNE [6] CH	TY NTE [2] Maximum 20
4) BANK EROSION AND RIPARIAN River right looking downstream RIPARI REROSION NONE / LITTLE [3] MODERATE [2] HEAVY / SEVERE [1] Comments	V ZONE Check ONE in each category for EACH B. AN WIDTH FLOOD PLAIN C om [4] Green Forest, SWAMP [3] ITE 10-50m [3] SHRUB OR OLD FIELD [2] V 5-10m [2] Green PASTURE [1] RROW < 5m [1] FENCED PASTURE [1]	ANK (Or 2 per bank & average) QUALITY CONSERVATION TILLAGE [1] URBAN OR INDUSTRIAL [0] V FIELD [1] O MINING / CONSTRUCTION [0] Indicate predominant land use(s) past 100m riparian. Riparian Maximum 10
5] <i>POOL / GLIDE AND RIFFLE / RU</i> MAXIMUM DEPTH CHAN Check ONE (<i>ONLYI</i>) Check ONE □ > 1m [6] □ POOL WIDTH □ 0.7 <1m [4] □ POOL WIDTH □ 0.2<-0.4m [1] □ < 0.2m [0] Comments	JN QUALITY NEL WIDTH CURRENT VELO E (Or 2 & average) Check ALL that a > RIFFLE WIDTH [2] TORRENTIAL [-1] SL > RIFFLE WIDTH [1] VRAST [1] INT > RIFFLE WIDTH [0] FAST [1] INT > RIFFLE WIDTH [0] FAST [1] INT	DCITY pply OW [1] rERSTITIAL [-1] PIES [1] Is and riffles.
Indicate for functional riffles; of riffle-obligate species: RIFFLE DEPTH RUN DI BESTAREAS > 10cm [2] MAXIMUM BESTAREAS 5-10cm [1] MAXIMUM BESTAREAS < 5cm [metric=0] Comments	Best areas must be large enough to su Check ONE (Or 2 & average). EPTH RIFFLE / RUN SUBSTRATE ≥ 50cm [2] □ STABLE (e.g., Cobble, Boulder) [2 < 50cm [1] □ MOD, STABLE (e.g., Large Gravel □ UNSTABLE (e.g., Fine Gravel, Sand	pport a population RIFFLE / RUN EMBEDDEDNESS I NONE [2] I1] LOW [1] DODERATE [0] Riffle / Run Extensive [-1] Maximum 8
6] GRADIENT (C ft/mi) OVER DRAINAGE AREA OMO () mi ²) Hig EPA 4520	RY LOW : LOW [2:4] %POOL: DERATE [6:10] H : VERY HIGH [10:6] %RUN:	Ø %GLIDE: Ø Ø %RIFFLE: Ø Ø %RIFFLE: 06/16/06

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ChipEPA Primary Headwater Habitat Evaluation Form HHEI Score (sum of metrics 1, 2, 3) :	13
SITE NAME/LOCATION <u>F-OL</u> SITE NUMBER RIVER BASIN <u>Blue Creek</u> DRAINAGE AREA (mi ²) LENGTH OF STREAM REACH (ft) <u>LO</u> LAT. DATE <u>Y-IS-IS</u> SCORER <u>MCV</u> COMMENTS <u>A 5 P. Hch</u> NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instr	<u>Z</u>
STREAM CHANNEL INONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OF NO RECOVERED RECOVERING RECENT OF NO RECO	OVERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 40). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE BLDR SLABS [16 pts] PERCENT TYPE BOULDER (<256 mm) [16 pts]	HHEI Metric Points Substrate Max = 40 3 A + B
MaxImum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from foad culverts of storm water pipes). (Check ONLY one box): > 30 centimeters [20 pts] > 22:5 - 30 cm [30 pts] > 10 - 22:5 cm [25 pts] COMMENTS COMMENTS MAXIMUM POOL DEPTH (centimeters):	Pool Depth Max = 30 25
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): • > 4.0 meters (> 13') [30 pts] > 1.0 m + 1.5 m (> 3 3' - 4 8') [15 pts] • > 3.0 m + 4.0 m (> 0' 7' - 13') [25 pts] • 1.0 m (≤ 3' 3'') [5 pts] • > 1.5 m > 3.0 m (> 4' 8' > 9' 7') [20 pts] • 1.0 m (≤ 3' 3'') [5 pts] • COMMENTS	Bankfull Width Max=30
This Information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY WINTE: River Left (L) and Right (R) as looking downstream Area in the second downst	
FLOW REGIME (At Time of Evaluation) (Check ONLY one box); Stream Flowing Moist Channel, isolated pools, no flow (Intermittent) Subsurface flow with isolated pools (Interstitial) Dry channel, no water (Ephemeral) COMMENTS	
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check QNLY one box): None 1.0 2.0 3.0 0.5 1.5 2.5 53	
SINEAM GRAUIENT ESTIMATE XFlat (05 #/100 m) Flat to Moderate Moderate (2 #/100 m) GModerate to Severe Severe (10 #/10	0, ît)

	(If Yes, Attach Completed QHEI Form)	
DOWNSTREAM DESIGNATED USE(S)	Distance from Evaluated Stream	
CWH Name:	Distance from Evaluated Stream	
EWH Name:	Distance from Evaluated Stream	
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE	ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION	
SGS Quadrande Name	NRCS Soil Map Page: NRCS Soil Map Stream Order	
ounty: $1001000 - 1000000000000000000000000000$	wnsnip / City:	
MISCELLANEOUS		
ase Flow Conditions? (Y/N): Date of last precipitation:	Quantity:	
hotograph information: See a fached rep	ort	
	· · · · · · · · · · · · · · · · · · ·	
levated Turbidity? (Y/N): Canopy (% open):		
ere samples collected for water chemistry? (Y/N): /// (Note	lab sample no. of Id. and attach résults) Lab Number	
ield Measures: Temp (°C) Dissolved Oxygen (mg/l)	pH (S.U.)Conductivity (umhos/cm)	
the compling reach representative of the stream $\mathcal{V}_{AD} \mathcal{V}_{AD}$. If n	not please explain:	
i the sampling reach representative of the area in (1)10-4 in t		
dditional comments/description of pollution impacts	n en	
BIOTIC EVALUATION Performed? (Y/N): (If Yes, Record all observations. Vou ID number. Include appropriate field	icher collections optional. NOTE: all voucher samples must be labeled with the site data sheets from the Primary Headwater Habitat Assessment Manual)	
BIOTIC EVALUATION Performed? (Y/N): (If Yes, Record all observations. Vou ID number. Include appropriate field Fish Observed? (Y/N) Voucher? (Y/N) Salamander Frogs or Tadpoles Observed? (Y/N) Voucher? (Y/N) Aq Comments Regarding Biology.	icher collections optional. NOTE: all voucher samples must be labeled with the site data sheets from the Primary Headwater Habitat Assessment Manual) rs Observed? (Y/N) Voucher? (Y/N) quatic Macroinvertebrates Observed? (Y/N) Voucher? (Y/N)	
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BioTIC EVALUATION Performed? (Y/N): ////////////////////////////////////	Ichér collections optional. NOTE: all voucher samples must be labeled with the site data sheets from the Primary Headwater Habitat Assessment Manual) rs Observed? (Y/N) Voucher? (Y/N) quatic Macroinvertebrates Observed? (Y/N) Voucher? (Y/N) IQON OF STREAM REACH (This must be completed): st for site evaluation and a narrative description of the stream's location PCL2 CADAD F.Cl2 WH Form Page - 2	

ChieEPA	Qualitative Habita and Use Assessn	t Evaluation Index nent Field Sheet	QHEI Score	e: [9]
Stream & Location: F- 0			M:Date:	// 06
River Code:	Scorers STORET #:	Full Name & Affiliation: 1 Lat./ Long.: (NAD 83 - decimal °)	<u>NCV (wes</u> _ 18	Hward Office verified location□
1] SUBSTRATE Check ONLY Two estimate % or note BEST TYPES POOL RIFFL BOULDER [9] COBBLE [8] COBBLE [8] COBBLE [8] BEDROCK [5] NUMBER OF BEST TYPES: Comments	substrate TYPE BOXES; every type present OTHER TYPES POOL HARDPAN [4] DETRITUS [3] MUCK [2] SILT [2] ARTIFICIAL [0] (Score natural substrate 4 or more [2] sludge from point- 3 or less [0]	Check ON ORIGIN UMESTONE [1] UMETLANDS [0] U	E (Or 2 & average) QUAI HEAVY SILT MORMA FREE 11 DEO EXTENS MODEO MODER NONE [LITY [2] ATE [-1] [0] [1] Substrate Substrate Maximum 20
2] INSTREAM COVER Indicate p quality; 2- quality; 3-Highest quality in moderate of diameter log that is stable, well develo O UNDERGUT BANKS [1] O OVERHANGING VEGETATION O SHALLOWS (IN SLOW WATER O ROOTMATS [1] Comments	resence 0 to 3: 0-Absent; 1-Very Moderate amounts, but not of hig or greater amounts (e.g., very larg ped rootwad in deep / fast water, POOLS > 70cm [2] ROOTWADS [1]) [1]	small amounts or if more common hest quality or in small amounts of le boulders in deep or fast water, le or deep, well-defined, functional pe OXBOWS, BACKWATER AQUATIC MACROPHYTE LOGS OR WOODY DEBR	of marginal AMC highest Check-ONE (i pols. EXTENSIV S [1] MODERAT S [1] MODERAT S [1] MODERAT S [1] NEARLY A	DUNT Or 2 & average) E >75% [11] E 25-75% [7] <25% [3] BSENT <5% [1] Cover Maximum 20
3] CHANNEL MORPHOLOGY (SINUOSITY DEVELOPME HIGH [4] EXCELLENT MODERATE [3] GOOD [5] LOW [2] FAIR [3] MONE [1] YOOR [1] Comments Yoor [1]	Check ONE in each category (Or 3 NT CHANNELIZATIO [7] [] NONE [6] [] RECOVERED [4] [] RECOVERING [3] [] RECENT OR NO RECO	2 & average) N STABILITY HIGH [3] MODERATE [2] X LOW [1] OVERY [1]		Channel Maximum 20
4] BANK EROSION AND RIPA River right looking downstream EROSION NONE / LITTLE [3] MODERATE [2] HEAVY / SEVERE [1] Comments	RIAN ZONE Check ONE in ea PARIAN WIDTH L DE > 50m [4] D DE PARIAN WIDTH L DE > 50m [4] D DE > 50m [4] D DE > 50m [4] D PARIAN (10 m [2]) D RROW 5-10m [2] D RY NARROW < 5m [1]	Ach category for EACH BANK (Or 2 FLOOD PLAIN QUALIT PREST, SWAMP [3] IRUB OR OLD FIELD [2] SIDENTIAL, PARK, NEW FIELD [7 NGED PASTURE [1] PEN PASTURE, ROWGROP [0]	Per bank & average) Y R D CONSERVATI URBAN OR IN URBAN OR IN II D MINING / CON Indicate predominant past 100m riparian.	ON TILLAGE [1] IDUSTRIAL [0] ISTRUCTION [0] Iand use(s) <i>Riparian</i> Maximum 10
5] POOL / GLIDE AND RIFFLE MAXIMUM DEPTH C Check ONE (ONLY!) Chec □ > 1m [6] □ POOL □ 0.7-<1m [4] □ POOL □ 0.4-<0.7m [2] POOL □ 0.2-<0.4m [1] □ < 0.2m [0] Comments	E / RUN QUALITY HANNEL WIDTH & ONE (Or 2 & average) WIDTH > RIFFLE WIDTH [2] 7 WIDTH = RIFFLE WIDTH [1] 7 WIDTH > RIFFLE WIDTH [0] 7 D	CURRENT VELOCITY Check ALL that apply ORRENTIAL [-1] SLOW [1] /ERY FAST [1] INTERSTITL AST [1] INTERMITT MODERATE [1] EDDIES [1] Indicate for reach - pools and riffle	AL [-1] ENT [-2]	on Potential y Contact try Contact comment on back) Pool / Current Maximum 12
Indicate for functional riff of riffle-obligate species: RIFFLE DEPTH RL BESTAREAS > 10cm [2] MAX BESTAREAS 5-10cm [1] MAX BESTAREAS < 5cm [metric=0] Comments	fles; Best areas must be I Check ONE (JN DEPTH RIFFLE / IMUM > 50cm [2] STABLE (e IMUM < 50cm [1] MOD, STAB UNSTABLE	arge enough to support a Or 2 & average). RUN SUBSTRATE RIFFI G., Cobble; Boulder) [2] SLE (e.g., Large Gravel) [1] (e.g., Fine Gravel, Sand) [0]	population LE / RUN EMBEDI NONE [2] LOW [1] MODERATE [0 EXTENSIVE [-1	DEDNESS
6] GRADIENT (\ ft/mi) K DRAINAGE AREA (mi ²) E EPA 4520	VERY LOW : LOW [2-4] MODERATE [6-10] HIGH : VERY HIGH [10-6]	%POOL:	%GLIDE: 100 KRIFFLE: O	Gradient Maximum 10 06/16/06



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ChoEPA Primary Headwater Habitat Evaluation Form HHEI Score (sum of metrics 1, 2, 3) :	13
SITE NAME/LOCATION H-OI SITE NUMBER RIVER BASIN HOKE RUN DRAINAGE AREA (m ²) LENGTH OF STREAM REACH (ft) 200 LAT LONG RIVER CODE RIVER MILE DATE 4-15-13 SCORER MCV COMMENTS AS D. Ich NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Onlo's PHWH Streams" for Instr	<u>0.5</u> uctions
STREAM CHANNEL IN NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OF NO RECOVERING RECENT OF NO RECOVERING MODIFICATIONS:	OVERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check OALY two predominant substrate TYPE boxes (Max of 40). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE BLDR SLABS [16 pts] PERCENT TYPE BUDR SLABS [16 pts] PERCENT SILT [3 pt] PERCENT BUDR SLABS [16 pts] PERCENT SILT [3 pt] PERCENT BUDR SLABS [16 pts] PERCENT SILT [3 pt] PERCENT BUDR SLABS [16 pts] PERCENT SILT [3 pt] PERCENT BUDR SLABS [16 pts] PERCENT SILT [3 pt] PERCENT BUDR SLABS [16 pts] PERCENT SILT [3 pt] PERCENT BUDR SLABS [16 pts] PERCENT SILT [3 pt] PERCENT BUDR SLABS [16 pts] PERCENT SILT [3 pt] PERCENT BUDR SLABS [16 pts] PERCENT SILT [3 pt] PERCENT BUDR SLABS [16 pts] PERCENT SILT [3 pt] PERCENT BUDR SLABS [16 pts] PERCENT PERCENT NUCK [0 pts] BUDR SLABS [16 pts] PERCENT PERCENT PERCENT BUDR SLABS [16 pts] PERCENT PERCENT PERCENT <td>HHEI Metric Points Substrate Max = 40 3 Beezeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeee</td>	HHEI Metric Points Substrate Max = 40 3 Beezeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeee
2. MaxImum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from foad culverts of storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 5 cm - 10 cm [15 pts] > 22.5 < 30 cm [30 pts]	Pool Depth Max = 30
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): > 4.0 meters (> 13) [30 pts]	Bankfull Width Max=30 /S
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream A RIPARIAN WIDTH FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream A L R (Per Bank) L R O Wide >10m L R (Most Predominant per Bank) L R O Wide >10m D Mature Forest, Wetland D Conservation Tillage Immature Forest, Shrub of Old D Urban of Industrial Field Open Pasture, Row V/X Narrow <5m	
FLOW REGIME (At Time of Evaluation) (Check ONLY one box); Stream Flowing Image: Stream Flowing Subsurface Now with Isolated pools (Interstitial) Image: Dry channel, no water (Ephemieral) COMMENTS Image: Stream Flow (Interstitial)	
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 1.0 2.0 3.0 0.5 1.5 2.5 >3	
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft) Flat to Moderate OModerate OModerate (2.0/100 ft) OModerate to Severe OSevere Severe OSevere	0 ît)

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ADDITIONAL STREAM INFORMATION (This Information	<u>1 Must Also be Completed):</u>
	Score(If Yes, Attach Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S)	
WWH Name:	Distance from Evaluated Stream
J CWH Name:	Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDI	ING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE STELLOCATION
JSGS Quadrangle Name:	NRCS Soil Map Page: NRCS Soil Map Stream Order
county: <u>Pauldim</u>	Township / City:
MISCELLANEOUS	
Base Flow Conditions? (Y/N): Date of last precip	vitation: $4 - 15 - 13$ quantity: 6.5°
Photograph Information: See a Hached	report
Elevated Turbidib (2 (Y/N): \mathcal{Y} Cabbby (% oper	1: 100% open
	(Note lebi sample no, or id, and attach résults) Leb Number:
Field Measures: Temp (°C) Dissolved Oxygen /	н (mgv) рн (s,v,) солансамих (himnos/cm)
is the sampling reach representative of the stream (Y/N)	f not, please explain:
<u></u>	مواجع میں میں میں ایک اور
Additional comments/description of pollution impacts:	
n an	en besten en beneken naar het nieden de en besten die besten die besten die besten de besten bestenden die best Die
BIOTIC EVALUATION	
Performed? (Y/N): (If Yes, Record all observati	ions. Voucher collections optional. NOTE: all voucher samples must be labeled with the site
ndiuner. nichtige abbrob	
Fish Observed? (Y/N) Voucher? (Y/N) Sa	Jamanders Observed? (Y/N) Voucher? (Y/N)) Aquatic Macroinvertebrates Observed? (Y/N) Voucher? (Y/N)
	/ / .quado mao onto nos acos o sociones (
DRAWING AND NARRATIVE DES	CRIPTION OF STREAM REACH (This must be completed):
Include Important landmarks and other features	of interest for site evaluation and a narrative description of the stream's location
·	Company (C))
	Cropper tielc
FLOW	-Ch
\wedge	
	Cropped field
JV J	

June 20, 2008 Revision

PHWH Form Page - 2

ChieEPA	Qualitativ and Use	/e Habitat Eva Assessment	luation Index Field Sheet	QHEI Sa	core: 05
Stream & Location:	H-01	· · · · · · · · · · · · · · · · · · ·		RM:D	ate: <u>4115</u>
River Code:	STORET #:	Scorers Full N Lat./	ame & Affiliation: Long.: decimal*)	MCV - Wes 	office verified location□
1] SUBSTRATE Check estima BEST TYPES BLDR/SLABS [10] BOULDER [9] COBBLE [8] GRAVEL [7] BEDROCK [5] NUMBER OF BEST T Comments	ONLY Two substrate TYPE B ate % or note every type prese OOL RIFFLE OTHER 1 Image: Im	OXES; int TYPES POOL RIFFLE POOL RIFFLE POOL RIFFLE INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT INT	Check O ORIGIN		DUALITY AVY [2] DDERATE [-1] DRMAL [0] EEE [1] DDERATE [-1] DDERATE [-1] DRMAL [0] DNE [1]
2] INSTREAM COVE quality; 3-Highest quality i diameter log that is stable UNDERCUT BANK OVERHANGING VE SHALLOWS (IN SL OROOTMATS [1] Comments	R Indicate presence 0 to 3: 0 quality; 2-Moderate amount n moderate or greater amount , well developed rootwad in de S [1] POO GETATION [1] ROC OW WATER) [1] BOU	Absent; 1-Very small an ts, but not of highest qua s (e.g., very large bould sep / fast water, or deep, LS > 70cm [2] TVVADS [1]	nounts or if more commor ality or in small amounts of ers in deep or fast water, well-defined, functional OXEOWS: BACKWATEI AQUATIC MACROPHYI LOGS OR WOODY DEE	n of marginal of highest large Check C pools. EXTE RS [1] SPAF RS [1] SPAF RIS [1] NEAF	AMOUNT DNE (Or 2 & average) NSIVE >75% [11] ERATE 25-75% [7] ISE 5<25% [3] RLY ABSENT <5% [1] Cover Maximum 20
3] CHANNEL MORPH SINUOSITY DEV HIGH [4] [] MODERATE [3] [] LOW [2] [] [] NONE [1] [] F Comments	IOLOGY Check ONE in eac /ELOPMENT CHAI SCELLENT [7] □ NONE SOOD [5] □ RECON AIR [3] 爻 RECON 200R [1] □ RECEN	ch category (Or 2 & aver NNELIZATION [6] /ERED [4] /ERING [3] /T OR NO RECOVERY	age) STABILITY HIGH [3] MODERATE [2] COW [1]		Channel Maximum 20
4] BANK EROSION / River right looking downstre EROSION NONE / LITTLE [3] MODERATE [2] M EAVY / SEVERE [1] Comments	AND RIPARIAN ZONE of TRIPARIAN WIDT WIDE > 50m [4] MODERATE 10-50m NARROW 5-10m [2] MODERATE 0-50m NARROW 5-10m [2] MONE [0]	Check ONE in each cate TH L R FLC D FOREST, 1 [3] D SHRUSO D RESIDEN m [1] D FENCED I XXX OPEN PA	gory for EACH BANK (Or DOD PLAIN QUALIT SWAMP [3] R OLD FIELD [2] (IAL, PARK, NEW FIELD ASTURE [1] STURE, ROWCROP [0]	2 per bank & avera TY ↓ R □ □ URBAN [1] □ □ MINING Indicate predon past 100m ripa	ge) RVATION TILLAGE [1] OR INDUSTRIAL [0] / CONSTRUCTION [0] ninant land use(s) rian. Riparian Maximum 10
5] POOL / GLIDE AN MAXIMUM DEPTH Check ONE (ONLYI) □ > 1m [6] □ 0.7 <1m [4] □ 0.4-<0.7m [2] ₩ 0.2-<0.4m [1] □ < 0.2m [0] Comments	ID RIFFLE / RUN QUAL CHANNEL WID Check ONE (Or 2 & av OCOL WIDTH > RIFFLE V POOL WIDTH = RIFFLE V POOL WIDTH = RIFFLE V	./TY DTH CU /erage) C MIDTH [2] □TORREN MIDTH [1] □ VERY F/ MIDTH [0] □ FAST [1] □ MODER Indicat	RRENT VELOCITY Check ALL that apply ITIAL [-1] X SLOW [1] AST [1] INTERSTI INTERMIT ATE [1] EDDIES [1] e for reach - pools and rif	TAL [-1] TENT [-2] Tes.	eation Potential mary Contact ondary Contact one and comment on back) Pool / Current Maximum 12
Indicate for func of riffle-obligate RIFFLE DEPTH BESTAREAS > 10cm [BESTAREAS 5-10cm] BESTAREAS < 5cm [metric= Comments	ctional riffles; Best are species: RUN DEPTH 21 □MAXIMUM > 50cm [2] 11 □MAXIMUM < 50cm [1] 0]	as must be large e Check ONE (Or 2 & a RIFFLE / RUN \$ STABLE (e.g., Cob MOD. STABLE (e.g.) UNSTABLE (e.g.) F	nough to support a verage). SUBSTRATE RIFF ble, Boulder) [2] .; Large Gravel) [1] ine Gravel, Sand) [0]	a population	SEDDEDNESS Riffle / VE [-1] Maximum 8
6] GRADIENT(ス DRAINAGE ARE (ひ EPA 4520	ft/mi)	OW [2:4] -10] IGH [10-6]	%POOL: 0 %RUN: 0	%GLIDE:(100 %RIFFLE:(0)	Gradient Maximum 10 06/16/06



ChipEPA Primary Headwater Habitat Evaluation Form HHEI Score (sum of metrics 1, 2, 3):	48
SITE NAME/LOCATION <u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> SITE NUMBER <u> </u> RIVER BASIN <u> <u> </u> <u> </u> <u> </u> <u> </u> RIVER CODE <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> RIVER CODE <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> RIVER CODE <u> </u> <u> </u> RIVER CODE <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> RIVER MILE <u> </u> <u> </u></u></u>	<u>2.5</u>
STREAM CHANNEL INONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVERED MODIFICATIONS:	OVERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 40). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE BLDR SLABS [16 pts] PERCENT TYPE BOULDER (<256 mm) [16 pts]	HHEI Metric Points Substrate Max = 40 3 Becades
2. MaxImum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from foed culverts or storm water pipes) (Check ONLY one box): 30 centimeters [20 pts] > 5 cm + 10 cm [15 pts] > 22.5 = 30 cm [30 pts] - > 5 cm + 10 cm [15 pts] > 10 - > 5 cm [15 pts] > 10 - > 5 cm [25 pts] COMMENTS - MAXIMUM POOL DEPTH (centimeters):	Pool Depth Max = 30 20
3, BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): > 4.0 meters (> 13) [30 pts] □ > 1.0 m - 1.5 m (> 3 3' - 4'8') [15 pts] > 3.0 m - 4.0 m (> 9 7' - 13) [25 pts] □ > 1.0 m (≤ 3'3') [5 pts] > 1.5 m - 3.0 m (> 4'8' ± 9' 7') [20 pts] □ > 1.0 m (≤ 3'3') [5 pts] COMMENTS	Bankfull Width Max=30 25
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY All PARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) L R Wide >10m L R (Most Predominant per Bank) L R Wide >10m Immature Forest, Wetland Immature Forest, Wetland Immature Forest, Shrub or Old Moderate 5-10m Immature Forest, Shrub or Old Immature Forest, Shrub or Old Immature, Row Moderate 5-10m Residential, Park, New Field Open Pasture, Row Orop Narrow <5m	÷
FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Moist Channel, isolated pools, no flow (Intermittent) Subsurface flow with isolated pools (Interstitial) Dry channel, no water (Ephemeral) COMMENTS Subsurface flow diameters of an flow of the flow	- -
SINUOSITY (Number of bends per 61 m (200 ti) of channel) (Check GN/LY one box): None 1.0 2.0 3.0 0.5 3 STREAM GRADIENT ESTIMATE Flat (05 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft/1	D0, Ř.)

DDITIONAL STREAM INFORMATION (This Information Must Also be Completed):	
QHEI PERFORMED? - XYes DNo QHEI Score 30_(If Yes, Attach Completed QHEI Form)	
DOWNSTREAM DESIGNATED USE(S)	
] WWH Namé: Distance from Evaluated	Stream
Distance from Evaluated Distance from Evaluated Distance from Evaluated	Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE <u>ENTIRE</u> WATERSHED AREA. CLEARLY MARK TH	E SITE LOCATION
SGS Quadrangle Name: NRCS Soil Map Page: NRCS Soil Map Page: NRCS Soil M	lap Stream Order
ounty: <u>Fauldin</u> Township/City.	······································
MISCELLANEOUS	
Base Flow Conditions? (Y/N): Date of last precipitation: $9 - 15 - 13$ Quantity: 325	
photograph Information: See affacted report	
ilevated Turbidity? (Y/N): Canopy (% open): 100% Open	*
Vere samples collected for water chemistry? (Y/N): (Note lab sample no. or id. and attach results) Lab Num	ber:
ield Measures: Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.)Conductivity (umho	os/cm)
s the sampling reach representative of the stream (Y/N) If not, please explain:	
•	
Additional comments/description of pollution impacts:	
BIÒTIC EVALUATION	landara eta eta eta diretta eta diretta eta diretta eta eta eta eta eta eta eta eta eta
BIOTIC EVALUATION Performed? (Y/N): ////////////////////////////////////	s must be labeled with the site essment Manual) Voucher? (Y/N)
BIOTIC EVALUATION Performed? (Y/N):	s must be labeled with the site essment Manual) Voucher? (Y/N)
BIOTIC EVALUATION Performed? (Y/N):	s must be labeled with the site essment Manual) Voucher? (Y/N) e completed):
BIOTIC EVALUATION Performed? (Y/N):	s must be labeled with the site essment Manual) Voucher? (Y/N) e completed): of the stream's location
BIOTIC EVALUATION Performed? (Y/N):	s must be labeled with the site essment Manual) Voucher? (Y/N) e completed): of the stream's location
BIOTIC EVALUATION Performed? (Y/N): M (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher sample: ID number. Include appropriate field data sheets from the Primary Headwater Habitat Ass Fish Observed? (Y/N) Voucher? (Y/N) Salamanders Observed? (Y/N) Voucher? (Y/N) Frogs or Tadpoles Observed? (Y/N) Voucher? (Y/N) Comments Regarding Biology: Aquatic Macroinvertebrates Observed? (Y/N) Comments Regarding Biology: Drawling AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be include important landmarks and other features of interest for site evaluation and a narrative description of Cropped Field Comped Field Field	s must be labeled with the site essment Manual) Voucher? (Y/N) e completed): of the stream's location
BiOTIC EVALUATION Performed? (Y/N):	s must be labeled with the site essment Manual) Voucher? (Y/N) e completed): of the stream's location
EIOTIC EVALUATION Performed? (Y/N): (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher sample: ID number. Include appropriate field data sheets from the Primary Headwater Habitat Ass Fish Observed? (Y/N) Voucher? (Y/N) Salamanders Observed? (Y/N) Voucher? (Y/N) Progis or Tadpoles Observed? (Y/N) Voucher? (Y/N) Aquatic Macroinvertebrates Observed? (Y/N) Counter? (Y/N) Comments Regarding Biology: Counter? (Y/N) Aquatic Macroinvertebrates Observed? (Y/N) Counter? DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be Include Important landmarks and other features of Interest for site evaluation and a narrative description of Cropped Field FLOW Diff	s must be labeled with the site essment Manual) Voucher? (Y/N) e completed): of the stream's location
BIOTIC EVALUATION Performed? (Y/N):	s must be labeled with the site essment Manual) Voucher? (Y/N) e completed): of the stream's location
EiOTIC EVALUATION Performed? (Y/N): M (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher sample: ID number. Include appropriate field data sheets from the Primary Headwater Habitat Ass Fish Observed? (Y/N) Voucher? (Y/N) Salamanders Observed? (Y/N) Voucher? (Y/N) Yourcher? (Y/N) Salamanders Observed? (Y/N) Yourcher? (Y/N) Voucher? (Y/N) Comments Regarding Elology: Voucher? (Y/N) Cropped Field FLOW Diff FLOW Diff Chopped Field Chopped Field	s must be labeled with the site essment Manual) Voucher? (Y/N) e completed): of the stream's location
BIOTIC EVALUATION Performed? (Y/N):	s must be labeled with the site essment Manual) Voucher? (Y/N) e completed): of the stream's location
Performed? (Y/N):	s must be labeled with the site essment Manual) Voucher? (Y/N) e completed): of the stream's location

ChieE A	Qualitative Hal and Use Asse	bitat Evaluation Index ssment Field Sheet	QHEI Score	e: 30
Stream & Location: I-0	·		RM:Date:	41161063
Horse Run	Sco	orers Full Name & Affiliation:	MCV - Westy	wed
River Code:	STORET #:	Lat./ Long.: (NAD 83 - decimal °) '		
1] SUBSTRATE Check ONLY Tweestimate % or n	ote every type present	Check O	NE (Or 2 & average)	171/
				-2]
				ATE [-1] Substrate
				3
□ □ SAND [6] □ □ BEDROCK [5]	(Score natural su	bstrates; ignore RIP/RAP [0]	Store Moder	ATE [-1] Maximum
NUMBER OF BEST TYPES:	4 or more [2] sludge from	point-sources) LACUSTURINE [0]		L[0] 20 []
Comments		COAL FINES [-2]	<u> 1999-1999 - 1999</u>	
2] INSTREAM COVER Indicate	e presence 0 to 3: 0-Absent; 1	-Very small amounts or if more common	n of marginal AMC	UNT
quality; 3-Highest quality in moderation diameter log that is stable, well day	te or greater amounts (e.g., ve	ery large boulders in deep or fast water,	large Check ONE (Or 2 & average) E >75% [11]
UNDERCUT BANKS [1]			RS [1]	E 25-75% [7]
<u>Ó</u> SHALLOWS (IN SLOW WAT	$\frac{O}{[1]} = \frac{O}{O} \text{ ROUTWADS}$		$\begin{array}{c c} IES[1] & \square SPARSES \\ IRIS[1] & \square NEARLY A \end{array}$	~257% [3] BSENT <5% [1]
ROOTMATS [1]				Cover
Comments		· · ·		20
3] CHANNEL MORPHOLOG	Check ONE in each categor	y (Or 2 & average)		
] [] MODERATE [2]		
NONE [1] X POOR [1]		RECOVERY [1]		Channel Maximum
Comments				20
4] BANK EROSION AND RI	PARIAN ZONE Check ON	E in each category for EACH BANK (O	r 2 per bank & average)	
	RIPARIAN WIDTH	R FOREST, SWAMP [3]		ON TILLAGE [1]
	NODERATE 10-50m [3]	SHRUB OR OLD FIELD [2]		IDUSTRIAL [0]
	VERY NARROW $< 5m$ [1]	FENCED PASTURE [1]	Indicate predominant	land use(s)
Comments	NONE [0]	M OPEN PASTURE, ROWGROP [0]	past 100m riparian.	Riparian Maximum 3
				10
5] <i>POOL / GLIDE AND RIFF</i> MAXIMUM DEPTH	<i>LE / RUN QUALITY</i> CHANNEL WIDTH	CURRENT VELOCITY	Recreation	on Potential
	heck ONE (<i>Or 2 & average</i>)		Primar	y Contact
	L WIDTH = RIFFLE WIDTH [1]		[IAL [-1] Seconda (circle one and	comment on back)
☐ 0.4-<0.7m [2] ★ POO ☐ 0.2-<0.4m [1]	LWIDTH > RIFFLE WIDTH [0]	MODERATE [1]	TENT [-2]]	Pool /
[] < 0.2m [0]		Indicate for reach - pools and ri	ffles.	Maximum 5
lu dicata far functional u	iffloor Post groat mus	t be large enough to support	a nonulation	12
of riffle-obligate specie	s: Check	ONE (Or 2 & average).		RIFFLE [metric=0]
	RUN DEPTH RIFF AXIMUM > 50cm [2] [7] STAE	LE / RUN SUBSTRATE RIF		DEDNESS
BEST AREAS 5-10cm [1]	AXIMUM < 50cm [1] □ MOD	. STABLE (e.g., Large Gravel) [1]		Riffle /
[] BEST AREAS < 5cm [metric=0]		IABLE (e.g., Fille Glaver, Sanu) [v]		Run O
				8
	VERY LOW - LOW [2-4]	%P00L:	%GLIDE:(100)	Gradient (U)
(2,5 mi ²)	HIGH - VERY HIGH 110-0	31 %RUN: ()	%RIFFLE:	10
EPA 4520				06/16/06



ChieFFA Primary Headwater Habitat Evaluation Form HHEI Score (sum of metrics 1, 2, 3) :	13
SITE NAME/LOCATION <u>5-01</u> SITE NUMBER RIVER BASIN <u>Blue Creek</u> DRAINAGE AREA (mi ²) LENGTH OF STREAM REACH (ft) LAT. LONG RIVER CODE RIVER MILE DATE <u>4-15-13</u> SCORER <u>MCV</u> COMMENTS <u>SMall</u> ROCA <u>2</u> ; 1 Ch	1
STREAM CHANNEL IN NONE / NATURAL CHANNEL RECOVERED RECOVERING RECEIPT OF NO REC MODIFICATIONS:	OVERY
SUBSTRATE (Estimate percent of every type of substrate present, Check ONLY two predominant substrate TYPE boxes (Max of 40), Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE BLDR SLABS [16 pts] BOULDER (<256 mm) [16 pts] BEDROCK [16 pt] COBBLE (65-256 mm) [12 pts] GRAVEL (2-64 mm) [9 pts] SAND (<2 mm) [6 pts] COBBLE (65 and complete to the present) COBB	HHEI Metric Points Substrate Max = 40
Bidr Slabs, Boulder, Cobble, Bedrock (h) (h) <td>A+B Peel Depth Max=30</td>	A+B Peel Depth Max=30
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): > 4.0 msters (> 13) [30 pts] > 1.0 m (> 3 3' - 4'8') [15 pts] > 3.0 m + 40 m (> 9' 7' + 13) [25 pts] > 1.0 m (< 3' 3') [5 pts]	Bankfull Width Max=30
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream Are an Are	<u>.</u>
FLOW REGIME (At Time of Evaluation) (Check ONLY one box); Stream Flowing Molst Channel, isolated pools, no flow (Intermittent) Subsurface flow with isolated pools (Interstitial) Dry channel, no water (Ephemeral) COMMENTS Divide pools (Interstitial)	
SINCOSI 17 (Number of penas per 61 m (200 tt) of channel) (Check ONLY one box): None 1.0 0.5 1.5 STREAM GRADIENT ESTIMATE Flat (05 tr/100 h) Flat to Moderate Moderate (2 tr/100 h) Flat to Moderate	0, ħj

OHEI PERFORM	ED? - XYes DNo QHEIS	Score (If Yes, Attach Completed QHEI Form)
DOWNSTREAM	DESIGNATED USE(S)	
WWH Name:		Distance from Evaluated Stream
CWH Name:		Distance from Evaluated Stream
EWH Name:		
MAPPING: ATT	CH COPIES OF MAPS, INCLUD	ING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE STE LOCATION
GS Quadrangle Name:	· · · · · · · · · · · · · · · · · · ·	NRCS Soil Map Page: NRCS Soil Map Stream Order
univ: Pauld	in	Township / City:
MISCELLANEO	us	
		situation: 4-15-13 Quiantity: 235"
ase Flow Conditions? (Y	N): Date of last precip	
notograph Information: _	See attached	
levated Turbidity? (Y/N):	Canopy (% oper	n): <u>100 %</u> Gpen
/ere samples collected for	or water chemistry? (Y/N):	(Note lab sample no. or id. and attach results) Lab Number:
		n (md/l)
iein Messinies: Teinh		
the sampling reach rep	esentative of the stream (Y/N)_	I not, please explain.
<u></u>		والمحمد والملامر ومعاورة والمشترية أعتار وتروي ومنابع ومنابع والمنابع والمتنابع ومنابع ومتروث فالمرابع ومتروع والمحمد
dditional comments/des	cription of pollution impacts:	
Additional comments/des	UATION (If Yes, Record all observat ID number. Include approp Voucher? (Y/N) Sa ved? (Y/N) Vouchër? (Y/N)	ttions. Voucher collections optional. NOTE: all voucher samples must be labeled with the site priate field data sheets from the Primary Headwater Habitat Assessment Manual) alamanders Observed? (Y/N) Voucher? (Y/N) N) Aquatic Macroinvertebrates Observed? (Y/N) Voucher? (Y/N)
Additional comments/des <u>BIOTIC EVAL</u> Performed? (Y/N): Fish Observed? (Y/N) Frogs or Tadpoles Obser Comments Regarding Bi	Cription of pollution impacts: <u>UATION</u> (If Yes, Record all observat ID number. Include approp Voucher? (Y/N) Sa ved? (Y/N) Voucher? (Y/N)	tions. Voucher collections optional. NOTE: all voucher samples must be labeled with the site priate field data sheets from the Primary Headwater Habitat Assessment Manual) alamanders Observed? (Y/N) Voucher? (Y/N) N) Aquatic Macroinvertebrates Observed? (Y/N) Voucher? (Y/N)
Additional comments/des	Cription of pollution impacts: <u>UATION</u> (If Yes, Record all observation ID number. Include appropring Voucher? (Y/N) Savet Voucher? (Y/N) Savet Voucher? (Y/N) Savet C. AND NARRATIVE DESC	tions. Voucher collections optional. NOTE: all voucher samples must be labeled with the site priate field data sheets from the Primary Headwater Habitat Assessment Manual) alamanders Observed? (Y/N) Voucher? (Y/N) N) Aquatic Macroinvertebrates Observed? (Y/N) Voucher? (Y/N) SCRIPTION OF STREAM REACH (This must be completed):
Additional comments/des	Cription of pollution impacts: <u>UATION</u> (If Yes, Record all observation ID number. Include appropring Voucher? (Y/N) Sa ved? (Y/N) Voucher? (Y/N) ology: G AND NARRATIVE DES t landmarks and other features	ttions. Voucher collections optional. NOTE: all voucher samples must be labeled with the site priate field data sheets from the Primary Headwater Habitat Assessment Manual) alamanders Observed? (Y/N) Voucher? (Y/N) N) Aquatic Macroinvertebrates Observed? (Y/N) Voucher? (Y/N) SCRIPTION OF STREAM REACH (This must be completed): s of interest for site evaluation and a narrative description of the stream's location
Additional comments/des	CCUNTY	tions. Voucher collections optional. NOTE: all voucher samples must be labeled with the site priate field data sheets from the Primary Headwater Habitat Assessment Manual) alamanders Observed? (Y/N) Voucher? (Y/N) N) Aquatic Macroinvertebrates Observed? (Y/N) Voucher? (Y/N) SCRIPTION OF STREAM REACH (This <u>must</u> be completed): s of interest for site evaluation and a narrative description of the stream's location Road 72
Additional comments/des <u>BiOTIC EVAL</u> Performed? (Y/N):	CCUNTY	tions. Voucher collections optional. NOTE: all voucher samples must be labeled with the site priate field data sheets from the Primary Headwater Habitat Assessment Manual) alamanders Observed? (Y/N) Voucher? (Y/N) N) Aquatic Macroinvertebrates Observed? (Y/N) Voucher? (Y/N) SCRIPTION OF STREAM REACH (This must be completed): as of interest for site evaluation and a narrative description of the stream's location
Additional comments/des	CCUNTY Ditch	tions. Voucher collections optional. NOTE: all voucher samples must be labeled with the site priate field data sheets from the Primary Headwater Habitat Assessment Manual) alamanders Observed? (Y/N) Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) Voucher? (Y/N) SCRIPTION OF STREAM REACH (This must be completed): s of interest for site evaluation and a narrative description of the stream's location
Additional comments/des	County Ditch	Ations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site priate field data sheets from the Primary Headwater Habitat Assessment Manual) alamanders Observed? (Y/N) Voucher? (Y/N) V
Additional comments/des	CCOUNTY Ditch	Ations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site priate field data sheets from the Primary Headwater Habitat Assessment Manual) alamanders Observed? (Y/N) Voucher? (Y/N) voucher? (Y/N) voucher? (Y/N) voucher? (Y/N) SCRIPTION OF STREAM REACH (This must be completed): s of interest for site evaluation and a narrative description of the stream's location Road 72

Chief	Qualitative Habi and Use Assess	tat Evaluation Index sment Field Sheet	QHEI Score: 16
Stream & Location:	J-01	Ŕ	M: Date: <u>G/1/5</u> 1 96 13
Piwar Codo:	Score	rs Full Name & Affiliation: Lat./ Long.:	100 - Westbrock 18 . Office verified location
Alver Code. - 1] SUBSTRATE Check Of estimate BEST TYPES D BLDR/SLABS [10] D BOULDER [9] D GOBBLE [8] D GRAVEL [7] D BEDROCK [5] NUMBER OF BEST TYD Comments	VLYTwo substrate TYPE BOXES; % or note every type present DL RIFFLE OTHER TYPES PO HARDPAN [4] DETRITUS [3] DETRITUS [3] DETRITUS [3] CONTRACTOR SILT [2] CScore natural subs PES: A or more [2] sludge from po	Check ONE OL RIFFLE ULIMESTONE [1] ULIMESTONE [1] ULIMESTONE [1] ULIMESTONE [1] ULIMESTONE [1] ULILS [1]	COR 2 & average) QUALITY HEAVY [-2] SILT MODERATE [-1] FREE [1] DECOMBENSIVE [-2] MODERATE [-1] MODERATE [-1] MAXIMUM 20 MAXIMUM 20
2] INSTREAM COVER quality; 3-Highest quality in n diameter log that is stable, w O UNDERCUT BANKS [O OVERHANGING VEG] O SHALLOWS (IN SLOV C IRGOTMATS [1] Comments	Indicate presence 0 to 3: 0-Absent; 1-V quality; 2-Moderate amounts, but not of hoderate or greater amounts (e.g., very ell developed rootwad in deep / fast wa [] [] [] [] [] [] [] [] [] [] [] [] []	ery small amounts or if more common of highest quality or in small amounts of large boulders in deep or fast water, le ter, or deep, well-defined, functional po [2] OXBOWS, BACKWATERS OXBOWS, BACKWATERS AQUATIC MACROPHYTE LOGS OR WOODY DEBR	of marginal AMOUNT highest rige Check-ONE (Or 2 & average) ols. EXTENSIVE >75% [11] [1] MODERATE 25-75% [7] [3] S [1] S SPARSE 5-25% [3] [5] INEARLY ABSENT <5% [1] Cover Maximum 20
3] CHANNEL MORPHO SINUOSITY DEVE HIGH [4] EXI MODERATE [3] GO LOW [2] FAI NONE [1] R PO Comments	LOGY Check ONE in each category LOPMENT CHANNELIZA SELLENT [7] [] (NONE [6] OD [5] [] RECOVERED [4] R [3] [] RECOVERING [3] OR [1] [] [RECENT OR NO F	(Or 2 & average) TION STABILITY HIGH [3] MODERATE [2] LOW [1]	Channel Maximum 20
4] BANK EROSION AN River right looking downstream REROSION NONE / LITTLE [3] MODERATE [2] MC HEAVY / SEVERE [1] Comments	ID RIPARIAN ZONE Check ONE RIPARIAN WIDTH F WIDE > 50m [4] F MODERATE 10-50m [3] F NARROW 5-10m [2] F VERY NARROW < 5m [1]	in each category for EACH BANK (Or 2 FLOOD PLAIN QUALIT FOREST, SWAMP [3] SHRUB OR OLD FIELD [2] RESIDENTIAL, PARK, NEW FIELD [FENCED PASTURE [1] OPEN PASTURE, ROWCROP [0]	Per bank & average)
5] <i>POOL / GLIDE AND</i> MAXIMUM DEPTH Check ONE (<i>ONLY</i> !) □ > 1m [6] [□ 0.7<1m [4] [□ 0.4<0.7m [2]] □ 0.2<0.4m [1] □ 4<0.2m [0] <i>Comments</i>	RIFFLE / RUN QUALITY CHANNEL WIDTH Check ONE (Or 2 & average) POOL WIDTH > RIFFLE WIDTH [2] POOL WIDTH = RIFFLE WIDTH [1] PPOOL WIDTH > RIFFLE WIDTH [0]	CURRENT VELOCITY Check ALL that apply TORRENTIAL [-1] SLOW [1] VERY FAST [1] SINTERSTITI FAST [1] INTERMITTI MODERATE [1] EDDIES [1] Indicate for reach - pools and riff/	AL [-1] Primary Contact Secondary Contact (circle one and comment on back) Pool/ Current Maximum 12
Indicate for functi of riffle-obligate s RIFFLE DEPTH BESTAREAS > 10cm [2] BESTAREAS > 5-10cm [1] BESTAREAS < 5cm [metric=0] Comments	onal riffles; Best areas must pecies: Check O RUN DEPTH RIFFI □MAXIMUM > 50cm [2] □ STABL □MAXIMUM < 50cm [1] □ MOD. □UNST/	be large enough to support a NE (Or 2 & average). .E / RUN SUBSTRATE RIFF E (e.g., Cobble, Boulder) [2] STABLE (e.g., Fine Gravel, Sand) [0] BLE (e.g., Fine Gravel, Sand) [0]	population LE / RUN EMBEDDEDNESS NONE [2] LOW [1] MODERATE [0] EXTENSIVE [-1] Maximum 8
6] GRADIENT () DRAINAGE AREA ()	ft/mi) 🛃 VERY LOW - LOW [2-4] D MODERATE [6-10] mi ²) D HIGH - VERY HIGH [10-6]	%POOL: %RUN: 6%	%GLIDE: %RIFFLE: 06/16/06



ChieEPA Primary Headwater Habitat Evaluation Form HHEI Score (sum of metrics 1, 2, 3) : 33							
SITE NAME/LOCATION	L						
1. SUBSTRATE (EstImate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 40). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE BLDR SLABS [16 pts] PERCENT TYPE BUD BOULDER (>256 mm) [16 pts] PERCENT TYPE SILT [3 pt] PERCENT BEDROCK [16 pt] BEDROCK [16 pt] <t< td=""><td>HHEI Metric Points Substrate Max = 40 3 A + B</td></t<>	HHEI Metric Points Substrate Max = 40 3 A + B						
2. MaxImum Pool Depth (Measure the maxImum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 5 cm + 10 cm [15 pts] > 22.5 - 30 cm [30 pts] > 5 cm + 10 cm [15 pts] > 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0 pts] COMMENTS MAXIMUM POOL DEPTH (centimeters): 3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): > 4.0 meters (> 13) [30 pts] > 1.0 m + 1.5 m (> 3 3" - 4'8") [15 pts] > 3.0 m + 4.0 m (> 9'7" - 13') [25 pts] > 1.0 m (< 3' 3") [5 pts]	Pool Depth Max = 30 /5 Bankfull Width Max=30 / S						
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ŵNOTE: River Left (L) and Right (R) as looking downstream ŵ RIPARIAN WIDTH FLOODPLAIN QUALITY Conservation Tillage L R (Per Bank) L R Image: Stream S							
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 1.0 2.0 3.0 0.5 1.5 2.5 3 STREAM GRADIENT ESTIMATE Clat (0.5 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft/1	90 ft)						

 $v = -c v \, v = E v v g \, v$

	DESIGNATED USE(S)			
WWH Name:				
			Distance from	n Evaluated Stream
CWH Name:			Distance from	n Evaluated Stream
D EWH Name:			Distance from	n Evaluated Stream
MAPPING: ATT	ACH COPIES OF MAPS, INCLUDI	NG THE <u>ENTIRE</u> WA	TERSHED AREA. CLEAR	LY MARK THE SITE LOCATION
USGS Quadrangle Name:		NRCS	Soil Map Page: I	NRCS Soil Map Stream Order
County: Pauld:	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Township / City	r	والمحافظ
MISCELLANEO	DUS	۰.		
Base Flow Conditions? (Y	/N): Date of last precipit	tation: 174	- 15 Quantity:_	0.25"
Photograph Information: _	See attached	report		·
Elevated Turbidity? (Y/N):	Canopy (% open)	100900	pn	
Were samples collected fo	or water chemistry? (Y/N): M	_ (Note lab sample	no. or id. and attach resul	s) Lab Number:
Field Measures: Temp	(°C) Dissolved Oxygen	(mg/l)p	H (S.U.) Condu	ctivity (µmhos/cm)
	Containing office and the start	/ IS	inte în c	
is the sampling reach repr	esentative of the stream (T/N)	L it not, please e	xplain.	
BIOTIC EVALU Performed? (Y/N): Fish Observed? (Y/N) Frogs or Tadpoles Observ Comments Regarding Bio	JATION (If Yes, Record all observatio ID number. Include appropria Voucher? (Y/N) Sala red? (Y/N) Voucher? (Y/N)_ loov	ns. Voucher collection ate field data sheets manders Observed Aquatic Macro	ons optional. NOTE: all vou from the Primary Headwate ? (Y/N) Voucher? (invertebrates Observed? (cher samples must be labeled with the Habitat Assessment Manual) Y/N) Y/N) Voucher? (Y/N)
DRAWING Include Important	S AND NARRATIVE DESC landmarks and other features of	RIPTION OF S	REAM REACH (Thi aluation and a narrative of Road 75	s <u>must</u> be completed): lescription of the stream's location
FLOW	Dito	h		
		1 ()		Δ

ChieEPA	Qualitative and Use A	e Habitat Eva Assessment	aluation Index Field Sheet	QHEI Scor	e: []8
Stream & Location:	K-61			RM: Date:	$\underline{y}_1 \underline{y}_2$
River Code: -	- STORET #:	Scorers Full N Lat./	lame & Affiliation:_ 'Long.: - decimal °) '	_/8	Office verified location
1] SUBSTRATE Check (estimate BEST TYPES pc BLDR /SLABS [10] BOULDER [9] COBBLE [8] GRAVEL [7] BEDROCK [5] NUMBER OF BEST TY Comments	ONLY Two substrate TYPE BO o or note every type presen OOL RIFFLE OTHER TY ODL RIFFLE OTHER TY ODL RIFFLE OTHER TY ODL RIFFLE OTHER TY OPETRITI OPETRITIC OPETRITIC <	xES; t YPES POOL RIFFLE JS [3] JS	Check O ORIGIN	NE (Or 2 & average) QUA HEAVY SILT SILT DROM FREE I WODEF EXTÉN MODEF NORM/ NONE	LITY [-2] LATE [-1] J. SiVE [-2] AL [0] AL [0] 1] Maximum 20
2] INSTREAM COVER quality; 3-Highest quality in diameter log that is stable, v 2 UNDERCUT BANKS 2 OVERHANGING VEC 3 SHALLOWS (IN SLO 6 ROOTMATS [1] Comments	P Indicate presence 0 to 3: 0-4 quality; 2-Moderate amounts moderate or greater amounts well developed rootwad in dee [1] POOL SETATION [1] POOL WWATER) [1] BOUL	besent; 1-Very small ar , but not of highest qu (e.g., very large bould p / fast water, or deep S > 70cm [2] WADS [1] DERS [1]	nounts or if more commo ality or in small amounts lers in deep or fast water , well-defined, functional OXBOWS, BACKWATE AQUATIC MACROPHY LOGS OR WOODY DEE	n of marginal AM of highest , large Check ONE pools. EXTENSIN RS [1] MODERA TES [1] SPARSE : 3RIS [1] NEARLY /	OUNT (Or 2 & average) YE >75% [11] YE 25-75% [7] 1-<25% [3]
3] CHANNEL MORPHO SINUOSITY DEVI HIGH [4] DOBERATE [3] GODERATE [3] LOW [2] DANONE [1] Comments	OLOGY Check ONE in each ELOPMENT CHAN (CELLENT [7] CHONE [4 DOD [5] CHECOV NR [3] CHECOV DOR [1] CRECOV	o category (Or 2 & ave NELIZATION] ERED [4] ERING [3] FOR NO RECOVERY	rage) STABILITY ☐ HIGH [3] ☐ MODERATE [2] [1] [1]		Channel Maximum 20
4] BANK EROSION A River right looking downstreat EROSION C NONE / LITTLE [3] MODERATE [2] HEAVY / SEVERE [1] Comments	ND RIPARIAN ZONE C RIPARIAN WIDT WIDE > 50m [4] MODERATE 10-50m NARROW 5-10m [2] Y VERY NARROW < 5r	heck ONE in each cate H FL FL FOREST, [3] SHRUB (SHRUB (RESIDEN n [1] FENCED X OPEN PA	egory for EACH BANK (C OOD PLAIN QUALI SWAMP [3] DR OLD FIELD [2] ITIAL, PARK, NEW FIELE PASTURE [1] ASTURE, ROWCROP [0]	Dr 2 per bank & average)	ION TILLAGE [1] NDUSTRIAL [0] NSTRUCTION [0] It land use(s) Riparian Maximum 10
5] POOL / GLIDE ANA MAXIMUM DEPTH Check ONE (ONLY!) 0.7-<1m [4] 0.4-<0.7m [2] (0.2-<0.4m [1] <0.2-m [0] Comments	D RIFFLE / RUN QUAL CHANNEL WID Check ONE (Or 2 & av POOL WIDTH > RIFFLE W POOL WIDTH = RIFFLE W POOL WIDTH > RIFFLE W	TY TH CL Parage) NDTH [2] TORRE NDTH [1] VERY F NDTH [0] FAST [MODEF Indice	JRRENT VELOCITY Check ALL that apply NTIAL [-1] SLOW [1] AST [1] INTERSTI I] INTERMIN RATE [1] EDDIES [afe for reach - pools and r	(ITIAL [-1] ITIAL [-1] ITIAL [-2] I] Iffles.	ion Potential ry Contact lary Contact d comment on back) Pool / Current Maximum 12
Indicate for func of riffle-obligate RIFFLE DEPTH BEST AREAS > 10cm [2 BEST AREAS 5-10cm [1 BEST AREAS < 5cm [metric=0 Comments	tional riffles; Best area species: RUN DEPTH] □ MAXIMUM > 50cm [2]] □ MAXIMUM < 50cm [1]	S must be large Check ONE (Or 2 & RIFFLE / RUN ☐ STABLE (e.g., Co ☐ MOD, STABLE (e. ☐ UNSTABLE (e.g.,	enough to support average). SUBSTRATE RIF bble, Boulder) [2] g., Large Gravel) [1] Fine Gravel, Sand) [0]	FLE / RUN EMBED NONE [2] Low [1] MODERATE EXTENSIVE	O RIFFLE [metric=0] DEDNESS Riffle / Eun Aximum 8
6] <i>GRADIENT</i> () DRAINAGE AREA () EPA 4520	ft/mi) 🔂 VERY LOW - LC MODERATE [6- mi²) 🗌 HIGH - VERY H	DW [2-4] 10] GH [10-6]	%POOL: () %RUN: ()) %GLIDE:(122))%RIFFLE:(2)	Gradient Maximum 10 06/16/06

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 $r\sigma$


Stream Drawing:

ChoEPA Primary Headwater Habitat Evaluation Form HHEI Score (sum of metrics 1, 2, 3):	3
SITE NAME/LOCATION	Jetions WERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 40). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE BLDR SLABS [16 pts] PERCENT TYPE BOULDER (>256 mm) [16 pts] PERCENT FINE SILT [3 pt] BEDROCK [16 pt] BEDROCK [16 pt] BEDROCK [16 pt] BEDROCK [16 pt] GRAVEL (2-64 mm) [9 pts] CLAY or HARDPAN [0 pt] BETORIAL [3 pts] Total of Percentages of (A) (B) Bidr Slabs, Boulder, Cobble, Bedrock (A) CB Score of Two MOST PREDOMINATE SUBSTRATE TYPES; Total NUMBER of SUBSTRATE TYPES; Total NUMBER of SUBSTRATE TYPES;	HHEI Metric Points Substrate Max = 40 3 Emailson A + B
 Maximum Pool Depth (Weasure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from foad culverts of storm water pipes) (Check ONLY one box): 30 centimeters [20 pts] 22.5 - 30 cm [30 pts] 50 cm [15 pts] 50 cm [15 pts] 25 cm [25 pts] MAXIMUM POOL DEPTH (centimeters): BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): > 40 meters (> 13) [30 pts] > 40 meters (> 13) [30 pts] > 10 m - 1.5 m (> 3 3 - 4 8) [15 pts] > 15 m - 3.0 m (> 4 6' = 9'.7') [20 pts] COMMENTS	Pool Depth Max = 30 JS Bankfull Width Max=30 S
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY Anote ::::::::::::::::::::::::::::::::::::	
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check O/LY one box): None 1.0 2.0 3.0 0.5 0.5 0 1.5 0 2.5 0 53 STREAM GRADIENT ESTIMATE Flat (05 ft/100 ft) I Flat to Moderate I Moderate (2 ft/100 ft) OMOderate to Severe Severe (10 ft/100). tî j

	0? - 🗖 Yes 🗖 No 🛛 QHEI Sco	e(If Yes,	Attach Completed QHEI Form)	
DOWNSTREAM DI	SIGNATED USE(S)			
J WWH Name:		2.	Distance from Evaluated Stream	
] CWH Name:			Distance from Evaluated Stream	
J EWH Name:			Distance from Evaluated Stream	.
MAPPING: ATTACH	I COPIES OF MAPS, INCLUDING	THE ENTIRE WATERS	HED AREA. CLEARLY MARK THE SITE LOCATION	
JSGS Quadrangle Name:	<u></u>	NRCS Soil N	ap Page: NRCS Soil Map Stream Order	
county: Pauld:	<u>r.)</u>	Township / City:		
MISCELLANEOUS				
Base Flow Conditions? (Y/N)	Date of last precipitat	ion: <u> </u>	Quantity: 25	
Photograph Information:	See attacked	Report		
Elevated Turbidity? (Y/N):	Canopy (% open):	100%	·	
Were samples collected for v	vater chemistry? (Y/N): N	(Note lab sample no. o	Id. and attach results) Lab Number:	
Field Measures Temp 7º	C) Dissolved Oxvaen (m	ıdı∕) ⊳H(S.U	J.)Conductivity (µmhos/cm)	<u> </u>
Liefe Merselse Leich (/		If not placed overlate		
is the sampling reach represe	entative of the stream (Y/N)	 it nor, biease explait 	<u>hanna an ann an Anna a</u>	
<u>.</u>				
BIOTIC EVALUA	<u></u>	an an an tha an		
<u>BIOTIC EVALUA</u> Performed? (Y/N): Fish Observed? (Y/N) Frogs or Tadpoles Observed Comments Regarding Biolog	TION (If Yes, Record all observation ID number. Include appropriat Voucher? (Y/N) Salar I? (Y/N) Voucher? (Y/N) IV	s. Voucher collections or e field data sheets from t nanders Observed? (Y/) Aquatic Macroinver	btional. NOTE: all voucher samples must be labeled with t he Primary Headwater Habitat Assessment Manual) v) Voucher? (Y/N) tebrates Observed? (Y/N) Voucher? (Y/N)	the site
BIOTIC EVALUA Performed? (Y/N): Fish Observed? (Y/N) Frogs or Tadpoles Observed Comments Regarding Biolog	TION (If Yes, Record all observations ID number. Include appropriat Voucher? (Y/N) Salar I? (Y/N) Voucher? (Y/N) IV:	s. Voucher collections of e field data sheets from t nanders Observed? (Y/I Aquatic Macroinver	btional. NOTE: all voucher samples must be labeled with t he Primary Headwater Habitat Assessment Manual) N Voucher? (Y/N) tebrates Observed? (Y/N) Voucher? (Y/N)	the site
<u>BIOTIC EVALUA</u> Performed? (Y/N): Fish Observed? (Y/N) Frogs or Tadpoles Observed Comments Regarding Biolog	TIÓN (If Yes, Record all observation: ID number. Include appropriat Voucher? (Y/N) Salan I? (Y/N) Voucher? (Y/N) Iŷ:	s. Voucher collections of e field data sheets from t nanders Observed? (Y/) Aquatic Macroinver	btional. NOTE: all voucher samples must be labeled with t he Primary Headwater Habitat Assessment Manual) N Voucher? (Y/N) tebrates Observed? (Y/N) Voucher? (Y/N)	the site
BIOTIC EVALUA Performed? (Y/N): Fish Observed? (Y/N) Frogs or Tadpoles Observed Comments Regarding Biolog DRAWING A Include Important Iar	IION (If Yes, Record all observation: ID number. Include appropriat Voucher? (Y/N) Salar (Y/N) Voucher? (Y/N) IV: AND NARRATIVE DESCR ndmarks and other features of I	s. Voucher collections or e field data sheets from t nanders Observed? (Y/I Aquatic Macroinver RIPTION OF STRE nterest for site evaluat	bional. NOTE: all voucher samples must be labeled with t he Primary Headwater Habitat Assessment Manual) y) Voucher? (Y/N) tebrates Observed? (Y/N) Voucher? (Y/N) AM REACH (This <u>must</u> be completed): ion and a narrative description of the stream's locati	the site
BIOTIC EVALUA Performed? (Y/N): Frogs or Tadpoles Observed Comments Regarding Biolog DRAWING A Include Important Iar	TION (If Yes, Record all observations ID number. Include appropriat Voucher? (Y/N)	s. Voucher collections of e field data sheets from t nanders Observed? (Y/) Aquatic Macroinver RIPTION OF STRE Interest for site evaluat	AM REACH (This <u>must</u> be completed): ion and a narrative description of the stream's location	the site
BIOTIC EVALUA Performed? (Y/N):	IION (If Yes, Record all observations ID number. Include appropriat Voucher? (Y/N) Salam I? (Y/N) Voucher? (Y/N) IV: AND NARRATIVE DESCR admarks and other features of I Cart	s. Voucher collections of e field data sheets from t nanders Observed? (Y/ Aquatic Macroinver Aquatic Macroinver RIPTION OF STRE Interest for site evaluat	bional. NOTE: all voucher samples must be labeled with t he Primary Headwater Habitat Assessment Manual) N Voucher? (Y/N) tebrates Observed? (Y/N) Voucher? (Y/N) AM REACH (This must be completed): ion and a narrative description of the stream's locati CO	the site
BIOTIC EVALUA Performed? (Y/N): Fish Observed? (Y/N) Frogs or Tadpoles Observed Comments Regarding Biolog DRAWING / Include Important Iar	ID N (If Yes, Record all observations ID number. Include appropriat Voucher? (Y/N) Salam? (Y/N) Voucher? (Y/N) I? (Y/N) Voucher? (Y/N) IV ID NARRATIVE DESCR Indmarks and other features of I Carty	s. Voucher collections op e field data sheets from t nanders Observed? (Y/) Aquatic Macroinver RIPTION OF STRE Interest for site evaluat Record	btional. NOTE: all voucher samples must be labeled with t he Primary Headwater Habitat Assessment Manual) y Voucher? (Y/N) tebrates Observed? (Y/N) Voucher? (Y/N) AM REACH (This <u>must</u> be completed): ion and a narrative description of the stream's location box	the site
BIOTIC EVALUA Performed? (Y/N): Fish Observed? (Y/N) Frogs or Tadpoles Observed Comments Regarding Biolog DRAWING / Include Important Iar	IION (If Yes, Record all observations ID number. Include appropriat Voucher? (Y/N) Salam I? (Y/N) Voucher? (Y/N) IV: AND NARRATIVE DESCF ndmarks and other features of I Cart	s. Voucher collections of e field data sheets from t nanders Observed? (Y/I Aquatic Macroinver RIPTION OF STRE Interest for site evaluat Recard D i Hch	bional. NOTE: all voucher samples must be labeled with the Primary Headwater Habitat Assessment Manual) V	the site
BIOTIC EVALUA Performed? (Y/N):	ID N (If Yes, Record all observations ID number. Include appropriat Voucher? (Y/N) Salam (Y/N)_	s. Voucher collections op e field data sheets from t handers Observed? (Y/) Aquatic Macroinver RIPTION OF STRE Interest for site evaluat Road D i Hch	bional. NOTE: all voucher samples must be labeled with t he Primary Headwater Habitat Assessment Manual) ()	the site
EIOTIC EVALUA Performed? (Y/N):	IION (If Yes, Record all observations ID number. Include appropriat Voucher? (Y/N)	s. Voucher collections op e field data sheets from t nanders Observed? (Y/I Aquatic Macroinver RIPTION OF STRE Interest for site evaluat Road D i Hch	bional. NOTE: all voucher samples must be labeled with t he Primary Headwater Habitat Assessment Manual) ()	the site

June 20, 2008 Revision

PHWH Form Page - 2

ChieEPA	Qualitative Habita and Use Assessi	at Evaluation Index ment Field Sheet	QHEI Score: 🗵
Stream & Location:		R	M:Date: 41 KA 👀 13
M-01	Scorers	Full Name & Affiliation:	MCV - Westmer
River Code:		Lat./ Long.: (NAD 83 - decimal °) •	
1] SUBSTRATE Check ONLY Two s estimate % or note BEST TYPES POOL RIFFL BOULDER [9] COBBLE [8] GRAVEL [7] BEDROCK [5] NUMBER OF BEST TYPES: Comments	ubstrate TYPE BOXES; every type present e OTHER TYPES POOL HARDPAN [4] DETRITUS [3] MUCK [2] SILT [2] ARTIFICIAL [0] (Score natural substrat 4 or more [2] Sild or less [0]	Check ON ORIGIN LIMESTONE [1] ZTILLS [1] WETLANDS [0] HARDPAN [0] SANDSTONE [0] LACUSTURINE [0] SHALE [-1] COAL FINES [-2]	E (Or 2 & average) QUALITY HEAVY [-2] SILT MODERATE [-1] NORMAL [0] DEON MODERATE [-1] MODERATE [-1] MODERATE [-1] MAXIMUM 20
2] INSTREAM COVER Indicate pr quality; 3-Highest quality in moderate o diameter log that is stable, well develop UNDERCUT BANKS [1] OVERHANGING VEGETATION (SHALLOWS (IN SLOW WATER) ROOTMATS [1] Comments	esence 0 to 3: 0-Absent; 1-Very Noderate amounts, but not of hig r greater amounts (e.g., very lar ied rootwad in deep / fast water, POOLS ≥ 70cm [2] [1]	small amounts or if more common ghest quality or in small amounts of ge boulders in deep or fast water, le or deep, well-defined, functional po OXEOWS, BACKWATER AQUATIC MACROPHYTE LOGS OR WOODY DEBR	of marginal highest arge Check ONE (Or 2 & average) pols. EXTENSIVE >75% [11] S [1] MODERATE 25-75% [7] S [1] SPARSE 5-25% [3] IS [1] NEARLY ABSENT <5% [1] Cover Maximum 20
3] CHANNEL MORPHOLOGY C SINUOSITY DEVELOPMEN HIGH[4] EXCELLENT MODERATE [3] GOOD [5] LOW [2] FAIR [3] NONE [1] POOR [1] Comments	heck ONE in each category (Or NT CHANNELIZATIO 7] INONE [6] RECOVERED [4] RECOVERING [3] X RECENT OR NO REC	2 & average) DN STABILITY HIGH [3] MODERATE [2] MILOW [1] OVERY [1]	Channel Maximum 20
4] BANK EROSION AND RIPA	RIAN ZONE Check ONE in e	ach category for EACH BANK (Or 2	per bank & average)
River right looking downstream RIF REROSION INVID NONE / LITTLE [3] INVID MODERATE [2] INAF XI XI HEAVY / SEVERE [1] XI VEF NON Comments	PARIAN WIDTH E > 50m [4] □ □ E DERATE 10-50m [3] □ □ S ROW 5-10m [2] □ □ R Y NARROW < 5m [1] □ □ F JE [0] Q Q Q O	FLOOD PLAIN QUALITY OREST, SWAMP [3] HRUB OR OLD FIELD [2] ESIDENTIAL, PARK, NEW FIELD [1 ENCED PASTURE [1] PEN PASTURE, ROWCROP [0]	R CONSERVATION TILLAGE [1] URBAN OR INDUSTRIAL [0] URBAN OR INDUSTRIAL [0] URBAN OR INDUSTRIAL [0] Indicate predominant land use(s) past 100m riparian. Riparian Maximum 10
5] POOL / GLIDE AND RIFFLE MAXIMUM DEPTH CH Check ONE (ONLY!) Check □ > 1m [6] □ POOL W □ 0.7 < 1m [4] □ POOL W □ 0.4 < 0.7m [2] ♀ POOL W □ 0.4 < 0.7m [1] □ < 0.2m [0] Comments	/ RUN QUALITY ANNEL WIDTH (ONE (Or 2 & average) IDTH = RIFFLE WIDTH [2] [] IDTH = RIFFLE WIDTH [1] [] IDTH = RIFFLE WIDTH [0] [] []	CURRENT VELOCITY Check ALL that apply TORRENTIAL [-1] CSLOW [1] VERY FAST [1] INTERSTITIA FAST [1] INTERMITTE MODERATE [1] EDDIES [1] Indicate for reach - pools and riffle	AL [-1] NT [-2] Recreation Potential Primary Contact Secondary Contact (circle one and comment on back) Pool / Current Maximum 12
Indicate for functional riffl of riffle-obligate species: RIFFLE DEPTH RU BESTAREAS > 10cm [2] MAXII BESTAREAS 5-10cm [1] MAXII BESTAREAS < 5cm [metric=0] Comments	es; Best areas must be Check ONE (N DEPTH RIFFLE / MUM ≥ 50cm [2] ☐ STABLE (e MUM ≤ 50cm [1] ☐ MOD. STA ☐ UNSTABLE	large enough to support a Or 2 & average). RUN SUBSTRATE RIFFL 9.g., Cobble, Boulder) [2] BLE (e.g., Large Gravel) [1] 2 (e.g., Fine Gravel, Sand) [0]	population E / RUN EMBEDDEDNESS NONE [2] LOW [1] MODERATE [0] EXTENSIVE [-1] Maximum 8
6] GRADIENT () ft/mi) R DRAINAGE AREA () mi ²)	VERY LOW - LOW [2-4] MODERATE [6-10] HIGH - VERY HIGH [10-6]	%POOL: () %RUN: ()%	GLIDE: C Gradient RIFFLE: C Maximum 10



Stream Drawing:

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ChieEPA Primary Headwater Habitat Evaluation Form HHEI Score (sum of metrics 1, 2, 3) :	43
SITE NAME/LOCATION	0-5
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instr STREAM GHANNEL INONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO REC MODIFICATIONS:	uctions OVERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 40). Add total number of significant substrate types found (Max of 6). Final metric score is sum of boxes A & B. TYPE BLDR SLABS [16 pts] PERCENT TYPE BOULDER (>256 mm) [16 pts] PERCENT TYPE SLT [3 pt] BEDROCK [16 pt] BEDROCK [16 pt] COBBLE (65-256 mm) [12 pts] CLAY or HARDPAN [0 pt] GRAVEL (2-64 mm) [9 pts] GRAVEL (2-64 mm) [9 pts] MUCK [0 pts] Score Total of Percentages of [A] [A] [B] Score OF TWO MOST PREDOMINATE SUBSTRATE TYPES: TOTAL NUMBER OF SUBSTRATE TYPES: [B]	HHEI Metric Points Substrate Max = 40 3 A + B
 Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from read culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 22.5 = 30 cm [30 pts] > 22.5 cm [25 pts] > 40 = 22.5 cm [25 pts] COMMENTS MAXIM UN POOL DEPTH (centimeters): MAXIM UN POOL DEPTH (centimeters): > 4.0 meters (> 13) [30 pts] > 3.0 m < 4.0 m (> 9.7 - 13) [25 pts] > 1.0 m < 1.5 m (> 3.3 ° 4'8') [16 pts] > 1.0 m (> 3.3 ° 4'8') [15 pts] 	Pool Depth Max = 30 25 Bankfull Width Max=30
COMMENTS AVERAGE BANKFULL WIDTH (meters) This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream A RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) L R Wide >10m I R Moderate 5-10m I miniature Forest, Wetland I R	
Image: Section in the section of the section in th	÷
Sinupositive now with isolated pools (interstitial) Divertice pools (interstitial) Divertice pools (interstitial) Sinupositive (number of bends per 61 m (200 ft) of channel) (Check ONLY one box): 3.0 None 1.0 2.0 3.0 0.5 1.5 2.5 53 STREAM GRADIENT ESTIMATE Moderate (2.1/100.1t) Moderate to Severe Severe (10.11/100.1t)	¢, ît∫

QHEI PERFORMED?	- XYes DNo QHEI Score 18 (If Yes, Attach Completed QHEI Form)	
DOWNSTREAM DES	BIGNATED ÜŚĖ(Ś)	
WWH Name:	Distance from Evaluated Stream	
CWH Name:	Distance from Evaluated Stream	
EWH Name:	Distance from Evaluated Stream	
MAPPING: ATTACH	COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION	
SGS Quadrangle Name:	NRCS Soil Map Page: NRCS Soil Map Stream Order	 .
unty: Paulding	Township / City	
MISCELLANEOUS		
ase Flow Conditions? (Y/N):	Date of last precipitation: $9-15-15$ Quantity: $0-35$	
hotograph Information:	el africted Report	
Levated Turbidity? (Y/N):	Canopy (% open): 100 % open	
/ere samples collected for wa	ter chemistry? (Y/N): (Note lab sample no. or id. and attach results) Lab Number:	
ield Measures: Temp (°C)	Dissolved Oxygen (mg/) pH (S.U.)Conductivity (µmhos/cm)	
the sampling reach represen	tative of the stream (Y/N) If not, please explain:	
<u></u>		
dditional comments/descriptic	on of pollution impacts:	<u></u>
BIOTIC EVALUATIO	<u>ON</u> (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)	the
BIOTIC EVALUATI Performed? (Y/N): Fish Observed? (Y/N) Frogs of Tadpoles Observed? Comménts Régarding Biology:	ON (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) Voucher? (Y/N) Salamanders Observed? (Y/N) Voucher? (Y/N) (Y/N) Voucher? (Y/N) Voucher? (Y/N) (Y/N) Voucher? (Y/N) Voucher? (Y/N)	the
<u>BIOTIC EVALUATI</u> Performed? (Y/N): Tish Observed? (Y/N) Trogs or Tadpoles Observed? Comments Regarding Biology:	ON (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) Voucher? (Y/N) Salamanders Observed? (Y/N) Voucher? (Y/N) (Y/N) Voucher? (Y/N) Vouch	the
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ChioEPA	Qualitative Habitat and Use Assessm	Evaluation Index ent Field Sheet	QHEI Score: 🛞
Stream & Location: <u>M - C</u>	52	ŔŊ	1:Date: <u>4_</u> 1 <u>15</u> 146613
River Code:	Scorers F STORET #:	ull Name & Affiliation: m Lat./ Long.:	18 Office verified
1] SUBSTRATE Check ONLY Two estimate % or not	substrate TYPE BOXES;	NAD 83 - decimal °) • Check ONE	(Or 2 & average)
BEST TYPES POOL RIFF	LE OTHER TYPES POOL R HARDPAN [4] DETRITUS [3] MUCK [2] SILT [2] SCORE natural substrates [4 or more [2] sludge from point-sc [3 or less [0]	IFFLE ORIGIN ILIMESTONE [1] ILIMESTONE [1] ILIMESTONE [1] ILIMESTONE [1] ILIMESTONE [1] ILIMESTONE [0] ILIMESTONE [0] ILIMESTONE [0] ILIMESTONE [0] ILIMESTONE [0] ILIMESTONE [0] ILIMESTONE [0] ILIMESTONE [1] ILIMESTONE [0] ILIMESTONE [0] ILIMESTONE [0] ILIMESTONE [1] ILIMESTONE [1] ILIMESTONE [1] ILIMESTONE [1]	QUALITY QUALITY HEAVY [-2] SILT MODERATE [-1] NORMAL [0] FREE [1] MODERATE [-1] MODERATE [-1] MODERATE [-1] MODERATE [-1] MAXIMUM 20
2] INSTREAM COVER Indicate r quality; 2	presence 0 to 3: 0-Absent; 1-Very sn -Moderate amounts, but not of highe	nall amounts or if more common of est quality or in small amounts of h	marginal AMOUNT
duality; 3-Highest quality in moderate diameter log that is stable, well develo O UNDERCUT BANKS [1] O VERHANGING VEGETATION SHALLOWS (IN SLOW WATEF O ROOTMATS [1] Comments	or greater amounts (e.g., very large pped rootwad in deep / fast water, or POOLS > 70cm [2] [1] ROOTWADS [1] [1] BOULDERS [1]	boulders in deep of fast water, larg deep, well-defined, functional poo O IOXBOWS: BACKWATERS AQUATIC MACROPHYTES ILOGS OR WOODY DEBRIS	10 EXTENSIVE >75% [11] 11 IMODERATE 25.75% [7] 11 MODERATE 25.75% [3] 11 IMODERATE 25.75% [1] 11 IMODERATE 5.425% [3] 12 IMODERATE 5.425% [3] 13 IMODERATE 5.425% [3] 14 IMODERATE 5.425% [3] 15 IMODERATE 5.425% [3] 16 IMODERATE 5.425% [3] 17 IMODERATE 5.425% [3] 18 IMODERATE 5.425% [3] 19 IMODERATE 5.425% [3] 10 IMODERATE 5.425% [3] 11 IMODERATE 5.425% [3]
31 CHANNEL MORPHOLOGY	Check ONE in each category (Or 2)	s average)	20
SINUOSITY DEVELOPME HIGH [4] EXCELLENT MODERATE [3] GOOD [6] LOW [2] FAIR [3] KINONE [1] Z POOR [1] Comments	INT CHANNELIZATION [7] INONE [6] RECOVERED [4] RECOVERING [3] RECENT OR NO RECOV	STABILITY II HIGH [3] II MODERATE [2] Z LOW [1] VERY [1]	Channel Maximum 20
4] BANK EROSION AND RIPA River right looking downstream	RIAN ZONE Check ONE in each	category for EACH BANK (Or 2 p	er bank & average)
EROSION	DE > 50m [4] Image: Book of the second sec	EST, SWAMP [3] UB OR OLD FIELD [2] IDENTIAL, PARK, NEW FIELD [1] CED PASTURE [1] N PASTURE, ROWCROP [0]	L R CONSERVATION TILLAGE [1] URBAN OR INDUSTRIAL [0] MINING / CONSTRUCTION [0] Indicate predominant land use(s) past 100m riparian. Maximum 10
5] POOL / GLIDE AND RIFFLE	RUN QUALITY		
MAXIMUM DEPTH C Check ONE (O//LY!) Chec □ > 1m [6] □ POOLV □ 0.7 < 1m [4]	HANNEL WIDTH & ONE (Or 2 & average) VIDTH > RIFFLE WIDTH [2] ☐ TO VIDTH = RIFFLE WIDTH [1] ☐ VE VIDTH > RIFFLE WIDTH [0] ☐ FA ☐ MC //	CURRENT VELOCITY Check ALL that apply RRENTIAL [-1] VSLOW [1] RY FAST [1] INTERSTITIAL ST [1] INTERMITTEN IDERATE [1] EDDIES [1] Idicate for reach - pools and riffles.	[-1] [-2] Recreation Potential <i>Primary Contact</i> Secondary Contact (circle one and comment on back) Pool / Current Maximum 12
Indicate for functional rif	les; Best areas must be lar	ge enough to support a po	opulation
RIFFLE DEPTH RL BEST AREAS > 10cm [2] MAX BEST AREAS 5-10cm [1] MAX BEST AREAS < 5cm [metric=0] Comments	IN DEPTH RIFFLE / R MUM > 50cm [2] STABLE (e.g. MUM < 50cm [1] MOD. STABLE UNSTABLE (e	UN SUBSTRATE RIFFLE Cobble: Boulder) [2] E (é.g., Large Gravel) [1] g., Fine Gravel, Sand) [0]	/ RUN EMBEDDEDNESS
6] GRADIENT () ft/mi) K DRAINAGE AREA	[VERY LOW = LOW [2-4] [MODERATE [6-10]	%POOL:	GLIDE:
(🖉 - 5 mi²) 🗆 EPA 4520	HIGH=VERY HIGH [10-6]	%RUN: 0/%R	



Stream Drawing:

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in

Case No(s). 13-0197-EL-BGN

Summary: Amended Application Appendix M (Weland Delineation Report) Part 2 of 4 electronically filed by Teresa Orahood on behalf of Sally Bloomfield for Northwest Ohio Wind Energy, LLC