Wetland 43

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Sunnyside-Carrollton   **City/County:** Stark County   **Sampling Date:** 01-May-17

Applicant/Owner: AEP   **State:** OH   **Sampling Point:** **W-PJR-050117-08**

Investigator(s): PJR, LCB   **Section, Township, Range:** **S** 31 **T** 18N **R** 7W

Landform (hillslope, terrace, etc.): Valley bottom   **Local relief (concave, convex, none):** concave   **Slope:** 5.0% **/** 2.9 °

Subregion (LRR or MLRA):   **Lat.:** 40.737158   **Long.:** -81.299944   **Datum:** NAD83

Soil Map Unit Name: MsD   **NWI classification:** N/A

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 ○		
Hydric Soil Present? Yes ⦿ No ○	**Is the Sampled Area within a Wetland?**	Yes ⦿ No ○
Wetland Hydrology Present? Yes ⦿ No ○		

Remarks:

PEM wetland

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)   Secondary Indicators (minimum of two required)

Primary		Secondary
☑ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☑ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☑ Saturation (A3)	☐ Oxidized Rhizospheres along Living Roots (C3)	☑ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry Season Water Table (C2)
☐ Drift deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☑ Microtopographic Relief (D4)
		☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ⦿ No ○	Depth (inches):	3
Water Table Present?	Yes ⦿ No ○	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ⦿ No ○	Depth (inches):	0

Wetland Hydrology Present? Yes ⦿ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland 43

VEGETATION (Five/Four Strata)- Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
	0	= Total Cover	

Sapling-Sapling/Shrub Stratum (Plot size: _____)

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
	0	= Total Cover	

Shrub Stratum (Plot size: _____)

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
	0	= Total Cover	

Herb Stratum (Plot size: _____)

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. Carex vulpinoidea	55	☑ 61.1%	OBL
2. Onoclea sensibilis	35	☑ 38.9%	FACW
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
11. _____	0	☐ 0.0%	
12. _____	0	☐ 0.0%	
	90	= Total Cover	

Woody Vine Stratum (Plot size: _____)

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	55	x 1 =	55
FACW species	35	x 2 =	70
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	90 (A)		125 (B)

Prevalence Index = B/A = 1.389

Hydrophytic Vegetation Indicators:

- ☑ **Rapid Test for Hydrophytic Vegetation**
- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Four Vegetation Strata:

Tree stratum – Consists of woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub stratum – Consists of woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb stratum – Consists of all herbaceous (non-woody) plants, regardless of size, and all other plants less than 3.28 ft tall.

Woody vines – Consists of all woody vines greater than 3.28 ft in height.

Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling stratum – Consists of woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub stratum – Consists of woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb stratum – Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody species, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vines – Consists of all woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ⦿ No ○

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

US Army Corps of Engineers

Eastern Mountains and Piedmont - Version 2.0

Wetland 43

Soil

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 4/2	90	10YR 4/6	10	C	M	Silty Clay Loam	

[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)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (LRR N)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1) (LRR N, MLRA 147, 148)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (MLRA 147,148)
- ☐ Thin Dark Surface (S9) (MLRA 147, 148)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- ☐ Umbric Surface (F13) (MLRA 136, 122)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 148)
- ☐ Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10) (MLRA 147)
- ☐ Coast Prairie Redox (A16) (MLRA 147,148)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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:

Wetland 44

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Sunnyside-Carrollton **City/County:** Stark County **Sampling Date:** 01-May-17

Applicant/Owner: AEP **State:** OH **Sampling Point:** **W-PJR-050117-07**

Investigator(s): PJR, LCB **Section, Township, Range: S** 31 **T** 18N **R** 7W

Landform (hillslope, terrace, etc.): Hillside **Local relief (concave, convex, none):** concave **Slope:** 15.0% / 8.5 °

Subregion (LRR or MLRA): **Lat.:** 40.738333 **Long.:** -81.301565 **Datum:** NAD83

Soil Map Unit Name: MsD **NWI classification:** N/A

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 ◯	
Hydric Soil Present? Yes ⊙ No ◯	**Is the Sampled Area within a Wetland?** Yes ⊙ No ◯
Wetland Hydrology Present? Yes ⊙ No ◯	

Remarks:

PEM wetland

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of two required)

Primary		Secondary
☑ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☑ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☑ Saturation (A3)	☐ Oxidized Rhizospheres along Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry Season Water Table (C2)
☐ Drift deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ⊙ No ◯	Depth (inches): 3	
Water Table Present?	Yes ⊙ No ◯	Depth (inches): 7	
Saturation Present? (includes capillary fringe)	Yes ⊙ No ◯	Depth (inches): 0	**Wetland Hydrology Present?** Yes ⊙ No ◯

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

US Army Corps of Engineers Eastern Mountains and Piedmont - Version 2.0

Wetland 44

VEGETATION (Five/Four Strata)- Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
	0	= Total Cover	

Sapling-Sapling/Shrub Stratum (Plot size: _____)

	Absolute % Cover	Dominant Rel.Strat. Cover	Indicator Status
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
	0	= Total Cover	

Shrub Stratum (Plot size: _____)

	Absolute % Cover	Dominant Rel.Strat. Cover	Indicator Status
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
	0	= Total Cover	

Herb Stratum (Plot size: _____)

	Absolute % Cover	Dominant Rel.Strat. Cover	Indicator Status
1. Typha angustifolia	10	☐ 10.5%	OBL
2. Onoclea sensibilis	25	☑ 26.3%	FACW
3. Agrimonia parviflora	20	☑ 21.1%	FACW
4. Impatiens capensis	15	☐ 15.8%	FACW
5. Leersia virginica	25	☑ 26.3%	FACW
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
11. _____	0	☐ 0.0%	
12. _____	0	☐ 0.0%	
	95	= Total Cover	

Woody Vine Stratum (Plot size: _____)

	Absolute % Cover	Dominant Rel.Strat. Cover	Indicator Status
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species
That are OBL, FACW, or FAC: **3** (A)

Total Number of Dominant
Species Across All Strata: **3** (B)

Percent of dominant Species
That Are OBL, FACW, or FAC: **100.0%** (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	85	x 2 =	170
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	95 (A)		180 (B)

Prevalence Index = B/A = **1.895**

Hydrophytic Vegetation Indicators:

- ☑ **Rapid Test for Hydrophytic Vegetation**
- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Four Vegetation Strata:

Tree stratum – Consists of woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub stratum – Consists of woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb stratum – Consists of all herbaceous (non-woody) plants, regardless of size, and all other plants less than 3.28 ft tall.

Woody vines – Consists of all woody vines greater than 3.28 ft in height.

Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling stratum – Consists of woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub stratum – Consists of woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb stratum – Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody species, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vines – Consists of all woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ⦿ No ◯

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland 44

Soil

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 5/1	90	10YR 5/4	10	C	M	Silty Clay Loam	

[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)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (LRR N)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Muck Mineral (S1) (LRR N, MLRA 147, 148)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) (MLRA 147,148)
☐ Thin Dark Surface (S9) (MLRA 147, 148)
☐ Loamy Gleyed Matrix (F2)
☑ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)
☐ Umbric Surface (F13) (MLRA 136, 122)
☐ Piedmont Floodplain Soils (F19) (MLRA 148)
☐ Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils[3]:

☐ 2 cm Muck (A10) (MLRA 147)
☐ Coast Prairie Redox (A16) (MLRA 147,148)
☐ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
☐ Very Shallow Dark Surface (TF12)
☐ 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:

Wetland 45

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Sunnyside-Carrollton **City/County:** Stark County **Sampling Date:** 01-May-17

Applicant/Owner: AEP **State:** OH **Sampling Point:** **W-PJR-050117-06**

Investigator(s): PJR, LCB **Section, Township, Range: S** 31 **T** 18N **R** 7W

Landform (hillslope, terrace, etc.): Valley bottom **Local relief (concave, convex, none):** none **Slope:** 1.0% **/** 0.6 °

Subregion (LRR or MLRA):   **Lat.:** 40.739178 **Long.:** -81.302775 **Datum:** NAD83

Soil Map Unit Name: Wd **NWI classification:** PEM

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 ○	
Hydric Soil Present?	Yes ⊙ No ○	**Is the Sampled Area within a Wetland?** Yes ⊙ No ○
Wetland Hydrology Present?	Yes ⊙ No ○	

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

		Secondary Indicators (minimum of two required)
☑ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☑ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☑ Saturation (A3)	☐ Oxidized Rhizospheres along Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry Season Water Table (C2)
☐ Drift deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☑ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☑ Microtopographic Relief (D4)
		☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ⊙ No ○	Depth (inches):	2
Water Table Present?	Yes ⊙ No ○	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ⊙ No ○	Depth (inches):	0

Wetland Hydrology Present? Yes ⊙ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland 45

VEGETATION (Five/Four Strata)- Use scientific names of plants.

Sampling Point: W-PJR-050117-06

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
	0	= Total Cover	

Sapling-Sapling/Shrub Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
	0	= Total Cover	

Shrub Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
	0	= Total Cover	

Herb Stratum (Plot size: _____)			
1. Typha angustifolia	5	☐ 5.0%	OBL
2. Impatiens capensis	45	☑ 45.0%	FACW
3. Carex vulpinoidea	35	☑ 35.0%	OBL
4. Onoclea sensibilis	10	☐ 10.0%	FACW
5. Eupatorium perfoliatum	5	☐ 5.0%	FACW
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
11. _____	0	☐ 0.0%	
12. _____	0	☐ 0.0%	
	100	= Total Cover	

Woody Vine Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species
That are OBL, FACW, or FAC: _2_ (A)

Total Number of Dominant
Species Across All Strata: _2_ (B)

Percent of dominant Species
That Are OBL, FACW, or FAC: _100.0%_ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	40	x 1 =	40
FACW species	60	x 2 =	120
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		160 (B)

Prevalence Index = B/A = _1.600_

Hydrophytic Vegetation Indicators:

- ☑ **Rapid Test for Hydrophytic Vegetation**
- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Four Vegetation Strata:

Tree stratum – Consists of woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub stratum – Consists of woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb stratum – Consists of all herbaceous (non-woody) plants, regardless of size, and all other plants less than 3.28 ft tall.

Woody vines – Consists of all woody vines greater than 3.28 ft in height.

Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling stratum – Consists of woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub stratum – Consists of woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb stratum – Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody species, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vines – Consists of all woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ⦿ No ○

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

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Wetland 45

Soil

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 4/2	90	10YR 5/3	10	C	M	Clay Loam	

[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)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5)
- [ ] 2 cm Muck (A10) (LRR N)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1) (LRR N, MLRA 147, 148)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)

- [ ] Dark Surface (S7)
- [ ] Polyvalue Below Surface (S8) (MLRA 147,148)
- [ ] Thin Dark Surface (S9) (MLRA 147, 148)
- [ ] Loamy Gleyed Matrix (F2)
- [x] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox Depressions (F8)
- [ ] Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- [ ] Umbric Surface (F13) (MLRA 136, 122)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 148)
- [ ] Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils[3]:

- [ ] 2 cm Muck (A10) (MLRA 147)
- [ ] Coast Prairie Redox (A16) (MLRA 147,148)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- [ ] Very Shallow Dark Surface (TF12)
- [ ] 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:

Wetland 46

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Sunnyside-Carrollton   **City/County:** Stark County   **Sampling Date:** 01-May-17

Applicant/Owner: AEP   **State:** OH   **Sampling Point:** **W-PJR-050117-05**

Investigator(s): PJR, LCB   **Section, Township, Range: S** 30   **T** 18N   **R** 7W

Landform (hillslope, terrace, etc.): Valley bottom   **Local relief (concave, convex, none):** concave   **Slope:** 3.0% / 1.7 °

Subregion (LRR or MLRA):   **Lat.:** 40.743830   **Long.:** -81.308901   **Datum:** NAD83

Soil Map Unit Name: Fph4F1   **NWI classification:** N/A

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 ○		
Hydric Soil Present? Yes ⦿ No ○	**Is the Sampled Area within a Wetland?** Yes ⦿ No ○	
Wetland Hydrology Present? Yes ⦿ No ○		

Remarks:

PEM wetland

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (minimum of two required)

Primary		Secondary
☑ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☑ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☑ Saturation (A3)	☐ Oxidized Rhizospheres along Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry Season Water Table (C2)
☐ Drift deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☑ Microtopographic Relief (D4)
		☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ⦿ No ○   Depth (inches): 2

Water Table Present? Yes ⦿ No ○   Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes ⦿ No ○   Depth (inches): 0   **Wetland Hydrology Present?** Yes ⦿ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland 46

VEGETATION (Five/Four Strata)- Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
	0	= Total Cover	

Sapling-Sapling/Shrub Stratum (Plot size: _____)

	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
	0	= Total Cover	

Shrub Stratum (Plot size: _____)

	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
	0	= Total Cover	

Herb Stratum (Plot size: _____)

	Absolute % Cover	Dominant Species?	Indicator Status
1. Impatiens capensis	30	☑ 54.5%	FACW
2. Dichanthelium clandestinum	20	☑ 36.4%	FAC
3. Eupatorium perfoliatum	5	☐ 9.1%	FACW
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
11. _____	0	☐ 0.0%	
12. _____	0	☐ 0.0%	
	55	= Total Cover	

Woody Vine Stratum (Plot size: _____)

	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species
That are OBL, FACW, or FAC: 2   (A)

Total Number of Dominant
Species Across All Strata: 2   (B)

Percent of dominant Species
That Are OBL, FACW, or FAC: 100.0%   (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	35	x 2 =	70
FAC species	20	x 3 =	60
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	55 (A)		130 (B)

Prevalence Index = B/A =   2.364

Hydrophytic Vegetation Indicators:

☐ Rapid Test for Hydrophytic Vegetation

☑ Dominance Test is > 50%

☑ Prevalence Index is ≤3.0 [1]

☐ Morphological Adaptations [1] (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation [1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Four Vegetation Strata:

Tree stratum – Consists of woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub stratum – Consists of woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb stratum – Consists of all herbaceous (non-woody) plants, regardless of size, and all other plants less than 3.28 ft tall.

Woody vines – Consists of all woody vines greater than 3.28 ft in height.

Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling stratum – Consists of woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub stratum – Consists of woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb stratum – Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody species, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vines – Consists of all woody vines, regardless of height.

Hydrophytic Vegetation Present?   Yes ◉   No ○

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland 46

Soil

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 4/1	90	10YR 6/6	10	C	M	Silty Clay Loam	

[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)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5)
- [ ] 2 cm Muck (A10) (LRR N)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1) (LRR N, MLRA 147, 148)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)

- [ ] Dark Surface (S7)
- [ ] Polyvalue Below Surface (S8) (MLRA 147,148)
- [ ] Thin Dark Surface (S9) (MLRA 147, 148)
- [ ] Loamy Gleyed Matrix (F2)
- [x] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox Depressions (F8)
- [ ] Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- [ ] Umbric Surface (F13) (MLRA 136, 122)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 148)
- [ ] Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils[3]:

- [ ] 2 cm Muck (A10) (MLRA 147)
- [ ] Coast Prairie Redox (A16) (MLRA 147,148)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- [ ] Very Shallow Dark Surface (TF12)
- [ ] 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:

Wetland 47

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Sunnyside-Carrollton   **City/County:** Stark County   **Sampling Date:** 01-May-17

Applicant/Owner: AEP   **State:** OH   **Sampling Point:** W-PJR-050117-04

Investigator(s): PJR, LCB   **Section, Township, Range:** S 30   T 18N   R 7W

Landform (hillslope, terrace, etc.): Depression   **Local relief (concave, convex, none):** convex   **Slope:** 0.0% / 0.0 °

Subregion (LRR or MLRA):   **Lat.:** 40.746464   **Long.:** -81.312701   **Datum:** NAD83

Soil Map Unit Name: MsD   **NWI classification:** N/A

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 ◯		
Hydric Soil Present? Yes ⦿ No ◯	**Is the Sampled Area within a Wetland?**	Yes ⦿ No ◯
Wetland Hydrology Present? Yes ⦿ No ◯		

Remarks:

PEM wetland

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)   Secondary Indicators (minimum of two required)

☑ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☑ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☑ Saturation (A3)	☐ Oxidized Rhizospheres along Living Roots (C3)	☑ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry Season Water Table (C2)
☐ Drift deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☑ Microtopographic Relief (D4)
		☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ⦿ No ◯	Depth (inches): 4		
Water Table Present?	Yes ⦿ No ◯	Depth (inches): 0	**Wetland Hydrology Present?**	Yes ⦿ No ◯
Saturation Present? (includes capillary fringe)	Yes ⦿ No ◯	Depth (inches): 0		

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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VEGETATION (Five/Four Strata)- Use scientific names of plants.

Sampling Point: __W-PJR-050117-04__

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
	0	= Total Cover	

Sapling-Sapling/Shrub Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
	0	= Total Cover	

Shrub Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
	0	= Total Cover	

Herb Stratum (Plot size: _____)			
1. Typha angustifolia	5	☐ 5.6%	OBL
2. Phalaris arundinacea	10	☐ 11.1%	FACW
3. Persicaria sagittata	60	☑ 66.7%	OBL
4. _____	15	☐ 16.7%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
11. _____	0	☐ 0.0%	
12. _____	0	☐ 0.0%	
	90	= Total Cover	

Woody Vine Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	65	x 1 =	65
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	75 (A)		85 (B)
Prevalence Index = B/A =			1.133

Hydrophytic Vegetation Indicators:

- ☑ **Rapid Test for Hydrophytic Vegetation**
- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Four Vegetation Strata:

Tree stratum – Consists of woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub stratum – Consists of woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb stratum – Consists of all herbaceous (non-woody) plants, regardless of size, and all other plants less than 3.28 ft tall.

Woody vines – Consists of all woody vines greater than 3.28 ft in height.

Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling stratum – Consists of woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub stratum – Consists of woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb stratum – Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody species, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vines – Consists of all woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ⦿ No ○

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

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Wetland 47

Soil

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	7.5YR 4/1	95	5YR 5/4	5	C	M	Silt Loam	

[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)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (LRR N)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1) (LRR N, MLRA 147, 148)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (MLRA 147,148)
- ☐ Thin Dark Surface (S9) (MLRA 147, 148)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- ☐ Umbric Surface (F13) (MLRA 136, 122)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 148)
- ☐ Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10) (MLRA 147)
- ☐ Coast Prairie Redox (A16) (MLRA 147,148)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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:

Wetland 48

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Sunnyside-Carrollton   **City/County:** Stark County   **Sampling Date:** 01-May-17

Applicant/Owner: AEP   **State:** OH   **Sampling Point:** **W-PJR-050117-03**

Investigator(s): PJR, LCB   **Section, Township, Range:** S 25   T 10N   R 8W

Landform (hillslope, terrace, etc.): Depression   **Local relief (concave, convex, none):** concave   **Slope:** 3.0% / 1.7 °

Subregion (LRR or MLRA):   **Lat.:** 40.752514   **Long.:** -81.320313   **Datum:** NAD83

Soil Map Unit Name: LaD   **NWI classification:** N/A

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 ○		
Hydric Soil Present? Yes ⦿ No ○	**Is the Sampled Area within a Wetland?** Yes ⦿ No ○	
Wetland Hydrology Present? Yes ⦿ No ○		

Remarks:

PEM wetland

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)   Secondary Indicators (minimum of two required)

Primary		Secondary
☑ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☑ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☑ Saturation (A3)	☐ Oxidized Rhizospheres along Living Roots (C3)	☑ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry Season Water Table (C2)
☐ Drift deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☑ Microtopographic Relief (D4)
		☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ⦿ No ○	Depth (inches):	2
Water Table Present?	Yes ⦿ No ○	Depth (inches):	1
Saturation Present? (includes capillary fringe)	Yes ⦿ No ○	Depth (inches):	0

Wetland Hydrology Present? Yes ⦿ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland 48

VEGETATION (Five/Four Strata)- Use scientific names of plants.

Sampling Point: W-PJR-050117-03

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
	0	= Total Cover	
Sapling-Sapling/Shrub Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
	0	= Total Cover	
Shrub Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: _____)			
1. Phalaris arundinacea	10	☐ 13.3%	FACW
2. Impatiens capensis	65	☑ 86.7%	FACW
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
11. _____	0	☐ 0.0%	
12. _____	0	☐ 0.0%	
	75	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species
That are OBL, FACW, or FAC: 1   (A)

Total Number of Dominant
Species Across All Strata: 1   (B)

Percent of dominant Species
That Are OBL, FACW, or FAC: 100.0%   (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	75	x 2 =	150
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	75 (A)		150 (B)

Prevalence Index = B/A =   2.000

Hydrophytic Vegetation Indicators:

- ☑ **Rapid Test for Hydrophytic Vegetation**
- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations [1] (Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation [1] (Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Four Vegetation Strata:

Tree stratum – Consists of woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub stratum – Consists of woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb stratum – Consists of all herbaceous (non-woody) plants, regardless of size, and all other plants less than 3.28 ft tall.

Woody vines – Consists of all woody vines greater than 3.28 ft in height.

Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling stratum – Consists of woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub stratum – Consists of woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb stratum – Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody species, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vines – Consists of all woody vines, regardless of height.

Hydrophytic Vegetation Present?   Yes ⦿   No ○

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

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Wetland 48

Soil

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 5/1	90	10YR 5/6	10	C	M	Clay Loam	

[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)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5)
- [ ] 2 cm Muck (A10) (LRR N)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1) (LRR N, MLRA 147, 148)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)

- [ ] Dark Surface (S7)
- [ ] Polyvalue Below Surface (S8) (MLRA 147,148)
- [ ] Thin Dark Surface (S9) (MLRA 147, 148)
- [ ] Loamy Gleyed Matrix (F2)
- [x] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox Depressions (F8)
- [ ] Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- [ ] Umbric Surface (F13) (MLRA 136, 122)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 148)
- [ ] Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils[3]:

- [ ] 2 cm Muck (A10) (MLRA 147)
- [ ] Coast Prairie Redox (A16) (MLRA 147,148)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- [ ] Very Shallow Dark Surface (TF12)
- [ ] 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:

Wetland 49

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Sunnyside-Carrollton   **City/County:** Stark County   **Sampling Date:** 01-May-17

Applicant/Owner: AEP   **State:** OH   **Sampling Point:** **W-PJR-050117-02**

Investigator(s): PJR, LCB   **Section, Township, Range: S** 24   **T** 10N   **R** 8W

Landform (hillslope, terrace, etc.): Depression   **Local relief (concave, convex, none):** concave   **Slope:** 0.0% / 0.0 °

Subregion (LRR or MLRA): _____   **Lat.:** 40.757104   **Long.:** -81.325307   **Datum:** NAD83

Soil Map Unit Name: FcB   **NWI classification:** N/A

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 ◯		
Hydric Soil Present? Yes ⦿ No ◯	**Is the Sampled Area within a Wetland?**	Yes ⦿ No ◯
Wetland Hydrology Present? Yes ⦿ No ◯		

Remarks:

PEM wetland

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

☑ 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)
☐ Water-Stained Leaves (B9)
☐ Aquatic Fauna (B13)

☐ True Aquatic Plants (B14)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

☐ Surface Soil Cracks (B6)
☐ Sparsely Vegetated Concave Surface (B8)
☑ 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)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☑ Microtopographic Relief (D4)
☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ⦿ No ◯   Depth (inches): 3

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 well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata)- Use scientific names of plants.

Sampling Point: W-PJR-050117-02

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
	0	= Total Cover	
Sapling-Sapling/Shrub Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
	0	= Total Cover	
Shrub Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: _____)			
1. Leersia oryzoides	55	☑ 55.0%	OBL
2. Lysimachia nummularia	30	☑ 30.0%	FACW
3. Festuca arundinacea	15	15.0%	FACU
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
11. _____	0	☐ 0.0%	
12. _____	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species
That are OBL, FACW, or FAC: _____2_____ (A)

Total Number of Dominant
Species Across All Strata: _____2_____ (B)

Percent of dominant Species
That Are OBL, FACW, or FAC: ___100.0%___ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	55	x 1 =	55
FACW species	30	x 2 =	60
FAC species	0	x 3 =	0
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	100 (A)		175 (B)

Prevalence Index = B/A = ___1.750___

Hydrophytic Vegetation Indicators:

- ☑ **Rapid Test for Hydrophytic Vegetation**
- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Four Vegetation Strata:

Tree stratum – Consists of woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub stratum – Consists of woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb stratum – Consists of all herbaceous (non-woody) plants, regardless of size, and all other plants less than 3.28 ft tall.

Woody vines – Consists of all woody vines greater than 3.28 ft in height.

Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling stratum – Consists of woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub stratum – Consists of woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb stratum – Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody species, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vines – Consists of all woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ⦿ No ○

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

US Army Corps of Engineers

Eastern Mountains and Piedmont - Version 2.0

Soil

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/2	90	10YR 5/6	10	C	M	Silty Clay Loam	
3-16	10YR 5/2	85	10YR 5/6	15	C	M	Silty Clay Loam	

[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)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5)
- [ ] 2 cm Muck (A10) (LRR N)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1) (LRR N, MLRA 147, 148)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)

- [ ] Dark Surface (S7)
- [ ] Polyvalue Below Surface (S8) (MLRA 147,148)
- [ ] Thin Dark Surface (S9) (MLRA 147, 148)
- [ ] Loamy Gleyed Matrix (F2)
- [x] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox Depressions (F8)
- [ ] Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- [ ] Umbric Surface (F13) (MLRA 136, 122)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 148)
- [ ] Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils[3]:

- [ ] 2 cm Muck (A10) (MLRA 147)
- [ ] Coast Prairie Redox (A16) (MLRA 147,148)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- [ ] Very Shallow Dark Surface (TF12)
- [ ] 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:

Wetland 50

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Sunnyside-Carrollton	**City/County:** Stark County		**Sampling Date:** 01-May-17	
Applicant/Owner: AEP	**State:** OH		**Sampling Point:** **W-PJR-050117-01**	

Investigator(s): PJR, LCB   **Section, Township, Range:** **S** 24   **T** 10N   **R** 8W

Landform (hillslope, terrace, etc.): Ditch   **Local relief (concave, convex, none):** concave   **Slope:** 0.0% / 0.0 °

Subregion (LRR or MLRA): LRR N   **Lat.:** 40.757515   **Long.:** -81.326383   **Datum:** NAD83

Soil Map Unit Name: FcB   **NWI classification:** N/A

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 ○	
Hydric Soil Present?	Yes ⦿ No ○	**Is the Sampled Area within a Wetland?** Yes ⦿ No ○
Wetland Hydrology Present?	Yes ⦿ No ○	

Remarks:

PEM wetland

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

		Secondary Indicators (minimum of two required)
☑ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☑ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☑ Saturation (A3)	☐ Oxidized Rhizospheres along Living Roots (C3)	☑ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry Season Water Table (C2)
☐ Drift deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☑ Microtopographic Relief (D4)
		☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ⦿ No ○	Depth (inches): 4	
Water Table Present?	Yes ⦿ No ○	Depth (inches): 0	**Wetland Hydrology Present?** Yes ⦿ No ○
Saturation Present? (includes capillary fringe)	Yes ⦿ No ○	Depth (inches): 0	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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Wetland 50

VEGETATION (Five/Four Strata)- Use scientific names of plants.

Sampling Point: W-PJR-050117-01

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
	0	= Total Cover	
Sapling-Sapling/Shrub Stratum (Plot size: _____)			
1. _____		☐ 0.0%	
2. _____		☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
	0	= Total Cover	
Shrub Stratum (Plot size: _____)			
1. _____		☐ 0.0%	
2. _____		☐ 0.0%	
3. _____		☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: _____)			
1. Leersia virginica	35	☑ 41.2%	FACW
2. Phalaris arundinacea	50	☑ 58.8%	FACW
3. _____		☐ 0.0%	
4. _____		☐ 0.0%	
5. _____		☐ 0.0%	
6. _____		☐ 0.0%	
7. _____		☐ 0.0%	
8. _____		☐ 0.0%	
9. _____		☐ 0.0%	
10. _____		☐ 0.0%	
11. _____		☐ 0.0%	
12. _____	0	☐ 0.0%	
	85	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2   (A)

Total Number of Dominant Species Across All Strata: 2   (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0%   (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	85	x 2 =	170
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	85 (A)		170 (B)

Prevalence Index = B/A =   2.000

Hydrophytic Vegetation Indicators:

- ☑ **Rapid Test for Hydrophytic Vegetation**
- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Four Vegetation Strata:

Tree stratum – Consists of woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub stratum – Consists of woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb stratum – Consists of all herbaceous (non-woody) plants, regardless of size, and all other plants less than 3.28 ft tall.

Woody vines – Consists of all woody vines greater than 3.28 ft in height.

Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling stratum – Consists of woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub stratum – Consists of woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb stratum – Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody species, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vines – Consists of all woody vines, regardless of height.

Hydrophytic Vegetation Present?   Yes ◉   No ○

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

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Wetland 50

Soil

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 4/1	90	7.5YR 4/6	10	C	M	Silt Loam	

[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)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5)
- [ ] 2 cm Muck (A10) (LRR N)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1) (LRR N, MLRA 147, 148)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)

- [ ] Dark Surface (S7)
- [ ] Polyvalue Below Surface (S8) (MLRA 147,148)
- [ ] Thin Dark Surface (S9) (MLRA 147, 148)
- [ ] Loamy Gleyed Matrix (F2)
- [x] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox Depressions (F8)
- [ ] Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- [ ] Umbric Surface (F13) (MLRA 136, 122)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 148)
- [ ] Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils[3]:

- [ ] 2 cm Muck (A10) (MLRA 147)
- [ ] Coast Prairie Redox (A16) (MLRA 147,148)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- [ ] Very Shallow Dark Surface (TF12)
- [ ] 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:

Wetland 51

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Carrollton-Sunnyside   **City/County:** Stark County   **Sampling Date:** 27-Apr-17

Applicant/Owner: AEP   **State:** OH   **Sampling Point:** **W-PJR-042717-05**

Investigator(s): PJR, LCB   **Section, Township, Range:** S 24   T 10N   R 8W

Landform (hillslope, terrace, etc.): Ditch   **Local relief (concave, convex, none):** concave   **Slope:** 2.0% / 1.1 °

Subregion (LRR or MLRA):   **Lat.:** 40.758489   **Long.:** -81.326980   **Datum:** NAD83

Soil Map Unit Name: FcA   **NWI classification:** N/A

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 ○	
Hydric Soil Present?	Yes ⦿ No ○	**Is the Sampled Area within a Wetland?** Yes ⦿ No ○
Wetland Hydrology Present?	Yes ⦿ No ○	

Remarks:

PEM/PSS wetland

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (minimum of two required)

Primary		Secondary
☑ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☑ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☑ Saturation (A3)	☐ Oxidized Rhizospheres along Living Roots (C3)	☑ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry Season Water Table (C2)
☐ Drift deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☑ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☑ Microtopographic Relief (D4)
		☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ⦿ No ○	Depth (inches): 1	
Water Table Present?	Yes ⦿ No ○	Depth (inches): 4	**Wetland Hydrology Present?** Yes ⦿ No ○
Saturation Present? (includes capillary fringe)	Yes ⦿ No ○	Depth (inches): 0	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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Wetland 51

VEGETATION (Five/Four Strata)- Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
	0	= Total Cover	
Sapling-Sapling/Shrub Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
	0	= Total Cover	
Shrub Stratum (Plot size: _____)			
1. Viburnum recognitum	10	☑ 100.0%	FAC
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
	10	= Total Cover	
Herb Stratum (Plot size: _____)			
1. Lysimachia nummularia	75	☑ 75.0%	FACW
2. Equisetum arvense	25	☑ 25.0%	FAC
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
11. _____	0	☐ 0.0%	
12. _____	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 3   (A)

Total Number of Dominant Species Across All Strata: 3   (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0%   (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	75	x 2 =	150
FAC species	35	x 3 =	105
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	110 (A)		255 (B)

Prevalence Index = B/A =   2.318

Hydrophytic Vegetation Indicators:
- ☐ **Rapid Test for Hydrophytic Vegetation**
- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Four Vegetation Strata:

Tree stratum – Consists of woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub stratum – Consists of woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb stratum – Consists of all herbaceous (non-woody) plants, regardless of size, and all other plants less than 3.28 ft tall.

Woody vines – Consists of all woody vines greater than 3.28 ft in height.

Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling stratum – Consists of woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub stratum – Consists of woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb stratum – Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody species, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vines – Consists of all woody vines, regardless of height.

Hydrophytic Vegetation Present?   Yes ⦿   No ○

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

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Wetland 51

Soil

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/2	90	10YR 4/4	10	C	M	Silty Clay Loam	
4-16	10YR 5/2	90	10YR 4/6	10	C	M	Silty Clay Loam	

[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)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5)
- [ ] 2 cm Muck (A10) (LRR N)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1) (LRR N, MLRA 147, 148)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)

- [ ] Dark Surface (S7)
- [ ] Polyvalue Below Surface (S8) (MLRA 147,148)
- [ ] Thin Dark Surface (S9) (MLRA 147, 148)
- [ ] Loamy Gleyed Matrix (F2)
- [x] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox Depressions (F8)
- [ ] Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- [ ] Umbric Surface (F13) (MLRA 136, 122)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 148)
- [ ] Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils[3]:

- [ ] 2 cm Muck (A10) (MLRA 147)
- [ ] Coast Prairie Redox (A16) (MLRA 147,148)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- [ ] Very Shallow Dark Surface (TF12)
- [ ] 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:

Wetland 52

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Carrollton-Sunnyside   **City/County:** Stark County   **Sampling Date:** 27-Apr-17

Applicant/Owner: AEP   **State:** OH   **Sampling Point:** W-PJR-042717-06

Investigator(s): PJR, LCB   **Section, Township, Range:** S 24   T 10N   R 8W

Landform (hillslope, terrace, etc.): Depression   **Local relief (concave, convex, none):** concave   **Slope:** 0.0% / 0.0 °

Subregion (LRR or MLRA):   **Lat.:** 40.760849   **Long.:** -81.331039   **Datum:** NAD83

Soil Map Unit Name: FcA   **NWI classification:** N/A

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 ○		
Hydric Soil Present? Yes ⦿ No ○	**Is the Sampled Area within a Wetland?**	Yes ⦿ No ○
Wetland Hydrology Present? Yes ⦿ No ○		

Remarks:

PEM wetland

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)   Secondary Indicators (minimum of two required)

☑ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☑ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres along Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry Season Water Table (C2)
☐ Drift deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☑ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☑ Microtopographic Relief (D4)
		☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ⦿ No ○	Depth (inches): 3	
Water Table Present?	Yes ○ No ⦿	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes ○ No ⦿	Depth (inches):	**Wetland Hydrology Present?** Yes ⦿ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland 52

VEGETATION (Five/Four Strata)- Use scientific names of plants.

Sampling Point: W-PJR-042717-06

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
	0	= Total Cover	
Sapling-Sapling/Shrub Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
	0	= Total Cover	
Shrub Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: _____)			
1. Rumex crispus	5	☑ 100.0%	FAC
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
11. _____	0	☐ 0.0%	
12. _____	0	☐ 0.0%	
	5	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species
That are OBL, FACW, or FAC: _1_ (A)

Total Number of Dominant
Species Across All Strata: _1_ (B)

Percent of dominant Species
That Are OBL, FACW, or FAC: _100.0%_ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	5 (A)		15 (B)

Prevalence Index = B/A = _3.000_

Hydrophytic Vegetation Indicators:
- ☐ Rapid Test for Hydrophytic Vegetation
- ☑ Dominance Test is > 50%
- ☑ Prevalence Index is ≤3.0 [1]
- ☐ Morphological Adaptations [1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation [1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Four Vegetation Strata:

Tree stratum – Consists of woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub stratum – Consists of woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb stratum – Consists of all herbaceous (non-woody) plants, regardless of size, and all other plants less than 3.28 ft tall.

Woody vines – Consists of all woody vines greater than 3.28 ft in height.

Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling stratum – Consists of woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub stratum – Consists of woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb stratum – Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody species, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vines – Consists of all woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ⦿ No ○

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

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Wetland 52

Soil

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 5/2	90	10YR 5/6	10	C	M	Silty Clay Loam	

[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)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5)
- [ ] 2 cm Muck (A10) (LRR N)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1) (LRR N, MLRA 147, 148)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)

- [ ] Dark Surface (S7)
- [ ] Polyvalue Below Surface (S8) (MLRA 147,148)
- [ ] Thin Dark Surface (S9) (MLRA 147, 148)
- [ ] Loamy Gleyed Matrix (F2)
- [x] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox Depressions (F8)
- [ ] Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- [ ] Umbric Surface (F13) (MLRA 136, 122)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 148)
- [ ] Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils[3]:

- [ ] 2 cm Muck (A10) (MLRA 147)
- [ ] Coast Prairie Redox (A16) (MLRA 147,148)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- [ ] Very Shallow Dark Surface (TF12)
- [ ] 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:

Wetland 53

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Carrollton-Sunnyside	**City/County:** Stark		**Sampling Date:** 25-Apr-17
Applicant/Owner: AEP		**State:** OH	**Sampling Point:** W-PJR-042517-06
Investigator(s): PJR, LCB	**Section, Township, Range:** S 23	T 10N	R 8W

Landform (hillslope, terrace, etc.): Floodplain   **Local relief (concave, convex, none):** concave   **Slope:** 0.0% / 0.0 °

Subregion (LRR or MLRA): _____   **Lat.:** 40.762286   **Long.:** -81.332846   **Datum:** NAD83

Soil Map Unit Name: FcA   **NWI classification:** N/A

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 ○		
Hydric Soil Present? Yes ⊙ No ○	**Is the Sampled Area within a Wetland?** Yes ⊙ No ○	
Wetland Hydrology Present? Yes ⊙ No ○		

Remarks:
PEM/PSS wetland

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

		Secondary Indicators (minimum of two required)
☑ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☑ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☑ Saturation (A3)	☐ Oxidized Rhizospheres along Living Roots (C3)	☑ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry Season Water Table (C2)
☐ Drift deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☑ Microtopographic Relief (D4)
		☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ⊙ No ○	Depth (inches): 12	
Water Table Present?	Yes ⊙ No ○	Depth (inches): 0	
Saturation Present? (includes capillary fringe)	Yes ⊙ No ○	Depth (inches): 0	**Wetland Hydrology Present?** Yes ⊙ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland 53

VEGETATION (Five/Four Strata)- Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
	0	= Total Cover	

Sapling-Sapling/Shrub Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
	0	= Total Cover	

Shrub Stratum (Plot size: _____)			
1. Viburnum recognitum	45	☑ 100.0%	FAC
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
	45	= Total Cover	

Herb Stratum (Plot size: _____)			
1. Phalaris arundinacea	95	☑ 100.0%	FACW
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
11. _____	0	☐ 0.0%	
12. _____	0	☐ 0.0%	
	95	= Total Cover	

Woody Vine Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: **2** (A)

Total Number of Dominant Species Across All Strata: **2** (B)

Percent of dominant Species That Are OBL, FACW, or FAC: **100.0%** (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	95	x 2 =	190
FAC species	45	x 3 =	135
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	140 (A)		325 (B)

Prevalence Index = B/A = 2.321

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☑ Dominance Test is > 50%
- ☑ Prevalence Index is ≤3.0 [1]
- ☐ Morphological Adaptations [1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation [1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Four Vegetation Strata:

Tree stratum – Consists of woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub stratum – Consists of woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb stratum – Consists of all herbaceous (non-woody) plants, regardless of size, and all other plants less than 3.28 ft tall.

Woody vines – Consists of all woody vines greater than 3.28 ft in height.

Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling stratum – Consists of woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub stratum – Consists of woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb stratum – Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody species, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vines – Consists of all woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ⦿ No ○

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

US Army Corps of Engineers

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Wetland 53

Soil

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 5/1	90	10YR 5/6	10	C	M	Clay Loam	

[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)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5)
- [ ] 2 cm Muck (A10) (LRR N)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1) (LRR N, MLRA 147, 148)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)

- [ ] Dark Surface (S7)
- [ ] Polyvalue Below Surface (S8) (MLRA 147,148)
- [ ] Thin Dark Surface (S9) (MLRA 147, 148)
- [ ] Loamy Gleyed Matrix (F2)
- [x] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox Depressions (F8)
- [ ] Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- [ ] Umbric Surface (F13) (MLRA 136, 122)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 148)
- [ ] Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils[3]:

- [ ] 2 cm Muck (A10) (MLRA 147)
- [ ] Coast Prairie Redox (A16) (MLRA 147,148)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- [ ] Very Shallow Dark Surface (TF12)
- [ ] 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:

Wetland 54a/b/c/d

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Carrollton-Sunnyside	**City/County:** Stark	**Sampling Date:** 25-Apr-17
Applicant/Owner: AEP	**State:** OH	**Sampling Point:** **W-PJR-042517-05**
Investigator(s): PJR, LCB	**Section, Township, Range: S** 23 **T** 10N **R** 8W	

Landform (hillslope, terrace, etc.): Depression   **Local relief (concave, convex, none):** concave   **Slope:** 1.0% / 0.6 °

Subregion (LRR or MLRA):   **Lat.:** 40.766354   **Long.:** -81.338912   **Datum:** NAD83

Soil Map Unit Name: FcB   **NWI classification:** NA

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 ○	
Hydric Soil Present?	Yes ⦿ No ○	**Is the Sampled Area within a Wetland?** Yes ⦿ No ○
Wetland Hydrology Present?	Yes ⦿ No ○	

Remarks:

PSS/PEM wetland

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)   Secondary Indicators (minimum of two required)

Primary		Secondary
☑ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres along Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry Season Water Table (C2)
☐ Drift deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☑ Microtopographic Relief (D4)
		☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ⦿ No ○	Depth (inches): 1	
Water Table Present?	Yes ○ No ⦿	Depth (inches):	**Wetland Hydrology Present?** Yes ⦿ No ○
Saturation Present? (includes capillary fringe)	Yes ⦿ No ○	Depth (inches): 5	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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VEGETATION (Five/Four Strata)- Use scientific names of plants.

Sampling Point: W-PJR-042517-05

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
__Tree Stratum__ (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
	0	= Total Cover	
__Sapling-Sapling/Shrub Stratum__ (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
	0	= Total Cover	
__Shrub Stratum__ (Plot size: _____)			
1. Viburnum recognitum	55	☑ 100.0%	FAC
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
	55	= Total Cover	
__Herb Stratum__ (Plot size: _____)			
1. Phalaris arundinacea	65	☑ 72.2%	FACW
2. Daucus carota	15	☐ 16.7%	UPL
3. Equisetum arvense	10	☐ 11.1%	FAC
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
11. _____	0	☐ 0.0%	
12. _____	0	☐ 0.0%	
	90	= Total Cover	
__Woody Vine Stratum__ (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species
That are OBL, FACW, or FAC: 2   (A)

Total Number of Dominant
Species Across All Strata: 2   (B)

Percent of dominant Species
That Are OBL, FACW, or FAC: 100.0%   (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	65	x 2 =	130
FAC species	65	x 3 =	195
FACU species	0	x 4 =	0
UPL species	15	x 5 =	75
Column Totals:	145 (A)		400 (B)

Prevalence Index = B/A =   2.759

Hydrophytic Vegetation Indicators:

- ☐ **Rapid Test for Hydrophytic Vegetation**
- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Four Vegetation Strata:

Tree stratum – Consists of woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub stratum – Consists of woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb stratum – Consists of all herbaceous (non-woody) plants, regardless of size, and all other plants less than 3.28 ft tall.

Woody vines – Consists of all woody vines greater than 3.28 ft in height.

Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling stratum – Consists of woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub stratum – Consists of woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb stratum – Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody species, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vines – Consists of all woody vines, regardless of height.

Hydrophytic Vegetation Present?   Yes ⦿   No ○

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

US Army Corps of Engineers

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Soil

Sampling Point: W-PJR-042517-05

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 5/2	95	10YR 5/6	5	C	M	Clay Loam	

[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)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5)
- [ ] 2 cm Muck (A10) (LRR N)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1) (LRR N, MLRA 147, 148)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)

- [ ] Dark Surface (S7)
- [ ] Polyvalue Below Surface (S8) (MLRA 147,148)
- [ ] Thin Dark Surface (S9) (MLRA 147, 148)
- [ ] Loamy Gleyed Matrix (F2)
- [x] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox Depressions (F8)
- [ ] Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- [ ] Umbric Surface (F13) (MLRA 136, 122)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 148)
- [ ] Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils[3]:

- [ ] 2 cm Muck (A10) (MLRA 147)
- [ ] Coast Prairie Redox (A16) (MLRA 147,148)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- [ ] Very Shallow Dark Surface (TF12)
- [ ] 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:

Wetland 55

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Carrollton-Sunnyside   **City/County:** Stark   **Sampling Date:** 25-Apr-17

Applicant/Owner: AEP   **State:** OH   **Sampling Point:** W-PJR-042517-04

Investigator(s): PJR, LCB   **Section, Township, Range:** S 23   T 10N   R 8W

Landform (hillslope, terrace, etc.): Depression   **Local relief (concave, convex, none):** concave   **Slope:** 1.0% / 0.6 °

Subregion (LRR or MLRA):   **Lat.:** 40.770188   **Long.:** -81.344384   **Datum:** NAD83

Soil Map Unit Name: WuD2   **NWI classification:** NA

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 ○		
Hydric Soil Present? Yes ⦿ No ○	**Is the Sampled Area within a Wetland?**	Yes ⦿ No ○
Wetland Hydrology Present? Yes ⦿ No ○		

Remarks:

PSS wetland

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (minimum of two required)

Primary Indicators		Secondary Indicators
☑ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres along Living Roots (C3)	☑ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry Season Water Table (C2)
☐ Drift deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☑ Microtopographic Relief (D4)
		☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ⦿ No ○	Depth (inches): 1	
Water Table Present?	Yes ○ No ⦿	Depth (inches):	**Wetland Hydrology Present?** Yes ⦿ No ○
Saturation Present? (includes capillary fringe)	Yes ○ No ⦿	Depth (inches):	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland 55

VEGETATION (Five/Four Strata)- Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
	0	= Total Cover	
Sapling-Sapling/Shrub Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
	0	= Total Cover	
Shrub Stratum (Plot size: _____)			
1. Viburnum recognitum	65	☑ 100.0%	FAC
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
	65	= Total Cover	
Herb Stratum (Plot size: _____)			
1. Impatiens capensis	15	☑ 100.0%	FACW
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
11. _____	0	☐ 0.0%	
12. _____	0	☐ 0.0%	
	15	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	65	x 3 =	195
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	80 (A)		225 (B)

Prevalence Index = B/A = 2.813

Hydrophytic Vegetation Indicators:

☐ **Rapid Test for Hydrophytic Vegetation**
☑ **Dominance Test is > 50%**
☑ **Prevalence Index is ≤3.0** [1]
☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Four Vegetation Strata:

Tree stratum – Consists of woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub stratum – Consists of woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb stratum – Consists of all herbaceous (non-woody) plants, regardless of size, and all other plants less than 3.28 ft tall.

Woody vines – Consists of all woody vines greater than 3.28 ft in height.

Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling stratum – Consists of woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub stratum – Consists of woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb stratum – Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody species, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vines – Consists of all woody vines, regardless of height.

Hydrophytic Vegetation Present?   Yes ☑   No ☐

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

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Wetland 55

Soil

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 4/2	90	7.5YR 5/6	10	C	M	Silt Loam	

[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)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5)
- [ ] 2 cm Muck (A10) (LRR N)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1) (LRR N, MLRA 147, 148)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)

- [ ] Dark Surface (S7)
- [ ] Polyvalue Below Surface (S8) (MLRA 147,148)
- [ ] Thin Dark Surface (S9) (MLRA 147, 148)
- [ ] Loamy Gleyed Matrix (F2)
- [x] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox Depressions (F8)
- [ ] Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- [ ] Umbric Surface (F13) (MLRA 136, 122)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 148)
- [ ] Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils[3]:

- [ ] 2 cm Muck (A10) (MLRA 147)
- [ ] Coast Prairie Redox (A16) (MLRA 147,148)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- [ ] Very Shallow Dark Surface (TF12)
- [ ] 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:

Wetland 56

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Carrollton-Sunnyside	**City/County:** Stark	**Sampling Date:** 25-Apr-17
Applicant/Owner: AEP	**State:** OH	**Sampling Point:** **W-PJR-042517-03**

Investigator(s): PJR, LCB   **Section, Township, Range: S** 15   **T** 10N   **R** 8W

Landform (hillslope, terrace, etc.): Floodplain   **Local relief (concave, convex, none):** concave   **Slope:** 2.0% / 1.1 °

Subregion (LRR or MLRA): ___   **Lat.:** 40.778162   **Long.:** -81.352516   **Datum:** NAD83

Soil Map Unit Name: Sl   **NWI classification:** N/A

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 ◯		
Hydric Soil Present? Yes ⦿ No ◯	**Is the Sampled Area within a Wetland?**	Yes ⦿ No ◯
Wetland Hydrology Present? Yes ⦿ No ◯		

Remarks:

PEM/PSS (90/10) wetland

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (minimum of two required)

Primary		Secondary
☑ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☑ Saturation (A3)	☐ Oxidized Rhizospheres along Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry Season Water Table (C2)
☐ Drift deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☑ Microtopographic Relief (D4)
		☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ⦿ No ◯	Depth (inches): 12	
Water Table Present?	Yes ◯ No ⦿	Depth (inches): ___	**Wetland Hydrology Present?** Yes ⦿ No ◯
Saturation Present? (includes capillary fringe)	Yes ⦿ No ◯	Depth (inches): 5	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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VEGETATION (Five/Four Strata)- Use scientific names of plants.

Sampling Point: W-PJR-042517-03

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
	0	= Total Cover	
Sapling-Sapling/Shrub Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
	0	= Total Cover	
Shrub Stratum (Plot size: _____)			
1. Viburnum recognitum	5	☑ 25.0%	FAC
2. Spiraea alba	15	☑ 75.0%	FACW
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
	20	= Total Cover	
Herb Stratum (Plot size: _____)			
1. Typha angustifolia	20	☐ 19.0%	OBL
2. Scirpus cyperinus	55	☑ 52.4%	FACW
3. Solidago altissima	30	☑ 28.6%	FACU
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
11. _____	0	☐ 0.0%	
12. _____	0	☐ 0.0%	
	105	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	70	x 2 =	140
FAC species	5	x 3 =	15
FACU species	30	x 4 =	120
UPL species	0	x 5 =	0
Column Totals:	125 (A)		295 (B)

Prevalence Index = B/A = 2.360

Hydrophytic Vegetation Indicators:

☐ **Rapid Test for Hydrophytic Vegetation**

☑ **Dominance Test is > 50%**

☑ **Prevalence Index is ≤3.0** [1]

☐ **Morphological Adaptations [1] (Provide supporting data in Remarks or on a separate sheet)**

☐ **Problematic Hydrophytic Vegetation [1] (Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Four Vegetation Strata:

Tree stratum – Consists of woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub stratum – Consists of woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb stratum – Consists of all herbaceous (non-woody) plants, regardless of size, and all other plants less than 3.28 ft tall.

Woody vines – Consists of all woody vines greater than 3.28 ft in height.

Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling stratum – Consists of woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub stratum – Consists of woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb stratum – Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody species, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vines – Consists of all woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ⦿ No ◯

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

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Soil

Sampling Point: W-PJR-042517-03

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 5/2	85	10YR 5/6	15	C	M	Silt Loam	Refusal at 12"; 40% gravel

[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)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5)
- [ ] 2 cm Muck (A10) (LRR N)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1) (LRR N, MLRA 147, 148)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)

- [ ] Dark Surface (S7)
- [ ] Polyvalue Below Surface (S8) (MLRA 147,148)
- [ ] Thin Dark Surface (S9) (MLRA 147, 148)
- [ ] Loamy Gleyed Matrix (F2)
- [x] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox Depressions (F8)
- [ ] Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- [ ] Umbric Surface (F13) (MLRA 136, 122)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 148)
- [ ] Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils[3]:

- [ ] 2 cm Muck (A10) (MLRA 147)
- [ ] Coast Prairie Redox (A16) (MLRA 147,148)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- [ ] Very Shallow Dark Surface (TF12)
- [ ] 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:

Wetland 57

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Carrollton-Sunnyside   **City/County:** Stark   **Sampling Date:** 25-Apr-17

Applicant/Owner: AEP   **State:** OH   **Sampling Point:** **W-PJR-042517-02**

Investigator(s): Phil Renner   **Section, Township, Range: S** 15   **T** 10N   **R** 8W

Landform (hillslope, terrace, etc.): Depression   **Local relief (concave, convex, none):** concave   **Slope:** 1.0% / 0.6 °

Subregion (LRR or MLRA):   **Lat.:** 40.779255   **Long.:** -81.354134   **Datum:** NAD83

Soil Map Unit Name: Fpi1A1   **NWI classification:** NA

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 ○	
Hydric Soil Present? Yes ⦿ No ○	**Is the Sampled Area within a Wetland?** Yes ⦿ No ○
Wetland Hydrology Present? Yes ⦿ No ○	

Remarks:

PEM/PSS (95/5) wetland

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)   Secondary Indicators (minimum of two required)

Primary		Secondary
☑ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☑ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☑ Saturation (A3)	☐ Oxidized Rhizospheres along Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry Season Water Table (C2)
☐ Drift deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☑ Microtopographic Relief (D4)
		☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ⦿ No ○	Depth (inches): 4	
Water Table Present?	Yes ⦿ No ○	Depth (inches): 7	**Wetland Hydrology Present?** Yes ⦿ No ○
Saturation Present? (includes capillary fringe)	Yes ⦿ No ○	Depth (inches): 6	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland 57

VEGETATION (Five/Four Strata)- Use scientific names of plants.

Sampling Point: W-PJR-042517-02

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
	0	= Total Cover	
Sapling-Sapling/Shrub Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
	0	= Total Cover	
Shrub Stratum (Plot size: _____)			
1. Viburnum recognitum	5	☑ 100.0%	FAC
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
	5	= Total Cover	
Herb Stratum (Plot size: _____)			
1. Phalaris arundinacea	60	☑ 100.0%	FACW
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
11. _____	0	☐ 0.0%	
12. _____	0	☐ 0.0%	
	60	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species
That are OBL, FACW, or FAC: 2   (A)

Total Number of Dominant
Species Across All Strata: 2   (B)

Percent of dominant Species
That Are OBL, FACW, or FAC: 100.0%   (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	60	x 2 =	120
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	65 (A)		135 (B)

Prevalence Index = B/A =   2.077

Hydrophytic Vegetation Indicators:

☐ **Rapid Test for Hydrophytic Vegetation**

☑ **Dominance Test is > 50%**

☑ **Prevalence Index is ≤3.0** [1]

☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**

☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Four Vegetation Strata:

Tree stratum – Consists of woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub stratum – Consists of woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb stratum – Consists of all herbaceous (non-woody) plants, regardless of size, and all other plants less than 3.28 ft tall.

Woody vines – Consists of all woody vines greater than 3.28 ft in height.

Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling stratum – Consists of woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub stratum – Consists of woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb stratum – Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody species, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vines – Consists of all woody vines, regardless of height.

Hydrophytic Vegetation Present?   Yes ⦿   No ○

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

US Army Corps of Engineers

Eastern Mountains and Piedmont - Version 2.0

Soil

Sampling Point: W-PJR-042517-02

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 5/1	90	10YR 4/6	10	C	M	Clay Loam	

[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)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5)
- [ ] 2 cm Muck (A10) (LRR N)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1) (LRR N, MLRA 147, 148)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)

- [ ] Dark Surface (S7)
- [ ] Polyvalue Below Surface (S8) (MLRA 147,148)
- [ ] Thin Dark Surface (S9) (MLRA 147, 148)
- [ ] Loamy Gleyed Matrix (F2)
- [x] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox Depressions (F8)
- [ ] Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- [ ] Umbric Surface (F13) (MLRA 136, 122)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 148)
- [ ] Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils[3]:

- [ ] 2 cm Muck (A10) (MLRA 147)
- [ ] Coast Prairie Redox (A16) (MLRA 147,148)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- [ ] Very Shallow Dark Surface (TF12)
- [ ] 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:

Wetland 58

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Carrollton-Sunnyside	**City/County:** Stark	**Sampling Date:** 25-Apr-17
Applicant/Owner: AEP	**State:** OH	**Sampling Point:** W-PJR-042517-01

Investigator(s): PJR, LCB   **Section, Township, Range: S** 15   **T** 10N   **R** 8W

Landform (hillslope, terrace, etc.): Depression   **Local relief (concave, convex, none):** concave   **Slope:** 10.0% / 5.7 °

Subregion (LRR or MLRA): LRR N   **Lat.:** 40.779527   **Long.:** -81.354301   **Datum:** NAD83

Soil Map Unit Name: Fpi1A1   **NWI classification:** PEM

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 ○	
Hydric Soil Present?	Yes ⦿ No ○	**Is the Sampled Area within a Wetland?** Yes ⦿ No ○
Wetland Hydrology Present?	Yes ⦿ No ○	

Remarks:

PEM wetland

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

☑ Surface Water (A1)	☐ True Aquatic Plants (B14)
☑ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)
☑ Saturation (A3)	☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Drift deposits (B3)	☐ Thin Muck Surface (C7)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)
☐ Iron Deposits (B5)	
☐ Inundation Visible on Aerial Imagery (B7)	
☐ Water-Stained Leaves (B9)	
☐ Aquatic Fauna (B13)	

Secondary Indicators (minimum of two required)

☐ Surface Soil Cracks (B6)
☐ Sparsely Vegetated Concave Surface (B8)
☑ 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)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☑ Microtopographic Relief (D4)
☑ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ⦿ No ○	Depth (inches): 4	
Water Table Present?	Yes ⦿ No ○	Depth (inches): 8	**Wetland Hydrology Present?** Yes ⦿ No ○
Saturation Present? (includes capillary fringe)	Yes ⦿ No ○	Depth (inches): 4	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

US Army Corps of Engineers   Eastern Mountains and Piedmont - Version 2.0

Wetland 58

VEGETATION (Five/Four Strata)- Use scientific names of plants.

Sampling Point: W-PJR-042517-01

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
	0	= Total Cover	
Sapling-Sapling/Shrub Stratum (Plot size: _____)			
1. _____		☐ 0.0%	
2. _____		☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
	0	= Total Cover	
Shrub Stratum (Plot size: _____)			
1. _____		☐ 0.0%	
2. _____		☐ 0.0%	
3. _____		☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: _____)			
1. Phalaris arundinacea	75	☑ 100.0%	FACW
2. _____		☐ 0.0%	
3. _____		☐ 0.0%	
4. _____		☐ 0.0%	
5. _____		☐ 0.0%	
6. _____		☐ 0.0%	
7. _____		☐ 0.0%	
8. _____		☐ 0.0%	
9. _____		☐ 0.0%	
10. _____		☐ 0.0%	
11. _____		☐ 0.0%	
12. _____	0	☐ 0.0%	
	75	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species
That are OBL, FACW, or FAC: ___1___ (A)

Total Number of Dominant
Species Across All Strata: ___1___ (B)

Percent of dominant Species
That Are OBL, FACW, or FAC: ___100.0%___ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	75	x 2 =	150
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	75 (A)		150 (B)

Prevalence Index = B/A = ___2.000___

Hydrophytic Vegetation Indicators:

- ☑ **Rapid Test for Hydrophytic Vegetation**
- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Four Vegetation Strata:

Tree stratum – Consists of woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub stratum – Consists of woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb stratum – Consists of all herbaceous (non-woody) plants, regardless of size, and all other plants less than 3.28 ft tall.

Woody vines – Consists of all woody vines greater than 3.28 ft in height.

Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling stratum – Consists of woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub stratum – Consists of woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb stratum – Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody species, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vines – Consists of all woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ⦿ No ○

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

US Army Corps of Engineers

Eastern Mountains and Piedmont - Version 2.0

Soil

Sampling Point: W-PJR-042517-01

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 5/1	90	10YR 4/6	10	C	M	Clay Loam	

[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)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5)
- [ ] 2 cm Muck (A10) (LRR N)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1) (LRR N, MLRA 147, 148)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)

- [ ] Dark Surface (S7)
- [ ] Polyvalue Below Surface (S8) (MLRA 147,148)
- [ ] Thin Dark Surface (S9) (MLRA 147, 148)
- [ ] Loamy Gleyed Matrix (F2)
- [x] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox Depressions (F8)
- [ ] Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- [ ] Umbric Surface (F13) (MLRA 136, 122)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 148)
- [ ] Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils[3]:

- [ ] 2 cm Muck (A10) (MLRA 147)
- [ ] Coast Prairie Redox (A16) (MLRA 147,148)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- [ ] Very Shallow Dark Surface (TF12)
- [ ] 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:

Upland 01

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Carrollton-Sunnyside   **City/County:** Carroll County   **Sampling Date:** 27-Apr-17

Applicant/Owner: AEP   **State:** OH   **Sampling Point:** UP-PJR-042717-01

Investigator(s): PJR, LCB   **Section, Township, Range:** S 33   T 14N   R 5W

Landform (hillslope, terrace, etc.): Hillside   **Local relief (concave, convex, none):** concave   **Slope:** 15.0% / 8.5 °

Subregion (LRR or MLRA):   **Lat.:** 40.592373   **Long.:** -81.091265   **Datum:** NAD83

Soil Map Unit Name: WmC   **NWI classification:** N/A

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 ◉	
Hydric Soil Present?	Yes ○ No ◉	Is the Sampled Area within a Wetland? Yes ○ No ◉
Wetland Hydrology Present?	Yes ○ No ◉	

Remarks:

Upland data point for w-pjr-042517-01.

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

☐ 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)
☐ Water-Stained Leaves (B9)
☐ Aquatic Fauna (B13)

☐ True Aquatic Plants (B14)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

☐ Surface Soil Cracks (B6)
☐ Sparsely Vegetated Concave Surface (B8)
☐ 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)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ Microtopographic Relief (D4)
☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○ No ◉	Depth (inches): _____	
Water Table Present?	Yes ○ No ◉	Depth (inches): _____	Wetland Hydrology Present? Yes ○ No ◉
Saturation Present? (includes capillary fringe)	Yes ○ No ◉	Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata)- Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
	0	= Total Cover	

Sapling-Sapling/Shrub Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
	0	= Total Cover	

Shrub Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
	0	= Total Cover	

Herb Stratum (Plot size: _____)			
1. Rosa multiflora	5	☐ 5.9%	FACU
2. Plantago lanceolata	15	☐ 17.6%	UPL
3. Poa pratensis	50	☑ 58.8%	FACU
4. Achillea millefolium	15	☐ 17.6%	FACU
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
11. _____	0	☐ 0.0%	
12. _____	0	☐ 0.0%	
	85	= Total Cover	

Woody Vine Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species
That are OBL, FACW, or FAC: 0   (A)

Total Number of Dominant
Species Across All Strata: 1   (B)

Percent of dominant Species
That Are OBL, FACW, or FAC: 0.0%   (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	70	x 4 =	280
UPL species	15	x 5 =	75
Column Totals:	85 (A)		355 (B)

Prevalence Index = B/A =   4.176

Hydrophytic Vegetation Indicators:

☐ **Rapid Test for Hydrophytic Vegetation**

☐ **Dominance Test is > 50%**

☐ **Prevalence Index is ≤3.0** [1]

☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**

☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Four Vegetation Strata:

Tree stratum – Consists of woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub stratum – Consists of woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb stratum – Consists of all herbaceous (non-woody) plants, regardless of size, and all other plants less than 3.28 ft tall.

Woody vines – Consists of all woody vines greater than 3.28 ft in height.

Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling stratum – Consists of woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub stratum – Consists of woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb stratum – Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody species, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vines – Consists of all woody vines, regardless of height.

Hydrophytic Vegetation Present?   Yes ◯   No ⦿

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

US Army Corps of Engineers

Eastern Mountains and Piedmont - Version 2.0

Upland 01

Soil

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 6/2	55	10YR 5/6	45			Silt Loam	

[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)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (LRR N)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1) (LRR N, MLRA 147, 148)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (MLRA 147,148)
- ☐ Thin Dark Surface (S9) (MLRA 147, 148)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- ☐ Umbric Surface (F13) (MLRA 136, 122)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 148)
- ☐ Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10) (MLRA 147)
- ☐ Coast Prairie Redox (A16) (MLRA 147,148)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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:

Upland 02

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Carrollton-Sunnyside   **City/County:** Carroll County   **Sampling Date:** 27-Apr-17

Applicant/Owner: AEP   **State:** OH   **Sampling Point:** **UP-PJR-042717-02**

Investigator(s): PJR, LCB   **Section, Township, Range: S** 3 **T** 15N **R** 6W

Landform (hillslope, terrace, etc.): Hillside   **Local relief (concave, convex, none):** convex   **Slope:** 25.0% / 14.0 °

Subregion (LRR or MLRA):   **Lat.:** 40.597237   **Long.:** -81.099383   **Datum:** NAD83

Soil Map Unit Name: WmD   **NWI classification:** N/A

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 ⊙	
Hydric Soil Present?	Yes ○ No ⊙	**Is the Sampled Area within a Wetland?** Yes ○ No ⊙
Wetland Hydrology Present?	Yes ○ No ⊙	

Remarks:

Upland data point for w-pjr-042517-02.

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

☐ Surface Water (A1)	☐ True Aquatic Plants (B14)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)
☐ Saturation (A3)	☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Drift deposits (B3)	☐ Thin Muck Surface (C7)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)
☐ Iron Deposits (B5)	
☐ Inundation Visible on Aerial Imagery (B7)	
☐ Water-Stained Leaves (B9)	
☐ Aquatic Fauna (B13)	

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ 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)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○ No ⊙	Depth (inches): _____
Water Table Present?	Yes ○ No ⊙	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes ○ No ⊙	Depth (inches): _____

Wetland Hydrology Present? Yes ○ No ⊙

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata)- Use scientific names of plants.

Sampling Point: __UP-PJR-042717-02__

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
__Tree Stratum__ (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
	0	= Total Cover	
__Sapling-Sapling/Shrub Stratum__ (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
	0	= Total Cover	
__Shrub Stratum__ (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
	0	= Total Cover	
__Herb Stratum__ (Plot size: _____)			
1. Brassica rapa	35	☑ 77.8%	UPL
2. Prunella vulgaris	10	☑ 22.2%	FACU
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
11. _____	0	☐ 0.0%	
12. _____	0	☐ 0.0%	
	45	= Total Cover	
__Woody Vine Stratum__ (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species
That are OBL, FACW, or FAC: __0__ (A)

Total Number of Dominant
Species Across All Strata: __2__ (B)

Percent of dominant Species
That Are OBL, FACW, or FAC: __0.0%__ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	35	x 5 =	175
Column Totals:	45 (A)		215 (B)

Prevalence Index = B/A = __4.778__

Hydrophytic Vegetation Indicators:

☐ **Rapid Test for Hydrophytic Vegetation**

☐ **Dominance Test is > 50%**

☐ **Prevalence Index is ≤3.0** [1]

☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**

☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Four Vegetation Strata:

Tree stratum – Consists of woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub stratum – Consists of woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb stratum – Consists of all herbaceous (non-woody) plants, regardless of size, and all other plants less than 3.28 ft tall.

Woody vines – Consists of all woody vines greater than 3.28 ft in height.

Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling stratum – Consists of woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub stratum – Consists of woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb stratum – Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody species, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vines – Consists of all woody vines, regardless of height.

Hydrophytic Vegetation Present?   Yes ○   No ◉

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/3	100					Silt Loam	

[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)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (LRR N)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1) (LRR N, MLRA 147, 148)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (MLRA 147,148)
- ☐ Thin Dark Surface (S9) (MLRA 147, 148)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- ☐ Umbric Surface (F13) (MLRA 136, 122)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 148)
- ☐ Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10) (MLRA 147)
- ☐ Coast Prairie Redox (A16) (MLRA 147,148)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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:

Upland 03

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Carrollton-Sunnyside **City/County:** Carroll County **Sampling Date:** 27-Apr-17

Applicant/Owner: AEP **State:** OH **Sampling Point:** UP-PJR-042717-03

Investigator(s): PJR, LCB **Section, Township, Range:** S 3 T 15N R 6W

Landform (hillslope, terrace, etc.): Floodplain **Local relief (concave, convex, none):** none **Slope:** 3.0% / 1.7 °

Subregion (LRR or MLRA): **Lat.:** 40.598332 **Long.:** -81.101937 **Datum:** NAD83

Soil Map Unit Name: WmD **NWI classification:** N/A

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 ⦿	
Hydric Soil Present?	Yes ○ No ⦿	**Is the Sampled Area within a Wetland?** Yes ○ No ⦿
Wetland Hydrology Present?	Yes ○ No ⦿	

Remarks:
Upland data point for w-pjr-042517-03.

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (minimum of two required)

Primary		Secondary
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres along Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry Season Water Table (C2)
☐ Drift deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○ No ⦿	Depth (inches):	
Water Table Present?	Yes ○ No ⦿	Depth (inches):	**Wetland Hydrology Present?** Yes ○ No ⦿
Saturation Present? (includes capillary fringe)	Yes ○ No ⦿	Depth (inches):	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata)- Use scientific names of plants.

Sampling Point: UP-PJR-042717-03

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. Quercus rubra	65	☑ 100.0%	FACU
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
	65	= Total Cover	

Sapling-Sapling/Shrub Stratum (Plot size: _____)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	0	= Total Cover	

Shrub Stratum (Plot size: _____)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
	0	= Total Cover	

Herb Stratum (Plot size: _____)			
1. Alliaria petiolata	20	☑ 30.8%	FACU
2. Claytonia virginica	15	☑ 23.1%	FAC
3. Carex pensylvanica	30	☑ 46.2%	UPL
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
11.	0	☐ 0.0%	
12.	0	☐ 0.0%	
	65	= Total Cover	

Woody Vine Stratum (Plot size: _____)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of dominant Species That Are OBL, FACW, or FAC:	25.0%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	15	x 3 =	45
FACU species	85	x 4 =	340
UPL species	30	x 5 =	150
Column Totals:	130 (A)		535 (B)

Prevalence Index = B/A = 4.115

Hydrophytic Vegetation Indicators:

- ☐ **Rapid Test for Hydrophytic Vegetation**
- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Four Vegetation Strata:

Tree stratum – Consists of woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub stratum – Consists of woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb stratum – Consists of all herbaceous (non-woody) plants, regardless of size, and all other plants less than 3.28 ft tall.

Woody vines – Consists of all woody vines greater than 3.28 ft in height.

Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling stratum – Consists of woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub stratum – Consists of woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb stratum – Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody species, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vines – Consists of all woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ◯ No ⦿

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

US Army Corps of Engineers

Eastern Mountains and Piedmont - Version 2.0

Upland 03

Soil   Sampling Point: UP-PJR-042717-03

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 4/4	100					Silt Loam	

[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)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (LRR N)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1) (LRR N, MLRA 147, 148)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (MLRA 147,148)
- ☐ Thin Dark Surface (S9) (MLRA 147, 148)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- ☐ Umbric Surface (F13) (MLRA 136, 122)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 148)
- ☐ Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10) (MLRA 147)
- ☐ Coast Prairie Redox (A16) (MLRA 147,148)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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:

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Carrollton-Sunnyside   **City/County:** Carroll County   **Sampling Date:** 27-Apr-17

Applicant/Owner: AEP   **State:** OH   **Sampling Point:** UP-PJR-042717-04

Investigator(s): PJR, LCB   **Section, Township, Range:** S 3   T 15N   R 6W

Landform (hillslope, terrace, etc.): Hillside   **Local relief (concave, convex, none):** concave   **Slope:** 5.0% / 2.9 °

Subregion (LRR or MLRA):   **Lat.:** 40.601341   **Long.:** -81.106821   **Datum:** NAD83

Soil Map Unit Name: WmC   **NWI classification:** N/A

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 ⦿	
Hydric Soil Present?	Yes ⦿ No ○	**Is the Sampled Area within a Wetland?** Yes ○ No ⦿
Wetland Hydrology Present?	Yes ○ No ⦿	

Remarks:

Upland data point for w-pjr-042517-04.

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Primary Indicators		Secondary Indicators (minimum of two required)
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres along Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry Season Water Table (C2)
☐ Drift deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○ No ⦿	Depth (inches):	
Water Table Present?	Yes ○ No ⦿	Depth (inches):	**Wetland Hydrology Present?** Yes ○ No ⦿
Saturation Present? (includes capillary fringe)	Yes ○ No ⦿	Depth (inches):	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata)- Use scientific names of plants.

Sampling Point: UP-PJR-042717-04

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
	0	= Total Cover	
Sapling-Sapling/Shrub Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
	0	= Total Cover	
Shrub Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: _____)			
1. Phleum pratense	50	☑ 52.6%	FACU
2. Daucus carota	5	☐ 5.3%	UPL
3. Trifolium pratense	20	☑ 21.1%	FACU
4. Agrimonia parviflora	10	☐ 10.5%	FACW
5. Prunella vulgaris	10	☐ 10.5%	FACU
6. _____	0	☐ 0.0%	
7. _____	0	☐ 0.0%	
8. _____	0	☐ 0.0%	
9. _____	0	☐ 0.0%	
10. _____	0	☐ 0.0%	
11. _____	0	☐ 0.0%	
12. _____	0	☐ 0.0%	
	95	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1. _____	0	☐ 0.0%	
2. _____	0	☐ 0.0%	
3. _____	0	☐ 0.0%	
4. _____	0	☐ 0.0%	
5. _____	0	☐ 0.0%	
6. _____	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0   (A)

Total Number of Dominant Species Across All Strata: 2   (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0%   (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	80	x 4 =	320
UPL species	5	x 5 =	25
Column Totals:	95 (A)		365 (B)

Prevalence Index = B/A =   3.842

Hydrophytic Vegetation Indicators:

☐ **Rapid Test for Hydrophytic Vegetation**

☐ **Dominance Test is > 50%**

☐ **Prevalence Index is ≤3.0** [1]

☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**

☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Four Vegetation Strata:

Tree stratum – Consists of woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub stratum – Consists of woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb stratum – Consists of all herbaceous (non-woody) plants, regardless of size, and all other plants less than 3.28 ft tall.

Woody vines – Consists of all woody vines greater than 3.28 ft in height.

Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling stratum – Consists of woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub stratum – Consists of woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb stratum – Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody species, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vines – Consists of all woody vines, regardless of height.

Hydrophytic Vegetation Present?   Yes ○   No ◉

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

US Army Corps of Engineers

Eastern Mountains and Piedmont - Version 2.0

Soil   **Sampling Point:** UP-PJR-042717-04

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 4/2	90	10YR 4/6	10	C	M	Silty Clay Loam	

[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)	☐ Dark Surface (S7)	**Indicators for Problematic Hydric Soils[3]:**
☐ Histic Epipedon (A2)	☐ Polyvalue Below Surface (S8) (MLRA 147,148)	☐ 2 cm Muck (A10) (MLRA 147)
☐ Black Histic (A3)	☐ Thin Dark Surface (S9) (MLRA 147, 148)	☐ Coast Prairie Redox (A16) (MLRA 147,148)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	
☐ Stratified Layers (A5)	☑ Depleted Matrix (F3)	☐ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
☐ 2 cm Muck (A10) (LRR N)	☐ Redox Dark Surface (F6)	☐ Very Shallow Dark Surface (TF12)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)	☐ Other (Explain in Remarks)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)	
☐ Sandy Muck Mineral (S1) (LRR N, MLRA 147, 148)	☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)	
☐ Sandy Gleyed Matrix (S4)	☐ Umbric Surface (F13) (MLRA 136, 122)	[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
☐ Sandy Redox (S5)	☐ Piedmont Floodplain Soils (F19) (MLRA 148)	
☐ Stripped Matrix (S6)	☐ Red Parent Material (F21) (MLRA 127, 147)	

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present?   Yes ⦿   No ○

Remarks:

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: AEP Carrollton-Sunnyside T-Line   **City/County:** Carroll   **Sampling Date:** 27-Apr-17

Applicant/Owner: AEP   **State:** OH   **Sampling Point:** **upl-bcr-042717-04**

Investigator(s): BCR/MDT   **Section, Township, Range: S** 10   **T** 15N   **R** 6W

Landform (hillslope, terrace, etc.): Valley bottom   **Local relief (concave, convex, none):** concave   **Slope:** 0.0% / 0.0 °

Subregion (LRR or MLRA): LRR N   **Lat.:** 40.608061   **Long.:** -81.117176   **Datum:** NAD83

Soil Map Unit Name: WmC   **NWI classification:** NA

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 ⦿		
Hydric Soil Present? Yes ○ No ⦿	**Is the Sampled Area within a Wetland?**	Yes ○ No ⦿
Wetland Hydrology Present? Yes ○ No ⦿		

Remarks:

Upland data point for wetland w-bcr-042717-04.

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (minimum of two required)

Primary Indicators		Secondary Indicators
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Oxidized Rhizospheres along Living Roots (C3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Dry Season Water Table (C2)
☐ Drift deposits (B3)	☐ Thin Muck Surface (C7)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)		☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Geomorphic Position (D2)
☐ Water-Stained Leaves (B9)		☐ Shallow Aquitard (D3)
☐ Aquatic Fauna (B13)		☐ Microtopographic Relief (D4)
		☐ FAC-neutral Test (D5)

Field Observations:

Surface Water Present?   Yes ○   No ⦿   Depth (inches): _____

Water Table Present?   Yes ○   No ⦿   Depth (inches): _____

Saturation Present? (includes capillary fringe)   Yes ○   No ⦿   Depth (inches): _____   **Wetland Hydrology Present?**   Yes ○   No ⦿

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata)- Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. ____	0	☐ 0.0%	
2. ____	0	☐ 0.0%	
3. ____	0	☐ 0.0%	
4. ____	0	☐ 0.0%	
5. ____	0	☐ 0.0%	
6. ____	0	☐ 0.0%	
7. ____	0	☐ 0.0%	
8. ____	0	☐ 0.0%	
	0	= Total Cover	
Sapling-Sapling/Shrub Stratum (Plot size: ____)			
1. ____	0	☐ 0.0%	
2. ____	0	☐ 0.0%	
3. ____	0	☐ 0.0%	
4. ____	0	☐ 0.0%	
5. ____	0	☐ 0.0%	
6. ____	0	☐ 0.0%	
7. ____	0	☐ 0.0%	
8. ____	0	☐ 0.0%	
9. ____	0	☐ 0.0%	
10. ____	0	☐ 0.0%	
	0	= Total Cover	
Shrub Stratum (Plot size: ____)			
1. ____	0	☐ 0.0%	
2. ____	0	☐ 0.0%	
3. ____	0	☐ 0.0%	
4. ____	0	☐ 0.0%	
5. ____	0	☐ 0.0%	
6. ____	0	☐ 0.0%	
7. ____	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: ____)			
1. Poa pratensis	90	☑ 78.3%	FACU
2. Solidago gigantea	20	☐ 17.4%	FACW
3. Brassica rapa	5	☐ 4.3%	UPL
4. ____	0	☐ 0.0%	
5. ____	0	☐ 0.0%	
6. ____	0	☐ 0.0%	
7. ____	0	☐ 0.0%	
8. ____	0	☐ 0.0%	
9. ____	0	☐ 0.0%	
10. ____	0	☐ 0.0%	
11. ____	0	☐ 0.0%	
12. ____	0	☐ 0.0%	
	115	= Total Cover	
Woody Vine Stratum (Plot size: ____)			
1. ____	0	☐ 0.0%	
2. ____	0	☐ 0.0%	
3. ____	0	☐ 0.0%	
4. ____	0	☐ 0.0%	
5. ____	0	☐ 0.0%	
6. ____	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0   (A)

Total Number of Dominant Species Across All Strata: 1   (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0%   (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	0	x 3 =	0
FACU species	90	x 4 =	360
UPL species	5	x 5 =	25
Column Totals:	115 (A)		425 (B)

Prevalence Index = B/A =   3.696

Hydrophytic Vegetation Indicators:

☐ **Rapid Test for Hydrophytic Vegetation**

☐ **Dominance Test is > 50%**

☐ **Prevalence Index is ≤3.0** [1]

☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**

☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Definition of Vegetation Strata:

Four Vegetation Strata:

Tree stratum – Consists of woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub stratum – Consists of woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb stratum – Consists of all herbaceous (non-woody) plants, regardless of size, and all other plants less than 3.28 ft tall.

Woody vines – Consists of all woody vines greater than 3.28 ft in height.

Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling stratum – Consists of woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub stratum – Consists of woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb stratum – Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody species, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vines – Consists of all woody vines, regardless of height.

Hydrophytic Vegetation Present?   Yes ○   No ◉

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 5/6	100					Clay Loam	

[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)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5)
- [ ] 2 cm Muck (A10) (LRR N)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1) (LRR N, MLRA 147, 148)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)

- [ ] Dark Surface (S7)
- [ ] Polyvalue Below Surface (S8) (MLRA 147,148)
- [ ] Thin Dark Surface (S9) (MLRA 147, 148)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox Depressions (F8)
- [ ] Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- [ ] Umbric Surface (F13) (MLRA 136, 122)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 148)
- [ ] Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils[3]:

- [ ] 2 cm Muck (A10) (MLRA 147)
- [ ] Coast Prairie Redox (A16) (MLRA 147,148)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- [ ] Very Shallow Dark Surface (TF12)
- [ ] 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:

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

6/26/2017 4:50:58 PM

in

Case No(s). 17-1318-EL-BLN

Summary: Letter of Notification electronically filed by Mr. Ryan F.M. Aguiar on behalf of AEP Ohio Transmission Company, Inc.