

WETLAND DETERMINATION DATA FORM - Midwest Region

Project Site: W-380-071112-02 City/County: WETLAND CO State: OH Sampling Date: 07/11/12

Applicant/Owner: ADP Section, Township, Range: 02

Investigator(s): BOG, SD, AG Local relief (concave, convex, none): CONCAVE

Landform (hillside, terrace, etc.): DEPRESSION, DEPRESSURE

Slope (%): 40.093805 Lat: 40.093805 Long: -82.650332 Datum: NAD83

Soil Map Unit Name: Bel CEC2 NW classification: N/A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No   (If no, explain in Remarks.)

Are vegetation/hydrology significantly disturbed? Yes X No   (If no, explain in Remarks.)

Are vegetation/soil/hydrology naturally problematic? Yes X No   (If no, explain in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No

Hydric Soil Present? Yes X No

Wetland Hydrology Present? Yes X No

Remarks: WETLAND

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: )	Absolute % Cover	Dominant Species	Indicator Status
1. <u>SPRUE</u>	<u>15</u>	<u>SPRUE</u>	<u>DBL</u>
2. <u>SPRUE</u>	<u>10</u>	<u>SPRUE</u>	<u>DBL</u>
3. <u>SPRUE</u>	<u>10</u>	<u>SPRUE</u>	<u>DBL</u>
4. <u>SPRUE</u>	<u>10</u>	<u>SPRUE</u>	<u>DBL</u>
5. <u>SPRUE</u>	<u>10</u>	<u>SPRUE</u>	<u>DBL</u>

Total Cover = 55

Shrub/Straw Stratum (Plot size: )	Absolute % Cover	Dominant Species	Indicator Status
1. <u>SPRUE</u>	<u>15</u>	<u>SPRUE</u>	<u>DBL</u>
2. <u>SPRUE</u>	<u>10</u>	<u>SPRUE</u>	<u>DBL</u>
3. <u>SPRUE</u>	<u>10</u>	<u>SPRUE</u>	<u>DBL</u>
4. <u>SPRUE</u>	<u>10</u>	<u>SPRUE</u>	<u>DBL</u>
5. <u>SPRUE</u>	<u>10</u>	<u>SPRUE</u>	<u>DBL</u>

Total Cover = 55

Herb Stratum (Plot size: )	Absolute % Cover	Dominant Species	Indicator Status
1. <u>SPRUE</u>	<u>15</u>	<u>SPRUE</u>	<u>DBL</u>
2. <u>SPRUE</u>	<u>10</u>	<u>SPRUE</u>	<u>DBL</u>
3. <u>SPRUE</u>	<u>10</u>	<u>SPRUE</u>	<u>DBL</u>
4. <u>SPRUE</u>	<u>10</u>	<u>SPRUE</u>	<u>DBL</u>
5. <u>SPRUE</u>	<u>10</u>	<u>SPRUE</u>	<u>DBL</u>

Total Cover = 55

Remarks: (include photo numbers here or on a separate sheet.)

W-380-071112-02 WETLAND

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Color (moist)	Color (dry)	Texture	Remarks
0-14	10YR 6/1	9.0	10YR 6/1	WETLAND
14-18				
18-22				
22-26				
26-30				
30-34				
34-38				
38-42				
42-46				
46-50				
50-54				
54-58				
58-62				
62-66				
66-70				
70-74				
74-78				
78-82				
82-86				
86-90				
90-94				
94-98				
98-102				
102-106				
106-110				
110-114				
114-118				
118-122				
122-126				
126-130				
130-134				
134-138				
138-142				
142-146				
146-150				
150-154				
154-158				
158-162				
162-166				
166-170				
170-174				
174-178				
178-182				
182-186				
186-190				
190-194				
194-198				
198-202				
202-206				
206-210				
210-214				
214-218				
218-222				
222-226				
226-230				
230-234				
234-238				
238-242				
242-246				
246-250				
250-254				
254-258				
258-262				
262-266				
266-270				
270-274				
274-278				
278-282				
282-286				
286-290				
290-294				
294-298				
298-302				
302-306				
306-310				
310-314				
314-318				
318-322				
322-326				
326-330				
330-334				
334-338				
338-342				
342-346				
346-350				
350-354				
354-358				
358-362				
362-366				
366-370				
370-374				
374-378				
378-382				
382-386				
386-390				
390-394				
394-398				
398-402				
402-406				
406-410				
410-414				
414-418				
418-422				
422-426				
426-430				
430-434				
434-438				
438-442				
442-446				
446-450				
450-454				
454-458				
458-462				
462-466				
466-470				
470-474				
474-478				
478-482				
482-486				
486-490				
490-494				
494-498				
498-502				
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550-554				
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558-562				
562-566				
566-570				
570-574				
574-578				
578-582				
582-586				
586-590				
590-594				
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598-602				
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638-642				
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662-666				
666-670				
670-674				
674-678				
678-682				
682-686				
686-690				
690-694				
694-698				
698-702				
702-706				
706-710				
710-714				
714-718				
718-722				
722-726				
726-730				
730-734				
734-738				
738-742				
742-746				
746-750				
750-754				
754-758				
758-762				
762-766				
766-770				
770-774				
774-778				
778-782				
782-786				
786-790				
790-794				
794-798				
798-802				
802-806				
806-810				
810-814				
814-818				
818-822				
822-826				
826-830				
830-834				
834-838				
838-842				
842-846				
846-850				
850-854				
854-858				
858-862				
862-866				
866-870				
870-874				
874-878				
878-882				
882-886				
886-890				
890-894				
894-898				
898-902				
902-906				
906-910				
910-914				
914-918				
918-922				
922-926				
926-930				
930-934				
934-938				
938-942				
942-946				
946-950				
950-954				
954-958				
958-962				
962-966				
966-970				
970-974				
974-978				
978-982				
982-986				
986-990				
990-994				
994-998				
998-1002				
1002-1006				
1006-1010				
1010-1014				
1014-1018				
1018-1022				
1022-1026				
1026-1030				
1030-1034				
1034-1038				
1038-1042				
1042-1046				
1046-1050				
1050-1054				
1054-1058				
1058-1062				
1062-1066				
1066-1070				
1070-1074				
1074-1078				
1078-1082				
1082-1086				
1086-1090				
1090-1094				
1094-1098				
1098-1102				
1102-1106				
1106-1110				
1110-1114				
1114-1118				
1118-1122				
1122-1126				
1126-1130				
1130-1134				
1134-1138				
1138-1142				
1142-1146				
1146-1150				
1150-1154				
1154-1158				
1158-1162				
1162-1166				
1166-1170				
1170-1174				
1174-1178				
1178-1182				
1182-1186				
1186-1190				
1190-1194				
1194-1198				
1198-1202				
1202-1206				
1206-1210				
1210-1214				
1214-1218				
1218-1222				
1222-1226				
1226-1230				
1230-1234				
1234-1238				
1238-1242				
1242-1246				
1246-1250				
1250-1254				
1254-1258				
1258-1262				
1262-1266				
1266-1270				
1270-1274				
1274-1278				
1278-1282				
1282-1286				
1286-1290				
1290-1294				
1294-1298				
1298-1302				
1302-1306				
1306-1310				
1310-1314				

**Metric 1. Wetland Area (size).**  
max 6 pts. subtotal  
2 2  
max 11 pts.

Select one size class and assign score.  
25 to <50 acres (20.2ha) (6 pts)  
50 to <100 acres (40.4 to <20.2ha) (5 pts)  
100 to <250 acres (4 to <10.1ha) (4 pts)  
250 to <500 acres (1.2 to <4ha) (3 pts)  
500 to <1000 acres (0.12 to <1.2ha) (2pts)  
1000 to <2500 acres (0.04 to <0.12ha) (1 pt)  
2500 to <5000 acres (0.04 to <0.12ha) (0 pts)

**Metric 2. Upland buffers and surrounding land use.**  
max 11 pts. subtotal  
5 7  
max 14 pts.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.  
WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)  
MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)  
NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)  
VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)  
Intensity of surrounding land use. Select one or double check and average.  
VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)  
LOW. 1st growth forest (<10 years), shrub land, young second growth forest. (5)  
MODERATE. 1st growth forest (>10 years), park, commercial/industrial, new/fallow field. (3)  
HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

**Metric 3. Hydrology.**  
max 30 pts. subtotal  
11 18  
max 30 pts.

3a. Sources of Water. Score all that apply.  
High pH groundwater (5)  
Other groundwater (3)  
Precipitation (1)  
Seasonal intermittent surface water (3)  
Perennial surface water (lake or stream) (5)  
Moisture from adjacent wetland. Select only one and assign score.  
>0.7 (27.6in) (3)  
0.4 to 0.7m (15.7 to 27.6in) (2)  
0.4m (<15.7in) (1)  
3b. Connectivity. Score all that apply.  
100 year floodplain (1)  
Between stream/lake and other human use (1)  
Part of wetland/upland (e.g. forest, complex) (1)  
Duration inundation/saturation. Score one or double check.  
Open to permanently inundated/saturated (4)  
Regularly inundated/saturated (3)  
Seasonally inundated (2)  
Seasonally saturated in upper 30cm (12in) (1)  
3c. Modifications to natural hydrologic regime. Score one or double check and average.  
None or none apparent (12)  
Recovering (7)  
Recovering (3)  
Recent or no recovery (1)  
Check all disturbances observed  
ditch  
tile  
dike  
weir  
stormwater input  
point source (nonstormwater)  
filling/grading  
road bed/RR track  
dredging  
other

**Metric 4. Habitat Alteration and Development.**  
max 20 pts. subtotal  
8 26  
max 20 pts.

4a. Substrate disturbance. Score one or double check and average.  
None or none apparent (4)  
Recovering (3)  
Recovering (2)  
Recovering (1)  
Habitat development. Select only one and assign score.  
Excellent (7)  
Very good (6)  
Good (5)  
Moderately good (4)  
Fair (3)  
Poor to fair (2)  
Poor (1)  
4b. Habitat alteration. Score one or double check and average.  
None or none apparent (9)  
Recovering (6)  
Recovering (3)  
Recent or no recovery (1)  
Check all disturbances observed  
mowing  
grazing  
clearcutting  
selective cutting  
woody debris removal  
herbicide application  
nutrient enrichment  
herbaceous/aquatic bed removal  
sedimentation  
dredging  
farming  
nutrient enrichment

**Metric 5. Special Wetlands.**  
max 10 pts. subtotal  
0 26  
max 10 pts.

Check all that apply and score as indicated.  
Bog (10)  
Fen (10)  
Mature forested wetland (5)  
Old growth forest (10)  
Lake Erie coastal/tributary wetland-unrestricted hydrology (10)  
Lake Erie coastal/tributary wetland-restricted hydrology (5)  
Lake Plain Sand Prairies (Oak Openings) (10)  
Relict Wet Prairies (10)  
Known occurrence state/federal threatened or endangered species (10)  
Significant migratory songbird/water fowl habitat or usage (10)  
Category 1 Wetland. See Question 1 Qualitative Rating (-10)

**Metric 6. Plant communities, interspersions, microtopography.**  
max 20 pts. subtotal  
0 26  
max 20 pts.

6a. Wetland Vegetation Communities. Score all present using 0 to 3 scale.  
Aquatic bed  
Emergent  
Shrub  
Forest  
Mudflats  
Open water  
Other  
6b. horizontal (plan view) interspersions. Select only one.  
High (5)  
Moderately high (4)  
Moderate (3)  
Moderately low (2)  
Low (1)  
None (0)  
6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage  
Extensive >75% cover (-5)  
Moderate 25-75% cover (-3)  
Sparse 5-25% cover (-1)  
Nearly absent <5% cover (0)  
Absent (1)  
6d. Microtopography. Score all present using 0 to 3 scale  
Vegetated hummocks/depressions  
Coarse woody debris >10cm (6in)  
Standing dead >25cm (10in) dbh  
Amphibian breeding pools

**Narrative Description of Vegetation Quality**  
low  
mod  
high  
Low spp diversity and/or predominance of disturbance tolerant native species  
Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp  
A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp  
**Mudflat and Open Water Class Quality**  
0 Absent <0.1ha (0.247 acres)  
1 Low 0.1 to <1ha (0.247 to 2.47 acres)  
2 Moderate 1 to <4ha (2.47 to 9.88 acres)  
3 High 4 to <8ha (9.88 to 19.76 acres)  
**Microtopography Cover Scale**  
0 Absent  
1 Present very small amounts or if more common of marginal quality  
2 Present in moderate amounts, but not of highest quality or in small amounts of highest quality  
3 Present in moderate or greater amounts and of highest quality



WETLAND 7

W-BAO-0711B-01

Site: AEP JWH-KLEK Rater(s): B. OTTO, J. COMBES, A. HENCH Date: 07/12

Metric 1. Wetland Area (size).

max 14 pts. subtotal

1	1
Select one size class and assign score.	
<input type="checkbox"/>	>50 acres (>20.2ha) (6 pts)
<input type="checkbox"/>	25 to <50 acres (10.1 to <20.2ha) (5 pts)
<input type="checkbox"/>	10 to <25 acres (4 to <10.1ha) (4 pts)
<input type="checkbox"/>	3 to <10 acres (1.2 to <4ha) (3 pts)
<input type="checkbox"/>	0.3 to <3 acres (0.12 to <1.2ha) (2pts)
<input checked="" type="checkbox"/>	0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
<input type="checkbox"/>	<0.1 acres (0.04ha) (0 pts)

Metric 2. Upland buffers and surrounding land use.

max 14 pts. subtotal

5	6
2a. Calculate average buffer width. Select only one and assign score. Do not double check.	
<input type="checkbox"/>	WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
<input type="checkbox"/>	MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
<input type="checkbox"/>	NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
<input checked="" type="checkbox"/>	VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)
2b. Intensity of surrounding land use. Select one or double check and average.	
<input checked="" type="checkbox"/>	VERY LOW. 2nd growth or older forest, prairie savannah, wildlife area, etc. (7)
<input checked="" type="checkbox"/>	LOW. Young forest, young prairie, young savannah, etc. (6)
<input checked="" type="checkbox"/>	MODERATELY HIGH. Residential, commercial, industrial, etc. (5)
<input checked="" type="checkbox"/>	HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

Metric 3. Hydrology.

max 30 pts. subtotal

8	14
3a. Sources of Water. Score all that apply.	
<input checked="" type="checkbox"/>	High pH groundwater (5)
<input checked="" type="checkbox"/>	Other groundwater (3)
<input checked="" type="checkbox"/>	Precipitation (1)
<input checked="" type="checkbox"/>	Seasonally intermittent surface water (3)
<input checked="" type="checkbox"/>	Perennial surface water (time or stream) (5)
<input checked="" type="checkbox"/>	Meaningful surface water. Select only one and assign score.
<input checked="" type="checkbox"/>	>0.7 (27.6in) (3)
<input checked="" type="checkbox"/>	0.4 to 0.7m (15.7 to 27.6in) (2)
<input checked="" type="checkbox"/>	<0.4m (<15.7in) (1)
3b. Modifications to natural hydrologic regime. Score one or double check and average.	
<input checked="" type="checkbox"/>	None or none apparent (12)
<input checked="" type="checkbox"/>	Check all disturbances observed
<input checked="" type="checkbox"/>	Recovered (7)
<input checked="" type="checkbox"/>	Recovering (3)
<input checked="" type="checkbox"/>	Recent or no recovery (1)
3c. Connectivity. Score all that apply.	
<input checked="" type="checkbox"/>	100 year floodplain (1)
<input checked="" type="checkbox"/>	Between stream/river and other human use (1)
<input checked="" type="checkbox"/>	Part of wetland/riparian (e.g. forest), complex (1)
<input checked="" type="checkbox"/>	Part of riparian or upland corridor (1)
<input checked="" type="checkbox"/>	Drainage ditch, culvert, or other check.
<input checked="" type="checkbox"/>	Scout to permanently inundated/saturated (4)
<input checked="" type="checkbox"/>	Regularly inundated/saturated (3)
<input checked="" type="checkbox"/>	Seasonally inundated (2)
<input checked="" type="checkbox"/>	Seasonally saturated in upper 30cm (12in) (1)

Metric 4. Habitat Alteration and Development.

max 30 pts. subtotal

7	21
4a. Substrate disturbance. Score one or double check and average.	
<input checked="" type="checkbox"/>	None or none apparent (4)
<input checked="" type="checkbox"/>	Recovered (6)
<input checked="" type="checkbox"/>	Recovering (3)
<input checked="" type="checkbox"/>	Recent or no recovery (1)
4b. Habitat development. Select only one and assign score.	
<input checked="" type="checkbox"/>	Excellent (7)
<input checked="" type="checkbox"/>	Very good (6)
<input checked="" type="checkbox"/>	Good (5)
<input checked="" type="checkbox"/>	Moderately good (4)
<input checked="" type="checkbox"/>	Fair (3)
<input checked="" type="checkbox"/>	Poor to fair (2)
<input checked="" type="checkbox"/>	Poor (1)
4c. Habitat alteration. Score one or double check and average.	
<input checked="" type="checkbox"/>	None or none apparent (9)
<input checked="" type="checkbox"/>	Recovered (6)
<input checked="" type="checkbox"/>	Recovering (3)
<input checked="" type="checkbox"/>	Recent or no recovery (1)
Check all disturbances observed	
<input checked="" type="checkbox"/>	mowing
<input checked="" type="checkbox"/>	grazing
<input checked="" type="checkbox"/>	clearcutting
<input checked="" type="checkbox"/>	silviculture
<input checked="" type="checkbox"/>	herbicide application
<input checked="" type="checkbox"/>	toxic pollutants
<input checked="" type="checkbox"/>	shrub/strawling removal
<input checked="" type="checkbox"/>	herbaceous/aquatic bed removal
<input checked="" type="checkbox"/>	sedimentation
<input checked="" type="checkbox"/>	creeping
<input checked="" type="checkbox"/>	erosion
<input checked="" type="checkbox"/>	nutrient enrichment

WETLAND 7

W-BAO-0711B-01

Site: AEP JWH-KLEK Rater(s): BAO Date:

Metric 5. Special Wetlands.

max 10 pts. subtotal

0	21
Check all that apply and score as indicated.	
<input type="checkbox"/>	Bog (10)
<input type="checkbox"/>	Pen (10)
<input type="checkbox"/>	Old growth forest (10)
<input type="checkbox"/>	Mature forested wetland (5)
<input type="checkbox"/>	Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
<input type="checkbox"/>	Lake Erie coastal/tributary wetland-restricted hydrology (5)
<input type="checkbox"/>	Lake Plain Sand Prairies (Oak Openings) (10)
<input type="checkbox"/>	Relict Wet Prairies (10)
<input type="checkbox"/>	Known occurrence state/federal threatened or endangered species (10)
<input type="checkbox"/>	Significant migratory songbird/water fowl habitat or usage (10)
<input type="checkbox"/>	Category 1 Wetland. See Question 1 Qualitative Rating (-10)

Metric 6. Plant communities, interspersions, microtopography.

max 20 pts. subtotal

4	14
6a. Wetland Vegetation Communities. Score all present using 0 to 3 scale.	
<input type="checkbox"/>	Aquatic bed
<input type="checkbox"/>	Emergent
<input checked="" type="checkbox"/>	Shrub
<input type="checkbox"/>	Forest
<input type="checkbox"/>	Mudflats
<input type="checkbox"/>	Open water
<input type="checkbox"/>	Other
6b. horizontal (plan view) Interspersion. Select only one.	
<input type="checkbox"/>	High (5)
<input type="checkbox"/>	Moderately high (4)
<input type="checkbox"/>	Moderate (3)
<input type="checkbox"/>	Moderately low (2)
<input type="checkbox"/>	Low (1)
<input checked="" type="checkbox"/>	None (0)
6c. Coverage of invasive plants. Refer to table 1 ORAM long form for list. Add or deduct points for coverage	
<input checked="" type="checkbox"/>	Extensive >75% cover (-3)
<input type="checkbox"/>	Moderate 25-75% cover (-3)
<input type="checkbox"/>	Sparse 5-25% cover (-1)
<input type="checkbox"/>	Nearly absent <5% cover (0)
<input type="checkbox"/>	Absent (1)
6d. Microtopography. Score all present using 0 to 3 scale	
<input type="checkbox"/>	Vegetated hummocks/mounds
<input type="checkbox"/>	Coarse woody debris >15cm (6in)
<input type="checkbox"/>	Standing dead >25cm (10in) dbh
<input type="checkbox"/>	Amphibian breeding pools
Vegetation Community Cover Scale	
<input type="checkbox"/>	0 Absent or comprises <0.1% (0.247 acres) contiguous area
<input type="checkbox"/>	1 Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
<input type="checkbox"/>	2 Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
<input type="checkbox"/>	3 Present and comprises significant part, or more, of wetland's vegetation and is of high quality
Narrative Description of Vegetation Quality	
<input type="checkbox"/>	low Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
<input type="checkbox"/>	mod Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
<input type="checkbox"/>	high A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp
Mudflat and Open Water Class Quality	
<input type="checkbox"/>	0 Absent <0.1% (0.247 acres)
<input type="checkbox"/>	1 Low 0.1 to <1% (0.247 to 2.47 acres)
<input type="checkbox"/>	2 Moderate 1 to <4% (2.47 to 9.88 acres)
<input type="checkbox"/>	3 High 4% (9.88 acres) or more
Microtopography Cover Scale	
<input type="checkbox"/>	0 Absent
<input type="checkbox"/>	1 Present very small amounts or if more common of marginal quality
<input type="checkbox"/>	2 Present in moderate amounts, but not of highest quality or in small amounts of highest quality
<input type="checkbox"/>	3 Present in moderate or greater amounts and of highest quality

w-bao 071112-4

WETLANDS

[illegible]

\*Location: PL=Pipe Lining, M=Matrix.

Histon (A1)	Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
Histic Epipedon	Sandy Redox (S5)	Dark Surface (S7)
Black Histic (A3)	Stripped Matrix (S6)	Iron-Manganese Masses (F12)
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1)	Very Shallow Dark Surface (TF12)
Stratified Layers (A5)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
2 cm Muck (A10)	Depleted Matrix (F3)	
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	

— Thick Dark S  
Candy Muck

Type: _____ Depth (inches): _____ Remarks: _____		Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
<p><b>HYDROLOGY</b></p> <p><b>Wetland Hydrology Indicators:</b></p> <p>Primary indicators (minimum of one is required; check all that apply)</p> <div style="display: flex;"> <div style="flex: 1;"> <ul style="list-style-type: none"> <li>— Surface Water (A1) _____</li> <li>— High Water Table (A2) _____</li> <li>— Saturation (A3) _____</li> <li>— Winter Murres (B1) _____</li> <li>— Sediment Deposits (B2) _____</li> <li>— Drift Deposits (B3) _____</li> <li>— Algal Mats or Crust (B4) _____</li> <li>— Iron Deposits (B5) _____</li> <li>— Inundation Visible on Aerial Imagery (B7) _____</li> <li>— Sparsely Vegetated Concave Surface (B8) _____</li> </ul> </div> <div style="flex: 1;"> <ul style="list-style-type: none"> <li>— Water-Stained Leaves (B9) _____</li> <li>— Aquatic Fauna (B13) _____</li> <li>— True Aquatic Plants (B14) _____</li> <li>— Hydrogen Sulfide Odor (C1) _____</li> <li>— Chlorided Rhizospheres on Living Roots (C3) _____</li> <li>— Presence of Reduced Iron (C4) _____</li> <li>— Percent Iron Reduction in Tilled Soils (C6) _____</li> <li>— Thin Muck Surface (C7) _____</li> <li>— Gauge or Well Data (C9) _____</li> <li>— Other (Explain in Remarks)</li> </ul> </div> </div>			
<p><b>Secondary Indicators (Minimum of two required)</b></p> <div style="display: flex;"> <div style="flex: 1;"> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Surface Soil Cracks (B6)</li> <li><input checked="" type="checkbox"/> Drainage Patterns (B10)</li> <li>— Dry-Season Water Table (C2)</li> <li>— Clayish Burrows (C8)</li> <li>— Saturation Visible on Aerial Imagery (C9)</li> <li>— Stunted or Stressed Plants (D1)</li> <li>— Geomorphic Position (D2)</li> <li><input checked="" type="checkbox"/> FAC-Nutrient Test (D6)</li> </ul> </div> </div>			
<b>Field Observations:</b>		<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____			
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____			
Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Remarks: No primary indicators due to abnormality dry summer.			

**Table 1**

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicator (minimum of one is required; check all that apply)			
— Water-Stained Leaves (B9)		— Surface Soil Cracks (B6)	
— Aquatic Fauna (B13)		<input checked="" type="checkbox"/> Drainage Patterns (B10)	
— True Aquatic Plants (B14)		— Dry-Season Water Table (C2)	
— Hydrogen Sulfide Odor (C1)		— Crayfish Burrows (C8)	
— Oxidized Rhizospheres on Living Roots (C3)		— Saturation Visible on Aerial Imagery (C9)	
— Presence of Reduced Iron (C4)		— Stunted or Stressed Plants (D1)	
— Percent Iron Reduction in Tilled Soils (C6)		— Geographic Position (D2)	
— Thin Muck Reduction (C7)		<input checked="" type="checkbox"/> FAC Neutral Test (D5)	
— Gauge or Well Data (D9)			
— Sparser Vegetated Concave Surface (B8)			
Other (Explain in Remarks)			
<b>Field Observations:</b>			
Yes	No	Depth (inches):	
Yes	No	Depth (inches):	
Yes	No	Depth (inches):	
Surface Water Present? _____ Surface Water Table Present? _____ Saturation Present? _____ Inundation Visible on Aerial Imagery (B7) _____ Saturated Vegetated Concave Surface (B8) _____		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____ Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  	
Remarks: No primary indicators due to abnormally dry summer.			



WETLAND DETERMINATION DATA FORM - Midwest Region

Project Site: WETLAND 9 City/County: W-BAO-071112-03 State: OH Sampling Date: 07/11/12

Applicant/Owner: HEP Section: OH Township: 03

Investigator(s): BAO, J, A Landform (hilllope, terrace, etc.): FLAT Local relief (concave, convex, nose): CONCAVE

Slope (%): 0 Lat: 40 03 00 N Long: -82 55 00 W Datum: NAD83

Soil Map Unit Name: CLE NW1 Classification: W14

Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No    (If no, explain in Remarks.)

Are vegetation    Soil    or Hydrology    significantly disturbed? Yes X 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 X No   

Hydric Soil Present? Yes X No   

Wetland Hydrology Present? Yes X No   

Is the Sampled Area within a Wetland? Yes X No   

Remarks: EXISTING WETLAND WITH NORMAL

VEGETATION - Use scientific names of plants.

Transect (Plot size)	Absolute % Cover	Dominant Species	Status
1. <u>Black Willow</u>	<u>5</u>	<u>X</u>	<u>DBL</u>
2. <u>Swamp Rose</u>	<u>5</u>	<u>X</u>	<u>DBL</u>
3. <u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>
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157. <u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>
158. <u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>
159. <u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>
160. <u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>
161. <u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>
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163. <u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>
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165. <u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>
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169. <u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>
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W-18-00-0312-03

WETLAND 10

WETLAND DETERMINATION DATA FORM - Midwest Region

Project Site: ARP Jug - Kirk City/County: 4/14/18 Sampling Date: 07/21/2  
Applicant/Owner: ARP, JC State: OH Sampling Point: 03  
Investigator(s): BAO, JC Section, Township, Range: 104.16E 5.8N 10M  
Landform (alluvial, terraced, etc.): Local relief (concave, convex, none) 104.16E  
Slope (%): 40 Lat: D18828 Long: 82.652486 Datum: NAD83  
Soil Map Unit Name: CfB NMI Classification: n/a  
Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No     
Are 'Normal Circumstances' present? Yes X No     
Are 'Hydrologic' conditions on the site significantly disturbed? Yes    No     
Are 'Vegetation' conditions on the site naturally problematic? Yes    No     
Are 'Hydrology' conditions on the site naturally problematic? Yes    No   

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No     
Hydrology Present? Yes X No     
Wetland Hydrology Present? Yes X No     
Remarks: 85% of Wetland within existing TRANS. ROW is near RISK-INTAKE PROPERTIES

VEGETATION - Use scientific names of plants.

Transect	Plot size	Absolute Dominant Indicator	Species	Stems
1. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
2. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
3. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
4. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
5. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
6. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
7. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
8. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
9. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
10. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
11. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
12. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
13. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
14. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
15. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
16. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
17. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
18. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
19. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
20. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
21. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
22. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
23. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
24. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
25. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
26. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
27. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
28. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
29. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
30. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
31. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
32. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
33. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
34. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
35. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
36. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
37. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
38. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
39. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
40. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
41. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
42. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
43. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
44. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
45. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
46. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
47. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
48. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
49. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
50. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
51. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
52. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
53. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
54. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
55. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
56. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
57. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
58. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
59. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
60. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
61. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
62. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
63. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
64. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
65. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
66. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
67. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
68. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
69. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
70. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
71. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
72. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
73. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
74. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
75. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
76. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
77. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
78. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
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82. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
83. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
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86. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
87. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
88. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
89. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
90. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
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99. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>
100. <u>SHRUB</u>	<u>1m x 1m</u>	<u>  </u>	<u>  </u>	<u>  </u>

Remarks: (Include photo numbers here or on a separate sheet.)

W-18-00-0312-02

WETLAND 10

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (cm)	Color (Munsell)	Texture	Remarks
0-2	10YR 5/3	10	10M 1M
2-12	10YR 5/2	70	10M 1M
12-17	10YR 5/2	30	10M 1M
17-22	10YR 5/2	30	10M 1M
22-27	10YR 5/2	30	10M 1M
27-32	10YR 5/2	30	10M 1M
32-37	10YR 5/2	30	10M 1M
37-42	10YR 5/2	30	10M 1M
42-47	10YR 5/2	30	10M 1M
47-52	10YR 5/2	30	10M 1M
52-57	10YR 5/2	30	10M 1M
57-62	10YR 5/2	30	10M 1M
62-67	10YR 5/2	30	10M 1M
67-72	10YR 5/2	30	10M 1M
72-77	10YR 5/2	30	10M 1M
77-82	10YR 5/2	30	10M 1M
82-87	10YR 5/2	30	10M 1M
87-92	10YR 5/2	30	10M 1M
92-97	10YR 5/2	30	10M 1M
97-102	10YR 5/2	30	10M 1M
102-107	10YR 5/2	30	10M 1M
107-112	10YR 5/2	30	10M 1M
112-117	10YR 5/2	30	10M 1M
117-122	10YR 5/2	30	10M 1M
122-127	10YR 5/2	30	10M 1M
127-132	10YR 5/2	30	10M 1M
132-137	10YR 5/2	30	10M 1M
137-142	10YR 5/2	30	10M 1M
142-147	10YR 5/2	30	10M 1M
147-152	10YR 5/2	30	10M 1M
152-157	10YR 5/2	30	10M 1M
157-162	10YR 5/2	30	10M 1M
162-167	10YR 5/2	30	10M 1M
167-172	10YR 5/2	30	10M 1M
172-177	10YR 5/2	30	10M 1M
177-182	10YR 5/2	30	10M 1M
182-187	10YR 5/2	30	10M 1M
187-192	10YR 5/2	30	10M 1M
192-197	10YR 5/2	30	10M 1M
197-202	10YR 5/2	30	10M 1M
202-207	10YR 5/2	30	10M 1M
207-212	10YR 5/2	30	10M 1M
212-217	10YR 5/2	30	10M 1M
217-222	10YR 5/2	30	10M 1M
222-227	10YR 5/2	30	10M 1M
227-232	10YR 5/2	30	10M 1M
232-237	10YR 5/2	30	10M 1M
237-242	10YR 5/2	30	10M 1M
242-247	10YR 5/2	30	10M 1M
247-252	10YR 5/2	30	10M 1M
252-257	10YR 5/2	30	10M 1M
257-262	10YR 5/2	30	10M 1M
262-267	10YR 5/2	30	10M 1M
267-272	10YR 5/2	30	10M 1M
272-277	10YR 5/2	30	10M 1M
277-282	10YR 5/2	30	10M 1M
282-287	10YR 5/2	30	10M 1M
287-292	10YR 5/2	30	10M 1M
292-297	10YR 5/2	30	10M 1M
297-302	10YR 5/2	30	10M 1M
302-307	10YR 5/2	30	10M 1M
307-312	10YR 5/2	30	10M 1M
312-317	10YR 5/2	30	10M 1M
317-322	10YR 5/2	30	10M 1M
322-327	10YR 5/2	30	10M 1M
327-332	10YR 5/2	30	10M 1M
332-337	10YR 5/2	30	10M 1M
337-342	10YR 5/2	30	10M 1M
342-347	10YR 5/2	30	10M 1M
347-352	10YR 5/2	30	10M 1M
352-357	10YR 5/2	30	10M 1M
357-362	10YR 5/2	30	10M 1M
362-367	10YR 5/2	30	10M 1M
367-372	10YR 5/2	30	10M 1M
372-377	10YR 5/2	30	10M 1M
377-382	10YR 5/2	30	10M 1M
382-387	10YR 5/2	30	10M 1M
387-392	10YR 5/2	30	10M 1M
392-397	10YR 5/2	30	10M 1M
397-402	10YR 5/2	30	10M 1M
402-407	10YR 5/2	30	10M 1M
407-412	10YR 5/2	30	10M 1M
412-417	10YR 5/2	30	10M 1M
417-422	10YR 5/2	30	10M 1M
422-427	10YR 5/2	30	10M 1M
427-432	10YR 5/2	30	10M 1M
432-437	10YR 5/2	30	10M 1M
437-442	10YR 5/2	30	10M 1M
442-447	10YR 5/2	30	10M 1M
447-452	10YR 5/2	30	10M 1M
452-457	10YR 5/2	30	10M 1M
457-462	10YR 5/2	30	10M 1M
462-467	10YR 5/2	30	10M 1M
467-472	10YR		

WETLAND 10 W-3AD-D41212-03

Site: AEP-NUT-KILL Rater(s): BAO, JKC Date: 07/12/12

Metric 1. Wetland Area (size).

max 6 pts. subtotal

1 1

Select one size class and assign score.

>50 acres (>20.2ha) (6 pts)

25 to <50 acres (10.1 to <20.2ha) (5 pts)

10 to <25 acres (4 to <10.1ha) (4 pts)

3 to <10 acres (1.2 to <4ha) (3 pts)

0.3 to <3 acres (0.12 to <1.2ha) (2 pts)

<0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)

<0.1 acres (0.04ha) (0 pts)

Metric 2. Upland buffers and surrounding land use.

max 14 pts. subtotal

3 4

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

WIDE. Buffers average 50m (154ft) or more around wetland perimeter (7)

MEDIUM. Buffers average 25m to <50m (82 to <154ft) around wetland perimeter (4)

NARROW. Buffers average 10m to <25m (<32 to <82ft) around wetland perimeter (1)

VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)

LOW. Old field (>10 years), shrub land, young second growth forest (6)

MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field, (3)

HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

Metric 3. Hydrology.

max 20 pts. subtotal

10 14

3a. Sources of Water. Score all that apply.

High pH groundwater (5)

Other groundwater (3)

Precipitation (1)

Seasonal/inherent surface water (3)

3b. Perennial surface water (lake or stream) (5)

Medium water depth. Select only one and assign score.

1m to <2m (<3.3 to <6.6ft) (1)

0.4 to <1m (<1.3 to <3.3ft) (2)

<0.4m (<1.3ft) (1)

3c. Modifications to natural hydrologic regime. Score one or double check and average.

None or none apparent (12)

Recovered (7)

Recovering (3)

Recent or no recovery (1)

Check all disturbances observed

point source (nonstormwater)

filling/grading

road bed/ER track

dredging

other

Metric 4. Habitat Alteration and Development.

max 20 pts. subtotal

9 23

4a. Substrate disturbance. Score one or double check and average.

None or none apparent (4)

Recovered (3)

Recovering (2)

Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

Very good (6)

Good (5)

Moderately good (4)

Fair (3)

Poor to fair (2)

Poor (1)

4c. Habitat alteration. Score one or double check and average.

None or none apparent (9)

Recovered (6)

Recovering (3)

Recent or no recovery (1)

Check all disturbances observed

mowing

grazing

selective cutting

woody debris removal

nutrient enrichment

stratification

herbaceous/aquatic bed removal

sedimentation

dredging

farming

nutrient enrichment

WETLAND 10 W-3AD-D41212-03

Site: AEP-NUT-KILL Rater(s): BAO, JKC Date: 07/12/12

Metric 5. Special Wetlands.

max 10 pts. subtotal

0 23

Check all that apply and score as indicated.

Bog (10)

Pen (10)

Old growth forest (10)

Mature forested wetland (5)

Lake Erie coastal/tributary wetland-unrestricted hydrology (10)

Lake Erie coastal/tributary wetland-restricted hydrology (5)

Lake Plain Sand Prairies (Oak Openings) (10)

Relict Wet Prairies (10)

Known occurrence state/federal threatened or endangered species (10)

Significant migratory songbird/water fowl habitat or usage (10)

Category 1 Wetland. See Question 1 Qualitative Rating (-10)

Metric 6. Plant communities, interspersions, microtopography.

max 20 pts. subtotal

3 26

6a. Wetland Vegetation Communities. Score all present using 0 to 3 scale.

Aquatic bed

Emergent

Shrub

Forest

Mudflats

Open water

Other

6b. horizontal (plan view) interspersions. Select only one.

High (5)

Moderately high (4)

Moderate (3)

Moderately low (2)

Low (1)

None (0)

6c. Coverage of invasive plants. Refer to table 1 ORAM long form for list. Add or deduct points for coverage

Extensive >75% cover (-3)

Moderate 25-75% cover (-1)

Sparse 5-25% cover (-1)

Nearly absent <5% cover (0)

6d. Microtopography. Score all present using 0 to 3 scale

Vegetated hummocks/mounds

Coarse woody debris >15cm (6in)

Standing dead >25cm (10in) dbh

Amphibian breeding pools

Narrative Description of Vegetation Quality

low Low spp diversity and/or predominance of nonnative or disturbance tolerant native species

mod Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally with presence of rare threatened or endangered spp

high A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

0 Absent <0.1ha (0.247 acres)

1 Low 0.1 to <1ha (0.247 to 2.47 acres)

2 Moderate 1 to <4ha (2.47 to 9.88 acres)

3 High >4ha (9.88 acres) or more

Microtopography Cover Scale

0 Absent

1 Present very small amounts or if more common of marginal quality

2 Present in moderate amounts, but not of highest quality or in small amounts of highest quality

3 Present in moderate or greater amounts and of highest quality

**This foregoing document was electronically filed with the Public Utilities**

**Commission of Ohio Docketing Information System on**

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**in**

**Case No(s). 12-2519-EL-BLN**

Summary: Letter of Notification and Attachments for Kirk-Jug 138 kV Circuit Project (Part 8 of 12) electronically filed by Erin C Miller on behalf of AEP Ohio Transmission Company, Inc.