

W-1840-041213-01

WETLAND 12

WETLAND DETERMINATION DATA FORM - Midwest Region

Project Site: Aspen Hill City/County: Litchfield Sampling Date: 07/12/12
Applicant/Owner: Aspen Hill State: OH Sampling Point: 01
Investigator(s): BAJ-D Section, Township, Range: _____
Landform (allotment, terrace, etc.): Top of slope Local relief (concave, convex, none): Concave
Slope (%): 40 Lat: 40.00377 Long: -82.652936 Datum: NAD
Soil Map Unit Name: Ge. OLB NWI classification: _____
Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
Are vegetation N Soil N or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are vegetation N Soil N or Hydrology N 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 _____
Remarks: 55% Wetland that is 40% existing transmission ROW
50% Wetland that is 40% existing transmission ROW

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Indicator Species	Dominance Test Worksheet
1. _____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)
2. _____	_____	_____	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. _____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (AB)
4. _____	_____	_____	
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293. _____	_____	_____	
294. _____	_____		

WETLAND 12

W-BAO-0712-01

Site: ACP 346-1144 Rater(s): BAO, JC Date: 0712

Metric 1. Wetland Area (size).

max 6 pts. subtotal

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

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 (32 to <82ft) around wetland perimeter (1)	

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

VERY LOW. Land used for agriculture, pasture, cropland, etc. (7)	
LOW. Land used for agriculture, pasture, cropland, etc. (4)	
MODERATELY HIGH. Residential, forest, pasture, park, conservation tillage, row fallow field. (3)	
HIGH. Urban, industrial, open pasture, row cropping, mowing, construction. (1)	

Metric 3. Hydrology.

max 20 pts. subtotal

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)	
Major water depth. Score 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. 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)	

3c. Check all disturbances observed

ditch	
tile	
dike	
weir	
stormwater input	
point source (nonstormwater)	
filling/grading	
road bed/R track	
dredging	
other	

Metric 4. Habitat Alteration and Development.

max 20 pts. subtotal

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

None or none apparent (4)	
Recovered (3)	
Recovering (1)	
Recent or no recovery (1)	

4b. 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)	

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

shrub/straw removal	
herbaceous/aquatic bed removal	
sedimentation	
dredging	
grazing	
selective cutting	
woody debris removal	
nutrient enrichment	
toxic pollutants	

WETLAND 12

W-BAO-0712-01

Site: ACP 346-1144 Rater(s): BAO, JC Date: 0712

Metric 5. Special Wetlands.

max 10 pts. subtotal

Check all that apply and score as indicated.

Bog (10)	
Fen (10)	
Old growth forest (10)	
Mature forested wetland (5)	
Lake Erie coastal/sublittoral wetland-unrestricted hydrology (10)	
Lake Erie coastal/sublittoral 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

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) Interspersion. 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)	
Sparsely 5-25% cover (-1)	
Nearly absent <5% cover (0)	
Absent (1)	

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

Vegetated hummocks/succs	
Coarse woody debris >15cm (6in)	
Standing dead >25cm (10in) dbh	
Amphibian breeding pools	

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.247 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	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
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

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

Mudflat and Open Water Class Quality

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

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal 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 end of highest quality

WETLAND DETERMINATION DATA FORM - Midwest Region

Project Site: ACP Jct. KIRK City/County: Licking Co. State: OH Sampling Date: 07/11/12

Applicant/Owner: ACP Section: Township: Range: Lat: 40.002100 Long: -82.654025 Datum: NAD83

Investigator(s): B.A.D. M.A.C. Local relief (concave, convex, none): CONCAVE

Slope (%): 0.00 Soil: D or Hydrology: D significantly disturbed? Yes X No

Soil Map Unit Name: S₂ NWI classification: UA

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 "Normal Circumstances" present? 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 Is the Sampled Area within a Wetland? Yes X No

Hydric Soil Present? Yes X No

Wetland Hydrology Present? Yes X No

Remarks: *See Wetlands map below & Abutting HH-BAD-07112-05*

VEGETATION - Use scientific names of plants.

Transect	Stratum	Plot size	Absolute % Cover	Dominant Species	Station
1	Herb Stratum	1m ²	40	FAW	
2	Herb Stratum	1m ²	10	FAW	
3	Herb Stratum	1m ²	10	FAW	
4	Herb Stratum	1m ²	10	FAW	
5	Herb Stratum	1m ²	10	FAW	
6	Herb Stratum	1m ²	10	FAW	
7	Herb Stratum	1m ²	10	FAW	
8	Herb Stratum	1m ²	10	FAW	
9	Herb Stratum	1m ²	10	FAW	
10	Herb Stratum	1m ²	10	FAW	
11	Herb Stratum	1m ²	10	FAW	
12	Herb Stratum	1m ²	10	FAW	

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

W-BAD 07112-6 WETLAND 13

SOIL

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

Depth (inches)	Matrix Color (moist)	% Color (moist)	Redox Features	Type	Loc	Remarks
0-12	10YR 4/1	75	5YR 3/4	S	10 M	21-12-04

Indicators for Problematic Hydric Soils¹:

Type	Concentration	Depletion	RM-Reduced Matrix	MS-Masked Sand Grains
Historic (A1)	Sandy Gleyed Matrix (S4)			
Black Histic (A2)	Sandy Redox (S5)			
Black Histic (A3)	Shipped Matrix (S6)			
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1)			
Stratified Layers (A5)	Loamy Gleyed Matrix (F2)			
2 cm Muck (A10)	Depleted Matrix (F3)			
Thick Dark Surface (A11)	Redox Dark Surface (F6)			
Thick Dark Surface (A12)	Depleted Dark Surface (F7)			
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)			
5 cm Mucky Peat or Peat (S3)	Restrictive Layer (if observed):			

Hydric Soil Indicators:

Type	Depth (inches)	Hydric Soil Present?	Yes	No
Surface Soil Cracks (B6)			X	
Drainage Patterns (B10)			X	
Dry-Season Water Table (C2)			X	
Crayfish Burrows (C8)			X	
Saturation Visible on Aerial Imagery (C9)			X	
Stunted or Stressed Plants (D1)			X	
Geomorphic Position (D2)			X	
FAC-Neutral Test (D6)			X	

Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1)	Water-Stained Leaves (B9)
High Water Table (A2)	Aquatic Fauna (B13)
Saturation (A3)	True Aquatic Plants (B14)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)
Drift Deposits (B3)	Presence of Reduced Iron (C4)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)
Iron Deposits (B5)	Thin Muck Surface (C7)
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)

Field Observations:

Surface Water Present?	Yes	No	Depth (inches):
Water Table Present? <td>Yes</td> <td>No</td> <td>Depth (inches):</td>	Yes	No	Depth (inches):
Saturation Present? <td>Yes</td> <td>No</td> <td>Depth (inches):</td>	Yes	No	Depth (inches):

Wetland Hydrology Present? Yes X No

Remarks: No primary hydrology indicators noted due to abnormally dry summer.

WETLAND DETERMINATION DATA FORM - Midwest Region
W-440.07112-05
WETLAND 14

Project Site: ASP Vot Kirk City/Country: UK/UK State: OH Sampling Date: 07/11/20
 Applicant/Owner: ACP Section, Township, Range: _____
 Investigator(s): BAQ, JC, AH Local relief (contour, aspect, aspect): CONCAVE
 Landform (hillslope, terrace etc.): Representative Datum: _____
 Slope (%): _____ Long: -82.65815
 Soil Map Unit Name: Ce3 NW1 classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)
 Are "Normal Circumstances" present? Yes ✓ No _____
 Are Vegetation N Soil N or Hydrology N significantly disturbed? _____
 Are Vegetation N Soil N or Hydrology N naturally problematic? _____ (If needed, explain any stressors in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks:			
Pew/PSS within existing road near residential house			

VEGETATION – Use scientific names of plants.

Total Stratum	(Plot size)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				

= Total Cover

Saccharid Struts Stratum	(Plot size)	% Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				

= Total Cover

Hets Stratum	(Plot size)	% Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				

= Total Cover

Woody Vines Stratum	(Plot size)	% Cover	Dominant Species?	Indicator Status
1.				
2.				

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

SOIL

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
___	Surface Water (A1)	___	Surface Soil Cracks (B6)
___	High Water Table (A2)	___	Drainage Patterns (B10)
___	Saturation (A3)	___	Dry-Season Water Table (C2)
___	Water Marks (B1)	___	Crayfish Burrows (C8)
___	Sediment Deposits (B2)	___	Saturation Visible on Aerial Imagery (C3)
___	Drift Deposits (B3)	___	Stunted or Stressed Plants (D1)
___	Algal Mat or Crust (B4)	___	Geomorphic Position (D2)
___	Iron Deposits (B5)	___	FAC-Neutral Test (D5)
___	Inundation Visible on Aerial Imagery (B6)	___	
___	Sparsely Vegetated Coarse Surface (B7)	___	
Field Observations:		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
___	Surface Water Present?		
___	Water Table Present?		
___	Saturation Present?		
___	(Includes capillary fringe)		
Describe Recorded Delta (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

HYDRO IS SOMEWHAT WEAR. DUE TO DIERE THAN NORMAL CONDITIONS

US Army Corps of Engineers

WETLAND 14
 Site: PERJUN-FLICK Rater(s): BAO, SC, AH Date: DFH12

Metric 1. Wetland Area (size).

max 10 pts. subtotal

Select appropriate 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 (4.0 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

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)

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

VERY LOW. 20% or less of land is in agriculture, forest, etc. (7)
LOW. 21 to 40% of land is in agriculture, forest, etc. (5)
MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, row fallow field. (3)
HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

Metric 3. Hydrology.

max 20 pts. subtotal

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

High pH groundwater (5)
Other groundwater (3)
Precipitation (1)
Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

100 year floodplain (1)
Between stream/river and other human use (1)
Part of wetland/riparian (e.g. forest) complex (1)
Part of riparian zone (1)
Duration inundation/saturation. Score one or double check. (4)
Semi- to permanently inundated/saturated (4)
Regularly inundated/saturated (3)
Seasonally inundated (2)
Seasonally saturated in upper 30cm (12in) (1)

3c. Maximum water depth. Select only one and assign score.

>0.7 (27.6in) (3)
0.4 to 0.7m (15.7 to 27.6in) (2)
0.4 to 0.7m (<15.7in) (1)

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

None or none apparent (12)
Recovered (7)
Recovered (3)
Recent or no recovery (1)

3e. Check all disturbances observed

ditch
tile
dike
weir
stormwater input
point source (nonstormwater) filling/grading
road bed/RTR track dredging
other

Metric 4. Habitat Alteration and Development.

max 20 pts. subtotal

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

None or none apparent (4)
Recovered (6)
Recovered (2)
Recent or no recovery (1)

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

Excellent (7)
Very good (6)
Good (5)
Moderately good (4)
Fair (3)
Poor (1)

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

None or none apparent (5)
Recovered (6)
Recovered (3)
Recent or no recovery (1)

Check all disturbances observed

mowing
grazing
selective cutting
woody debris removal
toxic pollutants
shrub/deciduous removal
herbaceous/aquatic bed removal
inundation
fertilizer
nutrient enrichment

WETLAND 14
 Site: PERJUN-FLICK Rater(s): BAO, SC, AG Date: DFH12

Metric 5. Special Wetlands.

max 10 pts. subtotal

Check all that apply and score as indicated.

Bog (10)
Fen (10)
Old growth forest (10)
Marine forested wetland (5)
Lake Erie coastal/wetland-unrestricted hydrology (10)
Lake Erie coastal/wetland-restricted hydrology (5)
Lake Erie coastal/wetland-restricted hydrology (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

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

1	Aquatic bed
2	Emergent
3	Shrub
4	Forest
5	Mudflat
6	Open water
7	Other

6b. horizontal (plan view) Interspersion. 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.

0	Vegetated hummocks/succulents
1	Coarse woody debris >15cm (6in)
2	Coarse woody debris >25cm (10in) dbh
3	Amphibian breeding pools

max 20 pts. subtotal

6e. 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 w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

6f. 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

max 10 pts. subtotal

6g. 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 DETERMINATION DATA FORM - Midwest Region

Project Site: AEP Jug-Kitch City/County: Licking Co. Sampling Date: 7/11/12
 Applicant/Owner: AEP State: OH Sampling Point: _____
 Investigator(s): BHO / JNC / AG Section, Township, Range: _____
 Landform (hilltops, terraces, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 1-2 Lat: 39.492135 Long: -82.652194 Datum: _____
 Soil Map Unit Name: S₀ NW1 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 Y Soil Y or Hydrology Y significantly disturbed? Yes X No _____
 Are Vegetation Y Soil Y or Hydrology Y naturally problematic? (If needed, explain any stressors in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Remarks: <u>POSSIBLE WETLAND LOCATED UPON EXISTING TRANSMISSION ROW</u>	

VEGETATION - Use scientific names of plants.

	Absence	Persistent or Sparse	Dominant Year-round Forest

Tree Stratum (Plot size: <u>10m x 10m</u>)	Percent Dominant Species Across All Strata: <u>2</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>(A)</u>
1. <u>None</u>	Total Number of Dominant Species Across All Strata: <u>2</u>	(B)
2. _____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u>	(AB)
3. _____		
4. _____		
5. _____		
6. _____		
Shrub Stratum (Plot size: _____)	Prevalence Index worksheet:	
1. <u>SALIX nigra</u>	Total % Cover of: _____	Multiply by: _____
2. _____	OBL species <u>42</u>	x 1 = <u>42</u>
3. _____	FACW species <u>95</u>	x 2 = <u>190</u>
4. _____	FAG species _____	x 3 = _____
5. _____	FACU species _____	x 4 = _____
6. _____	UPL species _____	x 5 = _____
_____	Column Totals: <u>137</u>	(A) <u>232</u> (B) _____
Herb Stratum (Plot size: _____)	Prevalence Index = B/A = <u>1.69</u>	
1. <u>Red clover grass</u>	Hydrophytic Vegetation Indicators:	
2. <u>Swamp milkweed</u>	1 - Rapid Test for Hydrophytic Vegetation	
3. <u>Red top tuft grass</u>	2 - Dominance Test is >50%	
4. <u>Water plantain</u>	3 - Prevalence Index is >3.0	
5. <u>Common horsetail</u>	4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)	
6. _____	_____ Problematic Hydrophytic Vegetation? (Explain)	
7. _____		
8. _____		
9. _____		
10. _____	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Woody Vine Stratum (Plot size: _____)	Hydrophytic Vegetation Present? Yes <u>X</u> No _____	
1. _____		
2. _____		
Remarks: (Include photo numbers here or on a separate sheet.)		

W-bao 07/11/12-07

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
— Surface Water (A1)	— Water-Stained Leaves (B9)	— Surface Soil Cracks (B6)	
— High Water Tables (A2)	— Aquatic Fauna (B13)	<input checked="" type="checkbox"/> Drainage Patterns (B10)	
— Saturation (A3)	— True Aquatic Plants (B14)	— Dry-Season Water Table (C2)	
— Water Marks (B1)	— Hydrogen Sulfide Odor (C1)	— Crayfish Burrows (C8)	
— Sediment Deposits (B2)	— Oxidized Rhizospheres on Living Roots (C3)	— Saturation Visible on Aerial Imagery (C9)	
— 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)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
— Iron Deposits (B5)	— Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
— Inundation Visible on Aerial Imagery (B7)	— Gauge or Wet Data (D0)		
— Sparingly Vegetated Concave Surface (B8)	— Other (Explain in Remarks)		
Field Observations:			
— Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
— Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
— Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring wet, aerial photos, previous inspections), if available:			
Remarks:		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <i>No primary indicators due to abnormally dry summer.</i>	

WETLAND 13

W-BAO-071112-07

Site: AcP SW-KUR Rater(s): BAO, JAC Date: 07/11/12

Metric 1. Wetland Area (size).

2 2
max 6 pts. subtotal

- 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)
 - 0.1 to <3 acres (0.04 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.

5 7
max 14 pts. subtotal

- 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 (<32ft) around wetland perimeter (1)
 - VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)
- 2b. ☒ Moderate. No double check and average.
4. ☒ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, row fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

Metric 3. Hydrology.

12 19
max 30 pts. subtotal

- 3a. Sources of Water. Score all that apply.
- High pH groundwater (5)
 - Other groundwater (3)
 - Perennial surface water (lake or stream) (3)
 - Seasonal surface water (lake or stream) (3)
 - Perennial surface water (lake or stream) (5)
 - Maximum water depth. Select only one and assign score.
 - >0.7 (27.6in) (3)
 - 0.4 to 0.7m (15.7 to 27.6in) (2)
 - 0.4 to 0.7m (<15.7in) (1)
 - <0.4m (<15.7in) (1)
- 3b. 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)
- 3c. Connectivity. Score all that apply.
- 100 year floodplain (1)
 - Between streamlake and other human use (1)
 - Part of riparian or wetland complex (1)
 - Part of riparian or wetland complex (1)
 - Part of riparian or wetland complex (1)
 - Duration inundated/saturated. Score one or double check.
 - Strat. to permanently inundated/saturated (4)
 - Seasonally inundated/saturated (3)
 - Seasonally inundated (2)
 - Seasonally inundated in upper 30cm (12in) (1)
- 3d. ☒ point source (nonstormwater) filling/grading
- ☒ road bed/RR track dredging
- ☒ other: Channel/Levee/Retain

Metric 4. Habitat Alteration and Development.

8 27
max 20 pts. subtotal

- 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.
- Excellent (7)
 - 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)
- 4d. ☒ shrubslapping removal
- ☒ herbaceous/aquatic bed removal
- ☒ fertilization
- ☒ selective cutting
- ☒ woody debris removal
- ☒ nutrient enrichment
- ☒ toxic pollutants

WETLAND 15

W-BAO-071112-07

Site: AcP SW-KUR Rater(s): BAO, JAC Date: 07/11/12

Metric 5. Special Wetlands.

0 24
max 10 pts. subtotal

- Check all that apply and score as indicated.
- ☒ Bog (10)
 - ☒ Old growth forest (10)
 - ☒ Mature forested wetland (5)
 - ☒ Lake Erie coastal/bay wetland-unrestricted hydrology (10)
 - ☒ Lake Erie coastal/bay 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.

0 24
max 20 pts. subtotal

- 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/muckflats
 - ☒ Coarse woody debris >15cm (6in)
 - ☒ Standing dead >25cm (10in) dbh
 - ☒ Amphibian breeding pools
- Vegetation Community Cover Scale
- | | |
|---|---|
| 0 | Absent or comprises <0.1ha (0.2471 acres) contiguous area |
| 1 | Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality |
| 2 | 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 |
| 3 | Present and comprises significant part, or more, of wetland's vegetation and is of high quality |
- 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 w/o presence of rare threatened or endangered spp |
| high | A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp |
- Mudflat and Open Water Class Quality
- | | |
|---|---|
| 0 | Absent <0.1ha (0.247 acres) |
| 1 | Low 0.1 to <1ha (0.247 to 2.47 acres) |
| 2 | Moderate 1 to <4ha (2.47 to 9.88 acres) |
| 3 | High 4ha (9.88 acres) or more |
- Microtopography Cover Scale
- | | |
|---|--|
| 0 | Absent |
| 1 | Present very small amounts or if more common of mesquite 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 |

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Commission of Ohio Docketing Information System on

9/14/2012 10:46:53 AM

in

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

Summary: Letter of Notification and Attachments for Kirk-Jug 138 kV Circuit Project (Part 9 of 12) electronically filed by Erin C Miller on behalf of AEP Ohio Transmission Company, Inc.