

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Wetzel County Sampling Date: 06/28/2018
 Applicant/Owner: MVP State: WV Sampling Point: W-ME1
 Investigator(s): M. Elizondo; G. Kingsley Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Toe of Slope Local relief (concave, convex, none): Concave Slope (%): 2-5
 Subregion (LRR or MLRA): LRRN Lat: 39.561833 Long: -80.544222 Datum: NAD 83
 Soil Map Unit Name: Skidmore gravelly loam NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks: Cowardin Code: PEM HGM: Depressional Water Type: RPWWD
 Maintained ROW for existing pipeline corridor. Wetland is a depression near to Mobley Run (S-WX2). Open ended to the north and southwest of the survey area.

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>	
☒ Surface Water (A1)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Sparsely Vegetated Concave Surface (B8)
☒ Saturation (A3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ 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): <u>3</u> Water Table Present? Yes ☐ No ☒ Depth (inches): <u> </u> Saturation Present? Yes ☒ No ☐ Depth (inches): <u>8</u> (includes capillary fringe)	Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:
 Heavy rain storms were observed in the area throughout the past week .

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-ME1

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Juncus effusus</u>	<u>30</u>	☒	<u>FACW</u>	
2. <u>Scirpus atrovirens</u>	<u>20</u>	☒	<u>OBL</u>	
3. <u>Carex baileyi</u>	<u>10</u>		<u>OBL</u>	
4. <u>Carex cristatella</u>	<u>25</u>	☒	<u>FACW</u>	
5. <u>Sorghum halepense</u>	<u>15</u>		<u>FACU</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>100</u> = Total Cover 50% of total cover: <u>50</u> 20% of total cover: <u>20</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-ME1

[illegible]

Wetland Photograph Page

Wetland ID W-ME1 Date 06/28/2018



Photograph Direction NE

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Wetzel County Sampling Date: 06/28/2018
Applicant/Owner: MVP State: WV Sampling Point: W-ME1-UPL
Investigator(s): M. Elizondo; G. Kingsley Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Toe of Slope Local relief (concave, convex, none): Concave Slope (%): 2-5
Subregion (LRR or MLRA): LRRN Lat: 39.561877 Long: -80.544037 Datum: NAD 83
Soil Map Unit Name: Skidmore gravelly loam NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks: Cowardin Code: UPLAND HGM: Water Type:
Associated with W-ME1.

HYDROLOGY

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

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):
Water Table Present? Yes ☐ No ☒ Depth (inches):
Saturation Present? Yes ☐ No ☒ Depth (inches):
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:
Heavy rain storms were observed in the area throughout the past week .

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-ME1-UPL

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Daucus carota</u>	<u>20</u>	☒	<u>UPL</u>	
2. <u>Plantago major</u>	<u>25</u>	☒	<u>FACU</u>	
3. <u>Rosa carolina</u>	<u>20</u>	☒	<u>FACU</u>	
4. <u>Solidago altissima</u>	<u>10</u>		<u>FACU</u>	
5. <u>Sorghum halepense</u>	<u>10</u>		<u>FACU</u>	
6. <u>Polygonum pensylvanicum</u>	<u>5</u>		<u>FACW</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>90</u> = Total Cover 50% of total cover: <u>45</u> 20% of total cover: <u>18</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-ME1-UPL

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Wetzel County Sampling Date: 06/28/2018
 Applicant/Owner: MVP State: WV Sampling Point: W-ME2
 Investigator(s): M. Elizondo; G. Kingsley Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Toe of Slope Local relief (concave, convex, none): Concave Slope (%): 2-5
 Subregion (LRR or MLRA): LRRN Lat: 39.559755 Long: -80.546749 Datum: NAD 83
 Soil Map Unit Name: Skidmore gravelly loam NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks: Cowardin Code: PEM HGM: Depressional Water Type: RPWWN
 Maintained ROW for existing pipeline corridor. Open ended northeast of the survey area.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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? Yes ☒ No ☐ Depth (inches): 7
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:
 Heavy rain storms were observed in the area throughout the past week.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-ME2

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>103</u> = Total Cover 50% of total cover: <u>51.5</u> 20% of total cover: <u>20.6</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Juncus effusus</u>	<u>30</u>	☒	<u>FACW</u>	Hydrophytic Vegetation Present? Yes ☒ No _____
2. <u>Carex vulpinoidea</u>	<u>25</u>	☒	<u>OBL</u>	
3. <u>Carex baileyi</u>	<u>10</u>		<u>OBL</u>	
4. <u>Sorghum halepense</u>	<u>20</u>	☒	<u>FACU</u>	
5. <u>Typha latifolia</u>	<u>5</u>		<u>OBL</u>	
6. <u>Rubus sp.</u>	<u>10</u>		<u>ND</u>	
7. <u>Galium tinctorium</u>	<u>3</u>		<u>OBL</u>	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.) ND- Not determined				

SOIL

Sampling Point: W-ME2

[illegible]

Wetland Photograph Page

Wetland ID W-ME2 Date 06/28/2018



Photograph Direction NE

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Wetzel County Sampling Date: 06/28/2018
Applicant/Owner: MVP State: WV Sampling Point: W-ME2-UPL
Investigator(s): M. Elizondo; G. Kingsley Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Toe of Slope Local relief (concave, convex, none): Concave Slope (%): 2-5
Subregion (LRR or MLRA): LRRN Lat: 39.559737 Long: -80.546781 Datum: NAD 83
Soil Map Unit Name: Skidmore gravelly loam NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks: Cowardin Code: UPLAND HGM: Water Type:
Associated with W-ME2.

HYDROLOGY

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

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):
Water Table Present? Yes ☐ No ☒ Depth (inches):
Saturation Present? Yes ☐ No ☒ Depth (inches):
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:
Heavy rain storms were observed in the area throughout the past week .

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-ME2-UPL

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Solanum carolinense</u>	<u>20</u>	_____	<u>FACU</u>	
2. <u>Daucus carota</u>	<u>15</u>	_____	<u>UPL</u>	
3. <u>Juncus effusus</u>	<u>5</u>	_____	<u>FACW</u>	
4. <u>Solidago altissima</u>	<u>5</u>	_____	<u>FACU</u>	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
5. <u>Sorghum halepense</u>	<u>40</u>	<u>✓</u>	<u>FACU</u>	
6. <u>Convolvulus arvensis</u>	<u>3</u>	_____	<u>ND</u>	
7. <u>Carex vulpinoidea</u>	<u>5</u>	_____	<u>OBL</u>	
8. <u>Dichanthelium clandestinum</u>	<u>10</u>	_____	<u>FAC</u>	
9. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>103</u> = Total Cover 50% of total cover: <u>51.5</u> 20% of total cover: <u>20.6</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-ME2-UPL

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Wetzel County Sampling Date: 06/28/2018
Applicant/Owner: MVP State: WV Sampling Point: W-ME3
Investigator(s): M. Elizondo; G. Kingsley Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Toe of Slope Local relief (concave, convex, none): Concave Slope (%): 2-5
Subregion (LRR or MLRA): LRRN Lat: 39.558971 Long: -80.547545 Datum: NAD 83
Soil Map Unit Name: Skidmore gravelly loam NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks: Cowardin Code: PEM HGM: Depressional Water Type: RPWWN
Maintained ROW for existing pipeline corridor. Open ended northeast and southeast of the survey area.

HYDROLOGY

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

Field Observations:	Wetland Hydrology Present? Yes ☒ No ☐
Surface Water Present? Yes ☒ No ☐ Depth (inches): <u>1</u>	
Water Table Present? Yes ☐ No ☒ Depth (inches): <u> </u>	
Saturation Present? Yes ☐ No ☒ Depth (inches): <u> </u> (includes capillary fringe)	

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

Remarks:
Heavy rain storms were observed in the area throughout the past week.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-ME3

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
1. <u>Salix nigra</u>	<u>5</u>	☒	OBL	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>5</u> = Total Cover 50% of total cover: <u>2.5</u> 20% of total cover: <u>1</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Juncus effusus</u>	<u>40</u>	☒	FACW	
2. <u>Carex vulpinoidea</u>	<u>30</u>	☒	OBL	
3. <u>Typha latifolia</u>	<u>15</u>	_____	OBL	
4. <u>Sorghum halepense</u>	<u>10</u>	_____	FACU	
5. <u>Dichanthelium clandestinum</u>	<u>15</u>	_____	FAC	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>110</u> = Total Cover 50% of total cover: <u>55</u> 20% of total cover: <u>22</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>

SOIL

Sampling Point: W-ME3

[illegible]

Wetland Photograph Page

Wetland ID W-ME3 Date 06/28/2018



Photograph Direction West

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Wetzel County Sampling Date: 06/28/2018
 Applicant/Owner: MVP State: WV Sampling Point: W-ME3-UPL
 Investigator(s): M. Elizondo; G. Kingsley Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Toe of Slope Local relief (concave, convex, none): Concave Slope (%): 2-5
 Subregion (LRR or MLRA): LRRN Lat: 39.558778 Long: -80.547695 Datum: NAD 83
 Soil Map Unit Name: Skidmore gravelly loam NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks: Cowardin Code: UPLAND HGM: Water Type:
 Associated with W-ME3.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☐ No ☒
Surface Water Present? Yes ☐ No ☒	Depth (inches): <u></u>	
Water Table Present? Yes ☐ No ☒	Depth (inches): <u></u>	
Saturation Present? Yes ☐ No ☒ (includes capillary fringe)	Depth (inches): <u></u>	

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

Remarks:
 Heavy rain storms were observed in the area throughout the past week .

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-ME3-UPL

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Sorghum halepense</u>	<u>50</u>	<u>✓</u>	<u>FACU</u>	
2. <u>Daucus carota</u>	<u>5</u>	_____	<u>UPL</u>	
3. <u>Erigeron strigosus</u>	<u>10</u>	_____	<u>FACU</u>	
4. <u>Carex vulpinoidea</u>	<u>5</u>	_____	<u>OBL</u>	
5. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>70</u> = Total Cover 50% of total cover: <u>35</u> 20% of total cover: <u>14</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-ME3-UPL

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Wetzel Sampling Date: 10/14/2014
 Applicant/Owner: MVP State: WV Sampling Point: W-A1a
 Investigator(s): ES,CM,DM,MW Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): stream channel Local relief (concave, convex, none): concave Slope (%): 3
 Subregion (LRR or MLRA): LRRN Lat: 39.553881 Long: -80.544875 Datum: NAD 83
 Soil Map Unit Name: Skidmore gravelley loam NWI classification: none

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:

Cowardin: PEM; HGM: Riverine; WT: RPWWD

Information listed on this form represents the data collected in 2014. The wetland was revisited on 9/16/2019; however, the three wetland criteria were not present. The wetland was previously located on a depositional sand bar within the banks of a stream. Scour and other natural processes have likely impacted the area.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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): 13
 Saturation Present? Yes ☒ No ☐ Depth (inches): 10
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

Riverine flow through PEM wetland is located on a vegetated sand bar within the OHWM of stream S-A1a.;

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-A1a

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>4</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Platanus occidentalis</u>	<u>5</u>	☒	<u>FACW</u>	Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
_____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>2.5</u> 20% of total cover: <u>1</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Phalaris arundinacea</u>	<u>30</u>	☒	<u>FACW</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
2. <u>Carex lurida</u>	<u>30</u>	☒	<u>OBL</u>	
3. <u>Impatiens capensis</u>	<u>30</u>	☒	<u>FACW</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>45</u> 20% of total cover: <u>18</u>				
Woody Vine Stratum (Plot size: <u>30'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				

Remarks: (Include photo numbers here or on a separate sheet.)
 See photo W-A1-P1.

 Within the herb stratum there was 10% bare ground.

SOIL

Sampling Point: W-A1a

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10YR 3/2	100					sand	
16-20	10Y 2.5/1	100					SCL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:			Indicators for Problematic Hydric Soils ³ :		
☐ Histosol (A1)	☐ Dark Surface (S7)	☐ 2 cm Muck (A10) (MLRA 147)			
☐ Histic Epipedon (A2)	☐ Polyvalue Below Surface (S8) (MLRA 147, 148)	☐ Coast Prairie Redox (A16)			
☐ Black Histic (A3)	☐ Thin Dark Surface (S9) (MLRA 147, 148)	☐ (MLRA 147, 148)			
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	☐ Piedmont Floodplain Soils (F19)			
☐ Stratified Layers (A5)	☐ Depleted Matrix (F3)	☐ (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 Mucky Mineral (S1) (LRR N,	☐ Iron-Manganese Masses (F12) (LRR N,				
☐ MLRA 147, 148)	☐ MLRA 136)				
☐ Sandy Gleyed Matrix (S4)	☐ Umbric Surface (F13) (MLRA 136, 122)				
☐ 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:

Cobbles to 3 inches present in upper layer.

Wetland Photograph Page

Wetland ID W-A1a



Photograph Direction NW

Date: 10/14/2014

Comments: 2014 wetland delineation.



Photograph Direction SE

Date: 09/16/19

Comments: 2019 wetland delineation confirmation.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Wetzel Sampling Date: 10/16/2014
 Applicant/Owner: MVP State: WV Sampling Point: W-A1a UPL
 Investigator(s): ES,CM,DM,MW Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): floodplain Local relief (concave, convex, none): flat Slope (%): 5-8
 Subregion (LRR or MLRA): LRRN Lat: 39.55387355 Long: -80.5448865 Datum: NAD 83
 Soil Map Unit Name: Skidmore gravelley loam 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 ☐	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland plot is located on the floodplain outside of the OHWM of stream S-A1, about 3-4 feet in elevation higher than wetland W-A1

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-A1a UPL

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Acer negundo</u>	<u>30</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80%</u> (A/B)																
2. <u>Platanus occidentalis</u>	<u>5</u>		<u>FACW</u>																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
<u>35</u> = Total Cover 50% of total cover: <u>17.5</u> 20% of total cover: <u>7</u>																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Acer negundo</u>	<u>2</u>	☒	<u>FAC</u>	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>92</u></td> <td>x 3 = <u>276</u></td> </tr> <tr> <td>FACU species <u>25</u></td> <td>x 4 = <u>100</u></td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: <u>122</u> (A)</td> <td><u>386</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.16</u></td> </tr> </table> Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>92</u>	x 3 = <u>276</u>	FACU species <u>25</u>	x 4 = <u>100</u>	UPL species _____	x 5 = _____	Column Totals: <u>122</u> (A)	<u>386</u> (B)	Prevalence Index = B/A = <u>3.16</u>	
Total % Cover of:	Multiply by:																			
OBL species _____	x 1 = _____																			
FACW species <u>5</u>	x 2 = <u>10</u>																			
FAC species <u>92</u>	x 3 = <u>276</u>																			
FACU species <u>25</u>	x 4 = <u>100</u>																			
UPL species _____	x 5 = _____																			
Column Totals: <u>122</u> (A)	<u>386</u> (B)																			
Prevalence Index = B/A = <u>3.16</u>																				
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
<u>2</u> = Total Cover 50% of total cover: <u>1</u> 20% of total cover: <u>0.4</u>																				
Herb Stratum (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Verbesina alternifolia</u>	<u>35</u>	☒	<u>FAC</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.																
2. <u>Solidago altissima</u>	<u>25</u>	☒	<u>FACU</u>																	
3. <u>Microstegium vimineum</u>	<u>25</u>	☒	<u>FAC</u>																	
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
<u>85</u> = Total Cover 50% of total cover: <u>42.5</u> 20% of total cover: <u>17</u>																				
Woody Vine Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____				Hydrophytic Vegetation Present? Yes ☒ No _____																
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																				

Remarks: (Include photo numbers here or on a separate sheet.)
 See photo W-A1-P1.

 Within the herb stratum there was ~15% bare ground.

SOIL

Sampling Point: W-A1a UPL

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Wetzel Sampling Date: 10/17/2014
 Applicant/Owner: MVP State: WV Sampling Point: W-A2a
 Investigator(s): ES,CM,DM,MW Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): floodplain Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR or MLRA): LRRN Lat: 39.55343 Long: -80.545431 Datum: NAD 83
 Soil Map Unit Name: Skidmore gravelley loam NWI classification: none

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:

2014 notes: PEM wetland is located in a slightly concave area of the floodplain, located about 100 feet south of stream S-A1a.

Cowardin: PEM HGM: Depressional WT: RPWWN

Information listed on this form represents the data collected in 2014. The wetland was revisited on 09/16/2019. Presence of wetland hydrology, hydrophytic vegetation, and hydric soils was confirmed using the USACE EMP Regional Supplement delineation methodology.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ 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 on 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): 4
 Saturation Present? Yes ☒ No ☐ Depth (inches): 4
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

Water was seeping from the side of the soil pit at 4".

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-A2a

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Panicum virgatum</u>	<u>45</u>	☒	<u>FAC</u>	
2. <u>Phalaris arundinacea</u>	<u>35</u>	☒	<u>FACW</u>	
3. <u>Juncus effusus</u>	<u>15</u>		<u>FACW</u>	
4. <u>Carex lurida</u>	<u>3</u>		<u>OBL</u>	
5. <u>Bidens frondosa</u>	<u>2</u>		<u>FACW</u>	Hydrophytic Vegetation Present? Yes ☒ No _____
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>100</u> = Total Cover 50% of total cover: <u>50</u> 20% of total cover: <u>20</u>				
Woody Vine Stratum (Plot size: <u>30'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-A2a

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 4/2	100					silt loam	
4-8	10YR 4/2	95	7.5YR 3/4	5	C	M	SCL	
8-16	10YR 4/2	80	7.5YR 3/4	10	C	M	SCL	
			7.5YR 4/6	10	C	M	SCL	
16-20	10YR 4/2	70	7.5YR 3/4	15	C	M	SCL	
			7.5YR 4/6	15	C	M	SCL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: 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 Mucky 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 Soils³:

- ☐ 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)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

Wetland Photograph Page

Wetland ID W-A2a Cowardin Code PEM



Photograph Direction NW

Date: 10/17/2014

Comments: 2014 wetland delineation.



Photograph Direction NNE

Date: 09/16/19

Comments: 2019 wetland delineation confirmation.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Wetzel Sampling Date: 10/17/2014
 Applicant/Owner: MVP State: WV Sampling Point: W-A2a UPL
 Investigator(s): ES,CM,DM,MW Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope (%): 12
 Subregion (LRR or MLRA): LRRN Lat: 39.55338382 Long: -80.5454037 Datum: NAD 83
 Soil Map Unit Name: Skidmore gravelley loam 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 ☐	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:

Upland plot is located on a 12% slope leading to an adjacent gas pump station. The plot is approximately 2-3 feet higher than wetland W-A2.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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): 13
 Saturation Present? Yes ☒ No ☐ Depth (inches): 11
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-A2a UPL

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species <u>15</u> x 2 = <u>30</u> FAC species <u>70</u> x 3 = <u>210</u> FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: <u>85</u> (A) <u>240</u> (B) Prevalence Index = B/A = <u>2.82</u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Panicum virgatum</u>	<u>70</u>	☒	<u>FAC</u>	
2. <u>Phalaris arundinacea</u>	<u>15</u>		<u>FACW</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>85</u> = Total Cover 50% of total cover: <u>42.5</u> 20% of total cover: <u>17</u>				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: <u>5'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>30'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Remarks: (Include photo numbers here or on a separate sheet.) See photo W-A2-P1. Cover in the herb stratum included ~15% bare ground.				

SOIL

Sampling Point: W-A2a UPL

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Wetzel Sampling Date: 10/18/2014
 Applicant/Owner: MVP State: WV Sampling Point: W-A4a
 Investigator(s): ES,CM,DM,MW Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR or MLRA): LRRN Lat: 39.544628 Long: -80.542844 Datum: NAD 83
 Soil Map Unit Name: Gilpin-Peabody complex, 35 to 70 percent slopes NWI classification: none

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 ☐	Hydic Soil Present? Yes ☒ No ☐	Wetland Hydrology Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐

Remarks:

PEM depressional wetland is located on the surface of an old logging road that was cut along a hillside.

Cowardin: PEM

HGM: slope

WT: NRPWW

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
<u>Primary Indicators (minimum of one is required; check all that apply)</u>			
☒ 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 on 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): 0
 Saturation Present? Yes ☒ No ☐ Depth (inches): 0
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

Shallow ponded surface water adjacent to the soil pit.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-A4a

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Typha angustifolia</u>	<u>30</u>	<u>✓</u>	<u>OBL</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
2. <u>Scirpus cyperinus</u>	<u>25</u>	<u>✓</u>	<u>FACW</u>	
3. <u>Microstegium vimineum</u>	<u>25</u>	<u>✓</u>	<u>FAC</u>	
4. <u>Onoclea sensibilis</u>	<u>5</u>		<u>FACW</u>	
_____ = Total Cover 50% of total cover: <u>42.5</u> 20% of total cover: <u>17</u>				
Woody Vine Stratum (Plot size: <u>30'</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u>✓</u> No _____
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.) ~15% of herb layer was bare ground. See photo W-A4-P1.				

SOIL

Sampling Point: W-A4a

[illegible]

Wetland Photograph Page

Wetland ID W-A4a Date 10/18/2014



Photograph Direction NE

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Wetzel Sampling Date: 10/18/2014
Applicant/Owner: MVP State: WV Sampling Point: W-A4a UPL
Investigator(s): ES,CM,DM,MW Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope (%): 35
Subregion (LRR or MLRA): LRRN Lat: 39.54462895 Long: -80.54280311 Datum: NAD 83
Soil Map Unit Name: Gilpin-Peabody complex, 35 to 70 percent slopes 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 ☐	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland plot is located on a 35% slope on the uphill side of wetland W-A4. The plot is approximately 2-3 feet higher than wetland W-A4.

HYDROLOGY

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

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-A4a UPL

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Robinia pseudoacacia</u>	<u>50</u>	☒	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67</u> (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
50% of total cover: <u>25</u>		50 = Total Cover 20% of total cover: <u>10</u>		Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species <u>135</u> x 3 = <u>405</u> FACU species <u>60</u> x 4 = <u>240</u> UPL species _____ x 5 = _____ Column Totals: <u>195</u> (A) <u>645</u> (B) Prevalence Index = B/A = <u>3.30</u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Rubus idaeus</u>	<u>65</u>	☒	<u>FAC</u>	
2. <u>Robinia pseudoacacia</u>	<u>10</u>		<u>FACU</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
50% of total cover: <u>37.5</u>		75 = Total Cover 20% of total cover: <u>15</u>		Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Microstegium vimineum</u>	<u>40</u>	☒	<u>FAC</u>	
2. <u>Conoclinium coelestinum</u>	<u>30</u>	☒	<u>FAC</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
50% of total cover: <u>35</u>		70 = Total Cover 20% of total cover: <u>14</u>		Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>30'</u>)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
50% of total cover: <u>0</u>		0 = Total Cover 20% of total cover: <u>0</u>		
Remarks: (Include photo numbers here or on a separate sheet.) See photo W-A4-P1. Within the herb layer there was ~30% bare ground.				Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: W-A4a UPL

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Wetzel Sampling Date: 06/13/2016
 Applicant/Owner: MVP State: WV Sampling Point: W-IJ31
 Investigator(s): E. Foster, S. Therkildson, C. Sorden Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Concave Slope (%): 2
 Subregion (LRR or MLRA): LRR N Lat: 39.505771 Long: -80.541782 Datum: NAD 83
 Soil Map Unit Name: Skidmore gravelly loam NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks: Cowardin Code: PEM HGM: Slope Water Type: RPWWN
 Disturbed roadside swale adjacent to unmapped NHD stream outside of ATWS. Marginal soils, gravel fill restrictive layer. Dominated by dense Carex, Juncus, and Scirpus.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☒ No ☐
Surface Water Present? Yes ☐ No ☒	Depth (inches): <u> </u>	
Water Table Present? Yes ☐ No ☒	Depth (inches): <u> </u>	
Saturation Present? Yes ☐ No ☒ (includes capillary fringe)	Depth (inches): <u> </u>	

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

Remarks:
 Clay and gravel fill perching water

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-IJ31

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Carex lurida</u>	<u>30</u>	☒	<u>OBL</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Carex vulpinoidea</u>	<u>30</u>	☒	<u>FACW</u>	
3. <u>Scirpus atrovirens</u>	<u>10</u>		<u>OBL</u>	
4. <u>Holcus lanatus</u>	<u>15</u>		<u>FAC</u>	
5. <u>Juncus effusus</u>	<u>20</u>		<u>FACW</u>	
6. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
<u>105</u> = Total Cover 50% of total cover: <u>52.5</u> 20% of total cover: <u>21</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-IJ31

[illegible]

Wetland Photograph Page

Wetland ID W-IJ31 Date 06/13/2016



Photograph Direction North

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Wetzel Sampling Date: 06/13/2016
 Applicant/Owner: MVP State: WV Sampling Point: W-IJ31-UP
 Investigator(s): E. Foster, S. Therkildson, C. Sorden Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Linear Slope (%): 12
 Subregion (LRR or MLRA): LRR N Lat: 39.50588 Long: -80.54164 Datum: NAD 83
 Soil Map Unit Name: Skidmore gravelly loam NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	
Remarks: Cowardin Code: <u>UPLAND</u> HGM: <u></u> Water Type: <u></u>	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ☐ Surface Water (A1) ☐ True Aquatic Plants (B14) ☐ High Water Table (A2) ☐ Hydrogen Sulfide Odor (C1) ☐ Saturation (A3) ☐ Oxidized Rhizospheres on 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) ☐ Geomorphic Position (D2) ☐ Inundation Visible on Aerial Imagery (B7) ☐ Shallow Aquitard (D3) ☐ Water-Stained Leaves (B9) ☐ Microtopographic Relief (D4) ☐ Aquatic Fauna (B13) ☐ FAC-Neutral Test (D5)		<u>Secondary Indicators (minimum of two required)</u> ☐ 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): <u></u> Water Table Present? Yes ☐ No ☒ Depth (inches): <u></u> Saturation Present? Yes ☐ No ☒ Depth (inches): <u></u> (includes capillary fringe)	Wetland Hydrology Present? Yes ☐ No ☒	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-IJ31-UP

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Platanus occidentalis</u>	<u>15</u>	☒	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. <u>Quercus alba</u>	<u>20</u>	☒	<u>FACU</u>	
3. <u>Acer sacharum</u>	<u>5</u>		<u>FACU</u>	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
4. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40</u> (A/B)
5. _____				
6. _____				
7. _____				
<u>40</u> = Total Cover 50% of total cover: <u>20</u> 20% of total cover: <u>8</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
<u>5</u> = Total Cover 50% of total cover: <u>2.5</u> 20% of total cover: <u>1</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Rosa multiflora</u>	<u>5</u>	☒	<u>FACU</u>	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
<u>5</u> = Total Cover 50% of total cover: <u>2.5</u> 20% of total cover: <u>1</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Leucanthemum vulgare</u>	<u>8</u>	☒	<u>UPL</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Plantanus occidentalis</u>	<u>8</u>	☒	<u>FACW</u>	
3. <u>Trifolium repens</u>	<u>5</u>		<u>FACU</u>	
4. <u>Microstegium vimineum</u>	<u>5</u>		<u>FAC</u>	
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
<u>26</u> = Total Cover 50% of total cover: <u>13</u> 20% of total cover: <u>5.2</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u> </u> No <u>☒</u>
2. _____				
3. _____				
4. _____				
5. _____				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-IJ31-UP

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Wetzel Sampling Date: 06/01/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-A27-PFO
 Investigator(s): SY, RS, KL Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Valley bottom Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR or MLRA): LRRN Lat: 39.502159 Long: 80.523411 Datum: NAD 83
 Soil Map Unit Name: Skidmore gravelly loam NWI classification: None

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 ☐	Is the Sampled Area within a Wetland?	Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐		
Wetland Hydrology Present?	Yes ☒ No ☐		

Remarks:

Cowardin Code: PFO

HGM: Slope

WT: RPWWD

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
<u>Primary Indicators (minimum of one is required; check all that apply)</u>			
☒ 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 on 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): .25
 Water Table Present? Yes ☐ No ☒ Depth (inches):
 Saturation Present? Yes ☒ No ☐ Depth (inches): 0
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

PFO/PEM wetland complex with Sycamore on the perimeters of the system and a stream running along the perimeter as well.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-A27-PFO

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Acer rubrum</u>	<u>25</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>8</u> (A) Total Number of Dominant Species Across All Strata: <u>9</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>89</u> (A/B)
2. <u>Platanus occidentalis</u>	<u>20</u>	☒	<u>FACW</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
<u>45</u> = Total Cover 50% of total cover: <u>22.5</u> 20% of total cover: <u>9</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Carex lurida</u>	<u>30</u>	☒	<u>OBL</u>	
2. <u>Carex scoparia</u>	<u>10</u>	☒	<u>FACW</u>	
3. <u>Carex vulpinoidea</u>	<u>10</u>	☒	<u>OBL</u>	
4. <u>Poa pratensis</u>	<u>10</u>	☒	<u>FACU</u>	
5. <u>Scirpus atrovirens</u>	<u>10</u>	☒	<u>OBL</u>	
6. <u>Microstegium vimineum</u>	<u>10</u>	☒	<u>FAC</u>	
7. <u>Juncus effusus</u>	<u>5</u>		<u>FACW</u>	
8. <u>Glyceria striata</u>	<u>5</u>		<u>OBL</u>	
9. <u>Spiraea alba</u>	<u>20</u>	☒	<u>FACW</u>	
10. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
11. _____				
<u>110</u> = Total Cover 50% of total cover: <u>55</u> 20% of total cover: <u>22</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				Hydrophytic Vegetation Present? Yes ☒ No _____
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

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

Wetland Photograph Page

Wetland ID W-A27-PFO Date 06/01/2015



Photograph Direction South

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Wetzel Sampling Date: 06/01/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-A27-PEM
 Investigator(s): SY, RS, KL Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): valley Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR or MLRA): LRRN Lat: 39.502291 Long: -80.523399 Datum: NAD83
 Soil Map Unit Name: Skidmore gravelly loam NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:
 PFO/PEM wetland complex with Sycamore on the perimeters and a stream running along the perimeter as well.
 Cowardin Code: PEM
 HGM: Slope
 WT: RPWWD

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☒ 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 on 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): <u>.25</u> Water Table Present? Yes ☐ No ☒ Depth (inches): <u> </u> Saturation Present? Yes ☒ No ☐ Depth (inches): <u>0</u> (includes capillary fringe)		Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:
 stream running along the perimeter S-A118

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-A27-PEM

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>7</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>86</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Carex lurida</u>	<u>30</u>	☒	<u>OBL</u>	Hydrophytic Vegetation Present? Yes ☒ No _____
2. <u>Carex scoparia</u>	<u>10</u>	☒	<u>FACW</u>	
3. <u>Carex vulpinoidea</u>	<u>10</u>	☒	<u>OBL</u>	
4. <u>Poa pratensis</u>	<u>10</u>	☒	<u>FACU</u>	
5. <u>Scirpus atrovirens</u>	<u>10</u>	☒	<u>OBL</u>	
6. <u>Microstegium vimineum</u>	<u>10</u>	☒	<u>FAC</u>	
7. <u>Juncus effusus</u>	<u>5</u>		<u>FACW</u>	
8. <u>Glyceria striata</u>	<u>5</u>		<u>OBL</u>	
9. <u>Spiraea alba</u>	<u>20</u>	☒	<u>FACW</u>	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>55</u> 20% of total cover: <u>22</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.) Complex (diverse) herbaceous layer.				

SOIL

Sampling Point: W-A27-PEM

[illegible]

Wetland Photograph Page

Wetland ID W-A27-PEM Date 06/01/2015



Photograph Direction SE

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Wetzel Sampling Date: 06/01/2015
Applicant/Owner: MVP State: WV Sampling Point: W-A27 UP
Investigator(s): S.Yarbrough, K.Lugo, R.Sparhawk Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Valley bottom Local relief (concave, convex, none): Planar Slope (%): 2
Subregion (LRR or MLRA): LRRN Lat: 39.502448 Long: -80.523262 Datum: NAD 83
Soil Map Unit Name: Skidmore gravelly loam (Sk) NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland

HYDROLOGY

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

Field Observations:

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

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

No indicators of wetland hydrology

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-A27 UP

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Platanus occidentalis</u>	<u>10</u>	☒	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
<u>10</u> = Total Cover 50% of total cover: <u>5</u> 20% of total cover: <u>2</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>15</u></td> <td>x 2 = <u>30</u></td> </tr> <tr> <td>FAC species <u>25</u></td> <td>x 3 = <u>75</u></td> </tr> <tr> <td>FACU species <u>70</u></td> <td>x 4 = <u>280</u></td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: <u>110</u> (A)</td> <td><u>385</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.5</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>15</u>	x 2 = <u>30</u>	FAC species <u>25</u>	x 3 = <u>75</u>	FACU species <u>70</u>	x 4 = <u>280</u>	UPL species _____	x 5 = _____	Column Totals: <u>110</u> (A)	<u>385</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>15</u>	x 2 = <u>30</u>																	
FAC species <u>25</u>	x 3 = <u>75</u>																	
FACU species <u>70</u>	x 4 = <u>280</u>																	
UPL species _____	x 5 = _____																	
Column Totals: <u>110</u> (A)	<u>385</u> (B)																	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																		
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																		
Herb Stratum (Plot size: <u>5'</u>)																		
1. <u>Elymus villosus</u>	<u>30</u>	☒	<u>FACU</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Holcus lanatus</u>	<u>20</u>	☒	<u>FAC</u>															
3. <u>Poa pratensis</u>	<u>20</u>	☒	<u>FACU</u>															
4. <u>Dactylis glomerata</u>	<u>10</u>		<u>FACU</u>															
5. <u>Solidago canadensis</u>	<u>10</u>		<u>FAC</u>															
6. <u>Juncus tenuis</u>	<u>5</u>		<u>FAC</u>															
7. <u>Spiraea alba</u>	<u>5</u>		<u>FACW</u>															
8. _____																		
9. _____																		
10. _____																		
11. _____																		
<u>100</u> = Total Cover 50% of total cover: <u>50</u> 20% of total cover: <u>20</u>																		
Woody Vine Stratum (Plot size: <u>15'</u>)																		
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																		
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes _____ No ☒														

SOIL

Sampling Point: W-A27 UP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 3/4	100					L	
4-15	10YR 4/4	98	7.5YR 5/6	2	C	PL	CL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:			Indicators for Problematic Hydric Soils ³ :		
☐ Histosol (A1)	☐ Dark Surface (S7)	☐ 2 cm Muck (A10) (MLRA 147)			
☐ Histic Epipedon (A2)	☐ Polyvalue Below Surface (S8) (MLRA 147, 148)	☐ Coast Prairie Redox (A16)			
☐ Black Histic (A3)	☐ Thin Dark Surface (S9) (MLRA 147, 148)	☐ (MLRA 147, 148)			
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	☐ Piedmont Floodplain Soils (F19)			
☐ Stratified Layers (A5)	☐ Depleted Matrix (F3)	☐ (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 Mucky Mineral (S1) (LRR N,	☐ Iron-Manganese Masses (F12) (LRR N,				
☐ MLRA 147, 148)	☐ MLRA 136)				
☐ Sandy Gleyed Matrix (S4)	☐ Umbric Surface (F13) (MLRA 136, 122)				
☐ 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: MVP City/County: Wetzel Sampling Date: 06/03/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-A35
 Investigator(s): S. Yarbrough, R. Sparhawk, W. Shattenberg, K. Lugo Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR or MLRA): LRRN Lat: 39.491268 Long: -80.520722 Datum: NAD 83
 Soil Map Unit Name: Gilpin-Peabody complex, 35 to 70 percent slopes (GpF) NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks:

Cowardin Code: PEM

HGM: slope

WT: NRPWW

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ 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 on 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? Yes ☒ No ☐ Depth (inches): 0
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

Old access road. This wetland is a PEM that lies against the slope. The slope above is ~30%.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-A35

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
0 = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
0 = Total Cover				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Typha latifolia</u>	<u>20</u>	☒	<u>OBL</u>	
2. <u>Carex vulpinoidea</u>	<u>20</u>	☒	<u>OBL</u>	
3. <u>Microstegium vimineum</u>	<u>25</u>	☒	<u>FAC</u>	
4. <u>Scirpus atrovirens</u>	<u>10</u>	_____	<u>OBL</u>	
5. <u>Juncus tenuis</u>	<u>5</u>	_____	<u>FAC</u>	
6. <u>Arthraxon hispidus</u>	<u>5</u>	_____	<u>FAC</u>	
7. <u>Carex scoparia</u>	<u>5</u>	_____	<u>FACW</u>	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
90 = Total Cover				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft in height. Woody vine – All woody vines greater than 3.28 ft in height.
50% of total cover: <u>45</u>		20% of total cover: <u>18</u>		
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. <u>Smilax rotundifolia</u>	<u>5</u>	☒	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
5 = Total Cover				Hydrophytic Vegetation Present? Yes ☒ No _____
50% of total cover: <u>2.5</u>		20% of total cover: <u>1</u>		

Remarks: (Include photo numbers here or on a separate sheet.)
 Old access road is likely holding water and providing wet habitat for herb stratum. Tree stratum is largely upland species overhanging the road, rooted outside the bounds of the delineated wetland. These species included Quercus montana, Acer rubrum, Robinia pseudoacacia, and Quercus coccinea.

SOIL

Sampling Point: W-A35**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
1-0								Leaf litter/organic matter
0-1	10YR 2/1	100					Muck	
1-7	10YR 6/3	85	Gley1 6/10Y	10	D	M	Clay	
			7.5YR 5/8	5	C	M	Clay	
7-8	7.5YR 4/6	90	7.5YR 5/8	10	C	M	Clay loam	
8-14	10YR 3/2	95	7.5YR 5/8	5				
14+								Refusal

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: 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 Mucky 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 Soils³:

- ☐ 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)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Course Fragments
 Depth (inches): 14

Hydric Soil Present? Yes ☒ No ☐

Remarks:

Wetland Photograph Page

Wetland ID W-A35 Date 06/03/2015



Photograph Direction North

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Wetzel Sampling Date: 06/03/2015
Applicant/Owner: MVP State: WV Sampling Point: W-A35 UP
Investigator(s): S. Yarbrough, R. Sparhawk, W. Shattenberg, K. Lugo Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 35
Subregion (LRR or MLRA): LRRN Lat: 39.491385 Long: -80.520689 Datum: NAD 83
Soil Map Unit Name: Gilpin-Peabody complex, 35 to 70 percent slopes (GpF) NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

No indication of wetland hydrology.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-A35 UP

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Quercus montana</u>	<u>70</u>	☒	<u>UPL</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>20%</u> (A/B)
2. <u>Magnolia acuminata</u>	<u>15</u>		<u>FACU</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
85 = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
50% of total cover: <u>42.5</u> 20% of total cover: <u>17</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Kalmia latifolia</u>	<u>30</u>	☒	<u>FACU</u>	
2. <u>Amelanchier laevis</u>	<u>30</u>	☒	<u>UPL</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
60 = Total Cover				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: <u>30</u> 20% of total cover: <u>12</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Vaccinium stamineum</u>	<u>30</u>	☒	<u>FACU</u>	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
30 = Total Cover				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
50% of total cover: <u>15</u> 20% of total cover: <u>6</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. <u>Smilax rotundifolia</u>	<u>15</u>	☒	<u>FAC</u>	
2. _____				
3. _____				
4. _____				
5. _____				
15 = Total Cover				Hydrophytic Vegetation Present? Yes _____ No ☒
50% of total cover: <u>7.5</u> 20% of total cover: <u>3</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-A35 UP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR3/3	100					L	
8-12	10YR4/3	100					CL	
12+								Refusal

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

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 Mucky 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 Soils³:

☐ 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)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Course Fragments

Depth (inches): 12

Hydric Soil Present? Yes _____ No ☒

Remarks:

No primary or secondary indicators of hydric soils.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Wetzel Sampling Date: 06/03/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-A34
 Investigator(s): S. Yarbrough, R. Sparhawk, W. Shattenberg, K. Lugo Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Valley Bottom Local relief (concave, convex, none): Concave Slope (%): 0
 Subregion (LRR or MLRA): LRRN Lat: 39.489839 Long: -80.520598 Datum: NAD 83
 Soil Map Unit Name: Vandalia silty clay loam, 15 to 25 percent slopes (VaD) NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks:
 Cowardin Code: PEM
 HGM: SLOPE
 WT: RPWWD
 Information listed on this form represents the data collected in 2015. The wetland was revisited on 09/17/2019. Presence of wetland hydrology, hydrophytic vegetation, and hydric soils was confirmed using the USACE EMP Regional Supplement delineation methodology.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☒ 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 on 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:		Wetland Hydrology Present? Yes ☒ No ☐
Surface Water Present?	Yes ☒ No ☐ Depth (inches): <u>0.25</u>	
Water Table Present?	Yes ☒ No ☐ Depth (inches): <u>14</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No ☐ Depth (inches): <u>0</u>	

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

Remarks:
 There is evidence of groundwater seeping out of the hillside in this location that supports this wetland.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-A34

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)																
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)																
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)																
4. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>50</u></td> <td>x 1 = <u>50</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>40</u></td> <td>x 3 = <u>120</u></td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: <u>90</u> (A)</td> <td><u>170</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.89</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>50</u>	x 1 = <u>50</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>40</u>	x 3 = <u>120</u>	FACU species _____	x 4 = _____	UPL species _____	x 5 = _____	Column Totals: <u>90</u> (A)	<u>170</u> (B)	Prevalence Index = B/A = <u>1.89</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>50</u>	x 1 = <u>50</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>40</u>	x 3 = <u>120</u>																			
FACU species _____	x 4 = _____																			
UPL species _____	x 5 = _____																			
Column Totals: <u>90</u> (A)	<u>170</u> (B)																			
Prevalence Index = B/A = <u>1.89</u>																				
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)																
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.																
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____																
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Glyceria grandis</u>	<u>50</u>	☒	<u>OBL</u>																	
2. <u>Microstegium vimineum</u>	<u>30</u>	☒	<u>FAC</u>																	
3. <u>Poa nemoralis</u>	<u>10</u>		<u>FAC</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
<u>90</u> = Total Cover 50% of total cover: <u>45</u> 20% of total cover: <u>18</u>																				
Woody Vine Stratum (Plot size: <u>15'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																				

Remarks: (Include photo numbers here or on a separate sheet.)
 This wetland is dominated by wetland plants in the herbaceous layer. There is a tight ring of upland trees and shrubs around the perimeter of this wetland system. There is also Carex vulpinoidea and Carex lurida common in this system beyond the limit of the 5' sample plot.

SOIL

Sampling Point: W-A34

[illegible]

Wetland Photograph Page

Wetland ID W-A34



Photograph Direction West

Date: 06/03/2015

Comments: 2015 wetland delineation.



Photograph Direction West

Date: 09/17/19

Comments: 2019 wetland delineation confirmation.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Wetzel Sampling Date: 06/03/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-A34 UP1
 Investigator(s): S. Yarbrough, R. Sparhawk, W. Shattenberg, K. Lugo Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 10
 Subregion (LRR or MLRA): LRRN Lat: 39.489839 Long: -80.520598 Datum: NAD 83
 Soil Map Unit Name: Vandalia silty clay loam, 15 to 25 percent slopes (VaD) NWI classification: None

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 ☒	Is the Sampled Area within a Wetland?	Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒		
Wetland Hydrology Present?	Yes ☐ No ☒		

Remarks:

Upland

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

No indication of wetland hydrology.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-A34 UP1

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Quercus alba</u>	<u>30</u>	☒	<u>UPL</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. <u>Fagus grandifolia</u>	<u>30</u>	☒	<u>FACW</u>	Total Number of Dominant Species Across All Strata: <u>7</u> (B)
3. <u>Carya ovata</u>	<u>20</u>	☒	<u>FACU</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>28.5%</u> (A/B)
4. <u>Fraxinus americana</u>	<u>20</u>	☒	<u>FACU</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
$\frac{100}{50\% \text{ of total cover: } \underline{50}} = \text{Total Cover}$ $\frac{100}{20\% \text{ of total cover: } \underline{20}}$				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
$\frac{15}{50\% \text{ of total cover: } \underline{7.5}} = \text{Total Cover}$ $\frac{15}{20\% \text{ of total cover: } \underline{3}}$				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is $\leq 3.0^1$ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
$\frac{30}{50\% \text{ of total cover: } \underline{15}} = \text{Total Cover}$ $\frac{30}{20\% \text{ of total cover: } \underline{6}}$				
$\frac{10}{50\% \text{ of total cover: } \underline{5}} = \text{Total Cover}$ $\frac{10}{20\% \text{ of total cover: } \underline{2}}$				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
$\frac{10}{50\% \text{ of total cover: } \underline{5}} = \text{Total Cover}$ $\frac{10}{20\% \text{ of total cover: } \underline{2}}$				Hydrophytic Vegetation Present? Yes _____ No ☒
Remarks: (Include photo numbers here or on a separate sheet.) Lots of leaf litter on the ground here.				

SOIL

Sampling Point: W-A34 UP1

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Wetzel Sampling Date: 09/01/2016
 Applicant/Owner: MVP State: WV Sampling Point: W-WX4
 Investigator(s): C. Vilen J. Bittner Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0
 Subregion (LRR or MLRA): LRRN Lat: 39.463847 Long: -80.502593 Datum: NAD 83
 Soil Map Unit Name: Sk - Skidmore gravelly loam NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks: Cowardin Code: PEM HGM: Riverine Water Type: RPWWD

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☒ No ☐
Surface Water Present? Yes ☐ No ☒ Depth (inches): <u> </u>		
Water Table Present? Yes ☒ No ☐ Depth (inches): <u>3</u>		
Saturation Present? Yes ☒ No ☐ Depth (inches): <u>0</u> (includes capillary fringe)		

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-WX4

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Microstegium vimineum</u>	<u>50</u>	☒	<u>FAC</u>	
2. <u>Persicaria sagittata</u>	<u>30</u>	☒	<u>OBL</u>	
3. <u>Impatiens capensis</u>	<u>15</u>	_____	<u>FACW</u>	
4. <u>Cyperus esculentus</u>	<u>5</u>	_____	<u>FACW</u>	
5. <u>Carex lurida</u>	<u>5</u>	_____	<u>OBL</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>105</u> = Total Cover 50% of total cover: <u>52.5</u> 20% of total cover: <u>21</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

Hydrophytic Vegetation Present?
 Yes ☒ No _____

SOIL

Sampling Point: W-WX4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR 3/1	100					CL	
3-16	10YR 3/1	80	10YR 5/6	20	C	M	SCL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: 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 Mucky 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 Soils³:

☐ 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)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

Wetland Photograph Page

Wetland ID W-WX4 Date 09/01/2016



Photograph Direction South

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Wetzel Sampling Date: 09/01/2016
Applicant/Owner: MVP State: WV Sampling Point: W-WX5
Investigator(s): C. Vilen J. Bittner Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR or MLRA): LRRN Lat: 39.463922 Long: -80.502657 Datum: NAD 83
Soil Map Unit Name: Sk - Skidmore gravelly loam NWI classification: None

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 ☐ Wetland Hydrology Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Remarks: Cowardin Code: <u>PEM</u> HGM: <u>Riverine</u> Water Type: <u>RPWWD</u>	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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): <u> </u>	Wetland Hydrology Present? Yes ☒ No ☐	
Water Table Present? Yes ☒ No ☐ Depth (inches): <u>3</u>		
Saturation Present? Yes ☒ No ☐ Depth (inches): <u>0</u> (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-WX5

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Microstegium vimineum</u>	<u>50</u>	☒	<u>FAC</u>	
2. <u>Persicaria sagittata</u>	<u>30</u>	☒	<u>OBL</u>	
3. <u>Impatiens capensis</u>	<u>20</u>		<u>FACW</u>	
4. <u>Solidago gigantea</u>	<u>10</u>		<u>FACW</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>110</u> = Total Cover 50% of total cover: <u>55</u> 20% of total cover: <u>22</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>

SOIL

Sampling Point: W-WX5

[illegible]

Wetland Photograph Page

Wetland ID W-WX5 Date 09/01/2016



Photograph Direction North

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Harrison Sampling Date: 09/01/2016
 Applicant/Owner: MVP State: WV Sampling Point: W-WX4/WX5-UP
 Investigator(s): C. Vilen J. Bittner Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 0-3
 Subregion (LRR or MLRA): LRRN Lat: 39.463771 Long: -80.502766 Datum: NAD 83
 Soil Map Unit Name: Sk - Skidmore gravelly loam NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks: Cowardin Code: UPLAND HGM: Water Type:
 Adjacent to gravel access road.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☐ No ☒
Surface Water Present? Yes ☐ No ☒	Depth (inches): <u></u>	
Water Table Present? Yes ☐ No ☒	Depth (inches): <u></u>	
Saturation Present? Yes ☐ No ☒ (includes capillary fringe)	Depth (inches): <u></u>	

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-WX4/WX5-UP

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Microstegium vimineum</u>	<u>50</u>	☒	<u>FAC</u>	
2. <u>Solidago canadensis</u>	<u>10</u>	_____	<u>FACU</u>	
3. <u>Trifolium pratense</u>	<u>5</u>	_____	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>65</u> = Total Cover 50% of total cover: <u>32.5</u> 20% of total cover: <u>13</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
1. <u>Smilax rotundifolia</u>	<u>5</u>	☒	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>5</u> = Total Cover 50% of total cover: <u>2.5</u> 20% of total cover: <u>1</u>				
Remarks: (Include photo numbers here or on a separate sheet.) Sparse vegetation, adjacent to gravel roadway.				Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: W-WX4/WX5-UP

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Doddridge Sampling Date: 06/01/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-K45
 Investigator(s): J. Hart, D. Santillo, J. Potrikus Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR or MLRA): LRRN Lat: 39.228946 Long: -80.552280 Datum: NAD 83
 Soil Map Unit Name: Sensabaugh silt loam, 3 to 8 percent slopes, rarely flooded (SeB) NWI classification: None

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 ☐	Hydic Soil Present? Yes ☒ No ☐	Wetland Hydrology Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Remarks: Cowardin Code: PEM HGM: Riverine WT: RPWWD Wetland plot paired with W-K45UP. Riverine wetland occurs in floodplain of intermittent stream. (S-K77). Intermittent stream S-K78 provides hydrologic contributions to the southeastern portion of the wetland. This stream has fringe wetlands at the far SE reach, then loses channel structure and disperses over flat area to form portion of wetland close to S-K77.			

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ☐ Surface Water (A1) ☐ True Aquatic Plants (B14) ☐ High Water Table (A2) ☐ Hydrogen Sulfide Odor (C1) ☐ Saturation (A3) ☒ Oxidized Rhizospheres on 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) ☒ Geomorphic Position (D2) ☐ Inundation Visible on Aerial Imagery (B7) ☐ Shallow Aquitard (D3) ☐ Water-Stained Leaves (B9) ☐ Microtopographic Relief (D4) ☐ Aquatic Fauna (B13) ☒ FAC-Neutral Test (D5)		<u>Secondary Indicators (minimum of two required)</u> ☐ 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? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes ☒ No ☐	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-K45

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>7</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
0 = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Salix nigra</u>	<u>5</u>	☒	<u>OBL</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
5 = Total Cover				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: <u>2.5</u> 20% of total cover: <u>1</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Carex lurida</u>	<u>20</u>	☒	<u>OBL</u>	
2. <u>Impatiens capensis</u>	<u>20</u>	☒	<u>FACW</u>	
3. <u>Carex vulpinoidea</u>	<u>10</u>	☒	<u>OBL</u>	
4. <u>Poa pratensis</u>	<u>10</u>	☒	<u>FAC</u>	
5. <u>Eutrochium fistulosum</u>	<u>10</u>	☒	<u>FACW</u>	
6. <u>Microstigeum vinineum</u>	<u>10</u>	☒	<u>FAC</u>	
7. <u>Panicum dichotomiflorum</u>	<u>5</u>	_____	<u>FACW</u>	
8. <u>Dactylis glomerata</u>	<u>5</u>	_____	<u>FACU</u>	
9. <u>Bromus inermis</u>	<u>5</u>	_____	<u>FACU</u>	
10. <u>Symphyotrichum praealtum</u>	<u>5</u>	_____	<u>FACW</u>	
11. _____	_____	_____	_____	
100 = Total Cover				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
50% of total cover: <u>50</u> 20% of total cover: <u>20</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
0 = Total Cover				
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

Hydrophytic Vegetation Present?
 Yes ☒ No _____

SOIL

Sampling Point: W-K45

[illegible]

Wetland Photograph Page

Wetland ID W-K45 Date 06/01/2015



Photograph Direction East

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Harrison Sampling Date: 06/01/2015
Applicant/Owner: MVP State: WV Sampling Point: W-K45UP
Investigator(s): J. Hart, D. Santillo, J. Potrikus Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 2
Subregion (LRR or MLRA): LRRN Lat: 39.228994 Long: -80.552285 Datum: NAD 83
Soil Map Unit Name: Sensabaugh silt loam, 3 to 8 percent slopes, rarely flooded NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland

Upland plot paired with W-K45. Occurs on terrace adjacent to wetland in an area dominated by upland vegetation.

HYDROLOGY

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

Field Observations:

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

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

No hydrology

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-K45UP

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Dactylis glomerata</u>	<u>30</u>	<u>✓</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Bromus inermis</u>	<u>30</u>	<u>✓</u>	<u>UPL</u>	
3. <u>Poa pratensis</u>	<u>15</u>	_____	<u>FAC</u>	
4. <u>Glechoma hederacea</u>	<u>10</u>	_____	<u>FACU</u>	
5. <u>Eutrochium fistulosum</u>	<u>10</u>	_____	<u>FACW</u>	
6. <u>Solidago canadensis</u>	<u>5</u>	_____	<u>FACU</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>100</u> = Total Cover 50% of total cover: <u>50</u> 20% of total cover: <u>20</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>✓</u>

SOIL

Sampling Point: W-K45UP

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Doddridge Sampling Date: 05/30/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-A23
 Investigator(s): S.Yarbrough, K.Lugo, R.Sparhawk, W.Shattenberg Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Valley bottom Local relief (concave, convex, none): Planar Slope (%): 0-3
 Subregion (LRR or MLRA): LRRN Lat: 39.201037 Long: -80.553372 Datum: NAD 83
 Soil Map Unit Name: Melvin silt loam (Me) NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks:

Cowardin Code: PEM
 HGM: Depressional
 WT: RPWWD

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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? Yes ☒ No ☐ Depth (inches): 8
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-A23

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Herb Stratum (Plot size: <u>5'</u>)				
1. Acorus calamus	50	✓	OBL	
2. Eleocharis acicularis	25	✓	OBL	
3. Carex lurida	10		OBL	
4. Juncus effusus	10		FACW	
5. Onoclea sensibilis			FACW	Hydrophytic Vegetation Present? Yes ☒ No _____
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>95</u> = Total Cover 50% of total cover: <u>47.5</u> 20% of total cover: <u>19</u>				Woody Vine Stratum (Plot size: <u>15'</u>)
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-A23

[illegible]

Wetland Photograph Page

Wetland ID W-A23 Date 05/30/2015



Photograph Direction NE

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Doddridge Sampling Date: 05/30/2015
Applicant/Owner: MVP State: WV Sampling Point: W-A23 UP
Investigator(s): S.Yarbrough, K.Lugo, R.Sparhawk, W.Shattenberg Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Valley bottom Local relief (concave, convex, none): Planar Slope (%): 0
Subregion (LRR or MLRA): LRRN Lat: 39.200988 Long: -80.553308 Datum: NAD 83
Soil Map Unit Name: Melvin silt loam (Me) NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

No indicators for wetland hydrology

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-A23 UP

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Trifolium pratense</u>	<u>50</u>	<u>✓</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Trifolium repens</u>	<u>35</u>	<u>✓</u>	<u>FACU</u>	
3. <u>Festuca rubra</u>	<u>10</u>		<u>FACU</u>	
4. <u>Poa pratensis</u>	<u>5</u>		<u>FACU</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>100</u> = Total Cover 50% of total cover: <u>50</u> 20% of total cover: <u>20</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Hydrophytic Vegetation Present? Yes <u> </u> No <u>✓</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-A23 UP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR4/3	100					SL	
4-7	10YR3/4	95	7.5YR4/6	5	C	PL	L	
7-14	10YR4/3	90	7.5YR4/6	10	C	PL	SL	
14-20	10 YR4/1	80	5YR4/6	20	C	M/PL	L	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:			Indicators for Problematic Hydric Soils ³ :		
☐ Histosol (A1)	☐ Dark Surface (S7)	☐ 2 cm Muck (A10) (MLRA 147)			
☐ Histic Epipedon (A2)	☐ Polyvalue Below Surface (S8) (MLRA 147, 148)	☐ Coast Prairie Redox (A16)			
☐ Black Histic (A3)	☐ Thin Dark Surface (S9) (MLRA 147, 148)	☐ (MLRA 147, 148)			
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	☐ Piedmont Floodplain Soils (F19)			
☐ Stratified Layers (A5)	☐ Depleted Matrix (F3)	☐ (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 Mucky Mineral (S1) (LRR N,	☐ Iron-Manganese Masses (F12) (LRR N,				
☐ MLRA 147, 148)	☐ MLRA 136)				
☐ Sandy Gleyed Matrix (S4)	☐ Umbric Surface (F13) (MLRA 136, 122)				
☐ 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:
Not hydric.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Doddridge Sampling Date: 05/31/2015
Applicant/Owner: MVP State: WV Sampling Point: W-K41
Investigator(s): J. Hart, D. Santillo, J. Potrikus Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR or MLRA): LRRN Lat: 39.208997 Long: -80.551987 Datum: NAD 83
Soil Map Unit Name: Gilpin-Peabody complex, 15 to 35 percent slopes, very stony (GsE) NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:

Cowardin Code: PEM

HGM: Depressional

WT: RPWWD

Wetland plot paired with W-K41UP. Depressional wetland occurs in flat concave landform at head of intermittent stream, receives hydrology from precipitation, contributions from short eroded drainage feature to east, and possibly a shallow groundwater table. Feature partially filled with cobbles from offsite (riprap)

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ 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 on 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): 10
Saturation Present? Yes ☒ No ☐ Depth (inches): 6
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

Standing water in other portions of wetland

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-K41

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Sapling/Shrub Stratum (Plot size: <u>15'</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____				
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>) 1. Carex lurida 25 ☒ OBL 2. Glyceria striata 15 ☒ OBL 3. Poa pratensis 15 ☒ FAC 4. Mimulus ringens 10 _____ OBL 5. Persicaria sagittata 10 _____ OBL 6. Microstigeum vinimeum 5 _____ FAC 7. Carex vulpinoidea 5 _____ OBL 8. _____ 9. _____ 10. _____ 11. _____				
_____ = Total Cover 50% of total cover: <u>42.5</u> 20% of total cover: <u>17</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>15'</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____				
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Hydrophytic Vegetation Present? Yes ☒ No _____				
Remarks: (Include photo numbers here or on a separate sheet.) Remaining cover in herb stratum is bareground				

SOIL

Sampling Point: W-K41

[illegible]

Wetland Photograph Page

Wetland ID W-K41 Date 05/31/2015



Photograph Direction SE

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Doddridge Sampling Date: 05/31/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-K41UP
 Investigator(s): J. Hart, D. Santillo, J. Potrikus Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 3
 Subregion (LRR or MLRA): LRRN Lat: 39.20904 Long: -80.55199 Datum: NAD 83
 Soil Map Unit Name: Gilpin-Peabody complex, 15 to 35 percent slopes, very stony NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland

Upland plot paired with W-K41. Occurs on hillside adjacent to wetland in an area dominated by upland vegetation.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

No hydrology

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-K41UP

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Platanus occidentalis</u>	<u>15</u>	☒	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33</u> (A/B)
2. _____				
3. _____				
4. _____				
5. _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
6. _____				
7. _____				
8. _____				
<u>15</u> = Total Cover 50% of total cover: <u>7.5</u> 20% of total cover: <u>3</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)
9. _____				
10. _____				
11. _____				
<u>25</u> = Total Cover 50% of total cover: <u>12.5</u> 20% of total cover: <u>5</u>				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
12. _____				
13. _____				
14. _____				
<u>25</u> = Total Cover 50% of total cover: <u>12.5</u> 20% of total cover: <u>5</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
15. _____				
16. _____				
17. _____				
<u>95</u> = Total Cover 50% of total cover: <u>47.5</u> 20% of total cover: <u>19</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
18. _____				
19. _____				
20. _____				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
21. _____				
22. _____				
23. _____				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
24. _____				
25. _____				
26. _____				

Remarks: (Include photo numbers here or on a separate sheet.)
 Remaining cover in herb stratum is thatch

SOIL

Sampling Point: W-K41UP

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 06/06/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-B57
 Investigator(s): C. Ansari, M. Whitten, M. Brice Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 2
 Subregion (LRR or MLRA): LRRN Lat: 39.111774 Long: -80.587239 Datum: NAD 83
 Soil Map Unit Name: Gilpin-Upshur silt loams, 25 to 35 percent slopes (GuE) NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:

Cowardin Code: PEM HGM: SLOPE WT: NRPWW

Information listed on this form represents the data collected in 2015. The wetland was revisited on 10/01/2019. The presence of wetland hydrology, hydrophytic vegetation, and hydric soils was unable to be confirmed because the wetland was obstructed by timber matting.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

Slope wetland that forms above the road. The road has altered the feature to follow the road to a low point then discharges downhill into sheet flow. There were no indicators for wetlands downhill of the road.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-B57

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Panicum virgatum</u>	<u>20</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Present? Yes ☒ No _____
2. <u>Carex vulpinoidea</u>	<u>15</u>		<u>OBL</u>	
3. <u>Juncus effusus</u>	<u>10</u>		<u>FACW</u>	
4. <u>Microstegium vimineum</u>	<u>45</u>	☒	<u>FAC</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>45</u> 20% of total cover: <u>18</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____	_____	_____	_____	
_____	_____	_____	_____	
_____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-B57

[illegible]

Wetland Photograph Page

Wetland ID W-B57



Photograph Direction South

Date: 06/06/2015

Comments: 2015 wetland delineation.



Photograph Direction West

Date: 10/01/19

Comments: 2019 wetland delineation confirmation.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 06/06/2015
Applicant/Owner: MVP State: WV Sampling Point: W-B57-UP1
Investigator(s): C. Ansari, M. Whitten, M. Brice Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 2
Subregion (LRR or MLRA): LRRN Lat: 39.111727° Long: -80.587102° Datum: NAD 83
Soil Map Unit Name: Gilpin-Upshur silt loams, 25 to 35 percent slopes (GuE) NWI classification: None

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 ☐	Hydic Soil Present? Yes ☐ No ☒	Wetland Hydrology Present? Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Remarks: Upland			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ 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 on 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): _____	Wetland Hydrology Present? Yes ☐ No ☒
Water Table Present? Yes ☐ No ☒	Depth (inches): _____	
Saturation Present? (includes capillary fringe) Yes ☐ No ☒	Depth (inches): _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Upland plot		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-B57-UP1

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Quercus alba</u>	<u>30</u>	☒	<u>FACU</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
2. <u>Acer rubrum</u>	<u>5</u>		<u>FAC</u>	
3. _____				Total Number of Dominant Species Across All Strata: <u>4</u> (B)
4. _____				
5. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75%</u> (A/B)
6. _____				
7. _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
<u>35</u> = Total Cover 50% of total cover: <u>17.5</u> 20% of total cover: <u>7</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Rosa virginiana</u>	<u>5</u>	☒	<u>FAC</u>	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u>5</u> = Total Cover 50% of total cover: <u>2.5</u> 20% of total cover: <u>1</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Vernonia gigantea</u>	<u>15</u>	☒	<u>FAC</u>	
2. <u>Apocynum androsaemifolium</u>	<u>5</u>		<u>FACU</u>	
3. <u>Microstegium vimineum</u>	<u>30</u>	☒	<u>FAC</u>	
4. <u>Panicum virgatum</u>	<u>10</u>		<u>FAC</u>	
5. <u>Oxalis corniculata</u>	<u>10</u>		<u>FACU</u>	
6. <u>Trifolium pratense</u>	<u>5</u>		<u>FACU</u>	
7. _____				
8. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
<u>75</u> = Total Cover 50% of total cover: <u>37.5</u> 20% of total cover: <u>15</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Hydrophytic Vegetation Present? Yes ☒ No _____				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-B57-UP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-11	10yr 5/3	90	7.5yr 5/6	10	C	M	L	
11-16	10yr 4/3	100					L	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:			Indicators for Problematic Hydric Soils³:		
☐ Histosol (A1)	☐ Dark Surface (S7)	☐ 2 cm Muck (A10) (MLRA 147)			
☐ Histic Epipedon (A2)	☐ Polyvalue Below Surface (S8) (MLRA 147, 148)	☐ Coast Prairie Redox (A16)			
☐ Black Histic (A3)	☐ Thin Dark Surface (S9) (MLRA 147, 148)	☐ (MLRA 147, 148)			
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	☐ Piedmont Floodplain Soils (F19)			
☐ Stratified Layers (A5)	☐ Depleted Matrix (F3)	☐ (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 Mucky Mineral (S1) (LRR N,	☐ Iron-Manganese Masses (F12) (LRR N,				
☐ MLRA 147, 148)	☐ MLRA 136)				
☐ Sandy Gleyed Matrix (S4)	☐ Umbric Surface (F13) (MLRA 136, 122)				
☐ Sandy Redox (S5)	☐ Piedmont Floodplain Soils (F19) (MLRA 148)				
☐ Stripped Matrix (S6)	☐ Red Parent Material (F21) (MLRA 127, 147)				

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 16

Hydric Soil Present?

Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/28/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-K33-PSS
 Investigator(s): J. Hart, D. Santillo, J. Potrikus Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Drainageway Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR or MLRA): LRRN Lat: 39.095035 Long: -80.58514 Datum: NAD 83
 Soil Map Unit Name: Lobdell-Holly silt loams NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:

Cowardin Code: PSS HGM: Riverine WT: RPWWD

2015 comments: Wetland plot paired with W-K33(PSS) UP. Wetland occurs as a backwater to adjacent stream (S-J46). Adjacent PEM portion of feature occurs in cleared pasture area.

Information listed on this form represents the data collected in 2015. The wetland was revisited on 09/20/2019. Presence of wetland hydrology, hydrophytic vegetation, and hydric soils was confirmed using the USACE EMP Regional Supplement delineation methodology.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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): 8
 Saturation Present? Yes ☒ No ☐ Depth (inches): 2
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-K33-PSS

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Salix nigra</u>	<u>20</u>	☒	<u>OBL</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____				
5. _____				
6. _____				
7. _____				
<u>20</u> = Total Cover 50% of total cover: <u>10</u> 20% of total cover: <u>4</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
<u>70</u> = Total Cover 50% of total cover: <u>35</u> 20% of total cover: <u>14</u>				Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
<u>90</u> = Total Cover 50% of total cover: <u>45</u> 20% of total cover: <u>18</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>) 1. <u>Salix nigra</u> <u>60</u> ☒ <u>OBL</u> 2. <u>Sambucus nigra</u> <u>10</u> <u> </u> <u>FAC</u> 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____				
Herb Stratum (Plot size: <u>5'</u>) 1. <u>Leersia oryzoides</u> <u>30</u> ☒ <u>OBL</u> 2. <u>Polygonum argyrocoleon</u> <u>15</u> ☒ <u>OBL</u> 3. <u>Chrysosplenium americanum</u> <u>15</u> ☒ <u>OBL</u> 4. <u>Impatiens capensis</u> <u>10</u> <u> </u> <u>FACW</u> 5. <u>Carex vulpinoidea</u> <u>10</u> <u> </u> <u>OBL</u> 6. <u>Amphicarpaea bracteata</u> <u>10</u> <u> </u> <u>FAC</u> 7. _____ 8. _____ 9. _____ 10. _____ 11. _____				
Woody Vine Stratum (Plot size: <u>15'</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____				
Remarks: (Include photo numbers here or on a separate sheet.) Remaining cover in herb stratum is bareground.				

SOIL

Sampling Point: W-K33-PSS

[illegible]

Wetland Photograph Page

Wetland ID W-K33-PSS



Photograph Direction West

Date: 05/28/2015

Comments: 2015 wetland delineation.



Photograph Direction West

Date: 09/20/19

Comments: 2019 wetland delineation confirmation.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/28/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-K33-UP1
 Investigator(s): J. Hart, D. Santillo, J. Potrikus Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 3
 Subregion (LRR or MLRA): LRRN Lat: 39.09507 Long: -80.58516 Datum: NAD 83
 Soil Map Unit Name: Lobdell-Holly silt loams NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland

Upland plot paired with W-K33(PSS) occurs on hillslope between road and wetland.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

No hydrology

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-K33-UP1

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Robinia pseudoacacia</u>	<u>20</u>	☒	<u>FACU</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>10</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
4. _____				
5. _____				
6. _____				
7. _____				
<u>20</u> = Total Cover 50% of total cover: <u>10</u> 20% of total cover: <u>4</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
<u>40</u> = Total Cover 50% of total cover: <u>20</u> 20% of total cover: <u>8</u>				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u>100</u> = Total Cover 50% of total cover: <u>50</u> 20% of total cover: <u>20</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes <u> </u> No ☒
Sapling/Shrub Stratum (Plot size: <u>15'</u>) 1. <u>Juglans nigra</u> <u>40</u> ☒ <u>FACU</u> 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 11. _____				
Herb Stratum (Plot size: <u>5'</u>) 1. <u>Bromus inermis</u> <u>20</u> ☒ <u>UPL</u> 2. <u>Dichanthelium clandestinum</u> <u>15</u> ☒ <u>FAC</u> 3. <u>Solidago canadensis</u> <u>15</u> ☒ <u>FACU</u> 4. <u>Impatiens capensis</u> <u>10</u> ☒ <u>FACW</u> 5. <u>Boehmeria cylindrica</u> <u>10</u> ☒ <u>FACW</u> 6. <u>Stellaria media</u> <u>10</u> ☒ <u>UPL</u> 7. <u>Panicum capillare</u> <u>10</u> ☒ <u>FAC</u> 8. <u>Amphicarpaea bracteata</u> <u>10</u> ☒ <u>FAC</u> 9. _____ 10. _____ 11. _____				
Woody Vine Stratum (Plot size: <u>15'</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-K33-UP1

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/28/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-K33-PEM
 Investigator(s): P Johnson Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Valley bottom Local relief (concave, convex, none): Concave Slope (%): 0
 Subregion (LRR or MLRA): LRRN Lat: 39.095221 Long: -80.583977 Datum: NAD 83
 Soil Map Unit Name: Lobdell-Holly silt loams NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:

Cowardin Code: PEM HGM: Riverine WT: RPWWD

Information listed on this form represents the data collected in 2015. The wetland was revisited on 09/20/2019. Presence of wetland hydrology, hydrophytic vegetation, and hydric soils was confirmed using the USACE EMP Regional Supplement delineation methodology.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-K33-PEM

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Bromus inermis</u>	<u>30</u>	☒	<u>UPL</u>	
2. <u>Eleocharis tenuosus</u>	<u>25</u>	☒	<u>FACW</u>	
3. <u>Scirpus atrovirens</u>	<u>25</u>	☒	<u>FACW</u>	
4. <u>Carex vulpinoidea</u>	<u>15</u>	_____	<u>FACW</u>	Hydrophytic Vegetation Present? Yes ☒ No _____
5. <u>Juncus bufonius</u>	<u>15</u>	_____	<u>FACW</u>	
6. <u>Poa pratensis</u>	<u>5</u>	_____	<u>FACU</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	Woody Vine Stratum (Plot size: <u>15'</u>)
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>115</u> = Total Cover 50% of total cover: <u>57.5</u> 20% of total cover: <u>23</u>				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-K33-PEM

[illegible]

Wetland Photograph Page

Wetland ID W-K33-PEM



Photograph Direction SE

Date: 05/28/2015

Comments: 2015 wetland delineation.



Photograph Direction South

Date: 09/20/19

Comments: 2019 wetland delineation confirmation.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/28/2015
Applicant/Owner: MVP State: WV Sampling Point: W-K33-UP1
Investigator(s): P. Johnson, C. Weber, N. Katsiaficas Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Valley bottom Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR or MLRA): LRRN Lat: 39.095254 Long: -80.584042 Datum: NAD 83
Soil Map Unit Name: Lobdell-Holly silt loams NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland

HYDROLOGY

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

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-K33-UP1

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Bromus inermis</u>	<u>35</u>	<u>✓</u>	<u>UPL</u>	
2. <u>Anthozanthum odoratum</u>	<u>30</u>	<u>✓</u>	<u>UPL</u>	
3. <u>Trifolium pratense</u>	<u>15</u>	_____	<u>UPL</u>	
4. <u>Trifolium repens</u>	<u>15</u>	_____	<u>UPL</u>	
5. <u>Solanum carolinense</u>	<u>15</u>	_____	<u>UPL</u>	
6. _____	_____	_____	_____	
<u>110</u> = Total Cover 50% of total cover: <u>55</u> 20% of total cover: <u>22</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-K33-UP1

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/28/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-K34-PEM
 Investigator(s): P. Johnson, C. Weber, N. Katsiaficas Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Valley bottom Local relief (concave, convex, none): Concave Slope (%): 0
 Subregion (LRR or MLRA): LRRN Lat: 39.093845 Long: -80.585483 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 15 to 25 percent slopes NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks:
 Cowardin Code: PEM
 HGM: Slope
 WT: RPWWD

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☒ 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 on 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:		Wetland Hydrology Present? Yes ☒ No ☐
Surface Water Present?	Yes ☒ No ☐ Depth (inches): <u>>1</u>	
Water Table Present?	Yes ☒ No ☐ Depth (inches): <u>0</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No ☐ Depth (inches): <u>0</u>	

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-K34-PEM

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Salix nigra</u>	<u>5</u>	☒	<u>OBL</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
_____	_____	_____	_____	
<u>5</u> = Total Cover 50% of total cover: <u>2.5</u> 20% of total cover: <u>1</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Typha angustifolia</u>	<u>20</u>	☒	<u>OBL</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
2. <u>Poa compressa</u>	<u>20</u>	☒	<u>FAC</u>	
3. <u>Schoenoplectus tabernaemontani</u>	<u>15</u>	☒	<u>OBL</u>	
4. <u>Juncus effusus</u>	<u>15</u>	☒	<u>FACW</u>	
5. <u>Carex lurida</u>	<u>10</u>	_____	<u>FACW</u>	
6. <u>Eupatorium perfoliatum</u>	<u>5</u>	_____	<u>FACW</u>	Hydrophytic Vegetation Present? Yes ☒ No _____
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>85</u> = Total Cover 50% of total cover: <u>42.5</u> 20% of total cover: <u>17</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-K34-PEM

[illegible]

Wetland Photograph Page

Wetland ID W-K34-PEM Date 05/28/2015



Photograph Direction North

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/28/2015
Applicant/Owner: MVP State: WV Sampling Point: W-K34-UP1
Investigator(s): J. Hart, D. Santillo, J. Potrikus Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 3
Subregion (LRR or MLRA): LRRN Lat: 39.093855 Long: -80.585551 Datum: NAD 83
Soil Map Unit Name: Vandalia silt loam, 15 to 25 percent slopes NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland

Upland plot paired with W-K34 occurs on a hillslope adjacent to the wetland.

HYDROLOGY

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

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

No hydrology

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-K34-UP1

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>14</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
0 = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
0 = Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Dactylis glomerata</u>	<u>30</u>	<u>✓</u>	<u>FACU</u>	
2. <u>Anthoxanthum odoratum</u>	<u>15</u>	<u>✓</u>	<u>FACU</u>	
3. <u>Bromus inermis</u>	<u>10</u>	<u>✓</u>	<u>UPL</u>	
4. <u>Trifolium pratense</u>	<u>10</u>	<u>✓</u>	<u>FACU</u>	
5. <u>Carex vulpinoidea</u>	<u>10</u>	<u>✓</u>	<u>OBL</u>	
6. <u>Trifolium repens</u>	<u>10</u>	<u>✓</u>	<u>FACU</u>	
7. <u>Plantago lanceolata</u>	<u>10</u>	<u>✓</u>	<u>FACU</u>	
8. <u>Daucus carota</u>	<u>5</u>		<u>UPL</u>	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
100 = Total Cover				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
50% of total cover: <u>50</u>		20% of total cover: <u>20</u>		
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
0 = Total Cover				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-K34-UP1

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/20/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-H109
 Investigator(s): A.Stott, A.Grech, D. McCullough Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Side-slope Local relief (concave, convex, none): Concave Slope (%): 4-6%
 Subregion (LRR or MLRA): LRRN Lat: 39.053353 Long: -80.582026 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 15 to 25 percent slopes (VaD) NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:
 Cowardin Code: PEM; HGM: slope; WT: NRPWW
 Information listed on this form represents the data collected in 2015. The wetland was revisited on 09/25/2019. The presence of wetland hydrology, hydrophytic vegetation, and hydric soils was unable to be confirmed because of construction activity within the LOD.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☒ No ☐
Surface Water Present? Yes ☐ No ☒ Depth (inches): <u>0"</u>		
Water Table Present? Yes ☒ No ☐ Depth (inches): <u>0"</u>		
Saturation Present? Yes ☒ No ☐ Depth (inches): <u>0"</u> (includes capillary fringe)		

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-H109

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>4</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75%</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Platanus occidentalis</u>	<u>5</u>	☒	<u>FACW</u>	
2. <u>Rosa multiflora</u>	<u>5</u>	☒	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>5</u> 20% of total cover: <u>2</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Crarex lurida</u>	<u>40</u>	☒	<u>OBL</u>	
2. <u>Juncus effusus</u>	<u>20</u>	☒	<u>FACW</u>	
3. <u>Holcus lanatus</u>	<u>15</u>	_____	<u>FAC</u>	
4. <u>Verbesina alternifolia</u>	<u>5</u>	_____	<u>FAC</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>40</u> 20% of total cover: <u>16</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: W-H109

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0-6"	7.5yr 4/1	95	7.5yr 3/4	5	C	PL	CL
6-12"	7.5yr 5/3	90	10yr 5/6	19	C	PL	C
12+ "							Refusal: Coarse Fragments

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

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 Mucky 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 Soils³:

☐ 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)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Course Fragments

Depth (inches): 12

Hydric Soil Present? Yes ☒ No ☐

Remarks:

Wetland Photograph Page

Wetland ID W-H109 Date 05/20/2015



Photograph Direction North

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/20/2015
Applicant/Owner: MVP State: WV Sampling Point: W-H109-UP1
Investigator(s): A.Stott, A.Grech, D. McCullough Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Side-slope Local relief (concave, convex, none): Convex Slope (%): 3-6%
Subregion (LRR or MLRA): LRRN Lat: 39.053362° Long: -80.582061° Datum: NAD 83
Soil Map Unit Name: Vandalia silt loam, 15 to 25 percent slopes (VaD) NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland

HYDROLOGY

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

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-H109-UP1

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Quercus rubra</u>	<u>20</u>	☒	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33</u> (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
<u>20</u> = Total Cover 50% of total cover: <u>10</u> 20% of total cover: <u>4</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
1. <u>Elaeagnus umbellata</u>	<u>40</u>	☒	<u>UPL</u>	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
<u>40</u> = Total Cover 50% of total cover: <u>20</u> 20% of total cover: <u>8</u>				
Herb Stratum (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Securigera varia</u>	<u>20</u>	☒	<u>UPL</u>	
2. <u>Achillea millefolium</u>	<u>20</u>	☒	<u>FACU</u>	
3. <u>Verbesina alternifolia</u>	<u>20</u>	☒	<u>FAC</u>	
4. <u>Dichanthelium clandestinum</u>	<u>10</u>		<u>FAC</u>	
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
<u>70</u> = Total Cover 50% of total cover: <u>35</u> 20% of total cover: <u>14</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
1. <u>Toxicodendron radicans</u>	<u>10</u>	☒	<u>FAC</u>	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
<u>10</u> = Total Cover 50% of total cover: <u>5</u> 20% of total cover: <u>2</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes <u> </u> No ☒

SOIL

Sampling Point: W-H109-UP1

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/19/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-I22 PEM
 Investigator(s): SET SJT GS Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Valley bottom Local relief (concave, convex, none): Concave Slope (%): 10-15
 Subregion (LRR or MLRA): LRRN Lat: 39.052793 Long: -80.582574 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 15 to 25 percent slopes (VaD) NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:

Cowardin Code: PEM HGM: RIVERINE WT: RPWWD

Information listed on this form represents the data collected in 2015. The wetland was revisited on 09/25/2019. Presence of wetland hydrology, hydrophytic vegetation, and hydric soils was confirmed using the USACE EMP Regional Supplement delineation methodology.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ 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 on 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): 12
 Saturation Present? Yes ☒ No ☐ Depth (inches): 8
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-I22 PEM

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67%</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Acorus americanus</u>	<u>40</u>	☒	<u>OBL</u>	Hydrophytic Vegetation Present? Yes ☒ No _____
2. <u>Mentha spicata</u>	<u>15</u>	☒	<u>FACW</u>	
3. <u>Trifolium repens</u>	<u>10</u>		<u>FACU</u>	
4. <u>Dactylis glomerata</u>	<u>25</u>	☒	<u>FACU</u>	
5. <u>Carex lurida</u>	<u>5</u>		<u>OBL</u>	
6. <u>Securigera varia</u>	<u>10</u>		<u>UPL</u>	
7. <u>Galium palustre</u>	<u>5</u>		<u>OBL</u>	
8. <u>Equisetum arvense</u>	<u>5</u>		<u>FAC</u>	
9. <u>Poa sp.</u>	<u>10</u>		<u>ND</u>	
10. <u>Iris pseudacorus</u>	<u>5</u>		<u>OBL</u>	
11. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>65</u> 20% of total cover: <u>26</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-I22 PEM

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 5/3	60					SaLo	
	10YR 5/1	40						
4-10	10YR 5/2	80	7.5YR 5/6	20	C	M	SaC	
10-14	Gley1 4/N	100					SaC	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: 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 Mucky 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 Soils³:

- ☐ 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)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

Wetland Photograph Page

Wetland ID W-I22 PEM



Photograph Direction East

Date: 05/19/2015

Comments: 2015 wetland delineation.



Photograph Direction NE

Date: 09/25/19

Comments: 2019 wetland delineation confirmation.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/19/2015
Applicant/Owner: MVP State: WV Sampling Point: W-I22-UP1
Investigator(s): SET SJT GS Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Valley bottom Local relief (concave, convex, none): Concave Slope (%): 0-5
Subregion (LRR or MLRA): LRRN Lat: 39.052584° Long: -80.582199° Datum: NAD 83
Soil Map Unit Name: Vandalia silt loam, 15 to 25 percent slopes (VaD) NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	
Remarks: Upland	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		☐ Surface Soil Cracks (B6)
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Sparsely Vegetated Concave Surface (B8)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Stunted or Stressed Plants (D1)
☐ Iron Deposits (B5)		☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Shallow Aquitard (D3)
☐ Water-Stained Leaves (B9)		☐ Microtopographic Relief (D4)
☐ Aquatic Fauna (B13)		☐ FAC-Neutral Test (D5)
Field Observations:		Wetland Hydrology Present? Yes ☐ No ☒
Surface Water Present? Yes ☐ No ☒ Depth (inches): _____		
Water Table Present? Yes ☐ No ☒ Depth (inches): _____		
Saturation Present? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-I22-UP1

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No ☒
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Trifolium repens</u>	<u>25</u>	☒	<u>FACU</u>	
2. <u>Plantago lanceolata</u>	<u>15</u>		<u>UPL</u>	
3. <u>Allium canadense</u>	<u>5</u>		<u>FACU</u>	
4. <u>Achillea millefolium</u>	<u>20</u>		<u>FACU</u>	
5. <u>Taraxacum officinale</u>	<u>25</u>	☒	<u>FACU</u>	Woody Vine Stratum (Plot size: <u>15'</u>)
6. <u>Glechome hederacea</u>	<u>5</u>		<u>FACU</u>	
7. <u>Dactylus glomerata</u>	<u>30</u>	☒	<u>FACU</u>	
8. <u>Poa sp.</u>	<u>10</u>		<u>ND</u>	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	Remarks: (Include photo numbers here or on a separate sheet.)
11. _____	_____	_____	_____	
<u>135</u> = Total Cover 50% of total cover: <u>67.5</u> 20% of total cover: <u>27</u>				

SOIL

Sampling Point: W-I22-UP1

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 08/14/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-KK06
 Investigator(s): D. Hadersbeck A. Hatfield C. Carver Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0
 Subregion (LRR or MLRA): LRRN Lat: 39.017834 Long: -80.597066 Datum: NAD 83
 Soil Map Unit Name: Sensabaugh silt loam NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:

Cowardin Code: PEM HGM: Riverine WT: RPWWD

2019 comments: Slight depression in topography limits wetland boundary and separates from upland

Information listed on this form represents the data collected in 2015. The wetland was revisited on 09/24/2019. Presence of wetland hydrology, hydrophytic vegetation, and hydric soils was confirmed using the USACE EMP Regional Supplement delineation methodology.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-KK06

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: <u>5'</u>)				
1. <i>Amphicarpaea bracteata</i>	30	✓	FAC	
2. <i>Carex lurida</i>	25	✓	OBL	
3. <i>Microstegium vimineum</i>	25	✓	FAC	
4. <i>Dichanthelium clandestinum</i>	20		OBL	
5. <i>Typha latifolia</i>	6		OBL	
6. <i>Carex vulpinoidea</i>	5		OBL	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>111</u> = Total Cover 50% of total cover: <u>55.5</u> 20% of total cover: <u>22.2</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

Hydrophytic Vegetation Present? Yes ✓ No

SOIL

Sampling Point: W-KK06

[illegible]

Wetland Photograph Page

Wetland ID W-KK06



Photograph Direction SE

Date: 08/14/2015

Comments: 2015 wetland delineation.



Photograph Direction South

Date: 09/24/19

Comments: 2019 wetland delineation confirmation.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 08/14/2015
Applicant/Owner: MVP State: WV Sampling Point: W-KK06-Up
Investigator(s): D. Hadersbeck A. Hatfield C. Carver Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Depressional Local relief (concave, convex, none): Convex Slope (%): 1
Subregion (LRR or MLRA): LRRN Lat: 39.017833 Long: -80.597172 Datum: NAD 83
Soil Map Unit Name: Sensabaugh silt loam NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland

HYDROLOGY

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

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-KK06-Up

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Juglans sp.</u>	<u>8</u>	☒	<u>ND</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2*</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
2. <u>Acer negundo</u>	<u>5</u>	☒	<u>FAC</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
<u>13</u> = Total Cover 50% of total cover: <u>6.5</u> 20% of total cover: <u>2.6</u>				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Amphicarpaea bracteata</u>	<u>25</u>	☒	<u>FACU</u>	
2. <u>Helianthus sp.</u>	<u>10</u>	☒	<u>ND</u>	
3. <u>Vernonia fasciculata</u>	<u>6</u>		<u>FACU</u>	
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
<u>41</u> = Total Cover 50% of total cover: <u>20.5</u> 20% of total cover: <u>8.2</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Remarks: (Include photo numbers here or on a separate sheet.) ND - Not Determined *Vegetation not ID'd down to species level is not included in the dominance test				

SOIL

Sampling Point: W-KK06-Up

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/16/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-I15
 Investigator(s): G. Stevens, S. Townsend, S. Therkildson Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): N/A
 Subregion (LRR or MLRA): LRRN Lat: 38.968377 Long: -80.59224 Datum: NAD 83
 Soil Map Unit Name: Gilpin-Upshur silt loams, 35 to 70 percent slopes, severely eroded (GwF3) NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks:

Cowardin Code: PEM; HGM: Slope; WT: RPWWN

Information listed on this form represents the data collected in 2015. The wetland was revisited on 09/25/2019. The presence of wetland hydrology, hydrophytic vegetation, and hydric soils was unable to be confirmed because the wetland was obstructed by timber matting.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☒ 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 on 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? Yes ☐ No ☒ Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

Connects to W-I14, separately delineated due to change in cowardin type during 2015 surveys.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-115

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>6</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>83</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Elaeagnus umbellata</u>	<u>5</u>	☒	<u>UPL</u>	
2. <u>Salix nigra</u>	<u>5</u>	☒	<u>OBL</u>	
3. <u>Platanus occidentalis</u>	<u>5</u>	☒	<u>FACW</u>	
4. <u>Fraxinus pennsylvanica</u>	<u>5</u>	☒	<u>FACW</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>10</u> 20% of total cover: <u>4</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Carex stricta</u>	<u>35</u>	☒	<u>OBL</u>	
2. <u>Equisetum arvense</u>	<u>15</u>		<u>FAC</u>	
3. <u>Microstegium vimineum</u>	<u>50</u>	☒	<u>FAC</u>	
4. <u>Polygonum sp.</u>	<u>5</u>		<u>ND</u>	
5. <u>Toxicodendron radicans</u>	<u>5</u>		<u>FAC</u>	
6. <u>Solidago sp.</u>	<u>5</u>		<u>ND</u>	
7. <u>Trifolium repens</u>	<u>15</u>		<u>FACU</u>	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>65</u> 20% of total cover: <u>26</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.) Adjacent to W-114 PFO ND - Not Determined.				Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: W-I15

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features					
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-10	7.5yr6/2	90	10yr7/6	10	C	M/PL	SiC	Concentrations
10+								Refusal: Bedrock
					¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.			
					² Location: PL=Pore Lining, M=Matrix.			
Hydric Soil Indicators:			Indicators for Problematic Hydric Soils ³ :					
☐ Histosol (A1)			☐ Dark Surface (S7)			☐ 2 cm Muck (A10) (MLRA 147)		
☐ Histic Epipedon (A2)			☐ Polyvalue Below Surface (S8) (MLRA 147, 148)			☐ Coast Prairie Redox (A16)		
☐ Black Histic (A3)			☐ Thin Dark Surface (S9) (MLRA 147, 148)			☐ (MLRA 147, 148)		
☐ Hydrogen Sulfide (A4)			☐ Loamy Gleyed Matrix (F2)			☐ Piedmont Floodplain Soils (F19)		
☐ Stratified Layers (A5)			☒ Depleted Matrix (F3)			☐ (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 Mucky 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: Rock base/bedrock/possible riprap Depth (inches): 10						Hydric Soil Present? Yes ☒ No _____		
Remarks: 								

Wetland Photograph Page

Wetland ID W-I15



Photograph Direction NE

Date: 05/16/2015

Comments: 2015 wetland delineation.



Photograph Direction SW

Date: 09/25/19

Comments: 2019 wetland delineation confirmation.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/16/2015
Applicant/Owner: MVP State: WV Sampling Point: W-I14-UP1, I15-UP1
Investigator(s): G. Stevens, S. Townsend, S. Therkildson Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 15-20
Subregion (LRR or MLRA): LRRN Lat: 38.968801 Long: -80.591841 Datum: NAD 83
Soil Map Unit Name: Gilpin-Upshur silt loams, 35 to 70 percent slopes, severely eroded (GwF3) NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

Serves as upland point for both W-I14 and W-I15

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-I14-UP1, I15-UP1

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>20%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Quercus alba</u>	<u>5</u>	☒	<u>FACU</u>	
2. <u>Hamamelis virginiana</u>	<u>5</u>	☒	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>10</u> = Total Cover 50% of total cover: <u>5</u> 20% of total cover: <u>2</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Packera aurea</u>	<u>5</u>	_____	<u>FACW</u>	
2. <u>Glechoma hederacea</u>	<u>5</u>	_____	<u>FACU</u>	
3. <u>Trifolium repens</u>	<u>30</u>	☒	<u>FACU</u>	
4. <u>Plantago lanceolata</u>	<u>15</u>	☒	<u>UPL</u>	
5. <u>Carex scoparia</u>	<u>5</u>	_____	<u>FACW</u>	
6. <u>Anthoxanthum hirtum</u>	<u>5</u>	_____	<u>FACW</u>	
7. <u>Polygonum sp.</u>	<u>5</u>	_____	<u>ND</u>	
8. <u>Dicranthelium clandestinum</u>	<u>10</u>	☒	<u>FAC</u>	
9. <u>Toxicodendron radicans</u>	<u>5</u>	_____	<u>FAC</u>	
10. <u>Solidago sp.</u>	<u>5</u>	_____	<u>ND</u>	
11. _____	_____	_____	_____	
<u>90</u> = Total Cover 50% of total cover: <u>45</u> 20% of total cover: <u>18</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.) ND - Not Determined.				Hydrophytic Vegetation Present? Yes <u> </u> No ☒

SOIL

Sampling Point: W-I14-UP1, I15-UP1

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/16/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-116
 Investigator(s): SET SJT GS Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Hill slope Local relief (concave, convex, none): Convex Slope (%): N/A
 Subregion (LRR or MLRA): LRRN Lat: 38.964993 Long: -80.590885 Datum: NAD 83
 Soil Map Unit Name: Gilpin-Upshur silt loams, 35 to 70 percent slopes, severely eroded (GwF3) NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks:

Cowardin Code: PEM; HGM: slope; WT: NRPWW

Information listed on this form represents the data collected in 2015. The wetland was revisited on 09/25/2019. Presence of wetland hydrology, hydrophytic vegetation, and hydric soils was confirmed using the USACE EMP Regional Supplement delineation methodology. Only small remnant of the originally delineated wetland currently exists within LOD.

HYDROLOGY

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

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): 4
 Water Table Present? Yes ☒ No ☐ Depth (inches): 8
 Saturation Present? Yes ☒ No ☐ Depth (inches): 0
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

Wetland along access road, surface water in depression created by truck ruts, but water table at about 8"

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-116

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Rosa multiflora</u>	<u>5</u>	☒	<u>FACU</u>	
2. <u>Rubus allegheniensis</u>	<u>5</u>	☒	<u>FACU</u>	
3. <u>Salix nigra</u>	<u>5</u>	☒	<u>OBL</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>15</u> = Total Cover 50% of total cover: <u>7.5</u> 20% of total cover: <u>3</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Juncus effusus</u>	<u>5</u>		<u>FACW</u>	
2. <u>Scirpus atrovirens</u>	<u>20</u>		<u>OBL</u>	
3. <u>Eleocharis sp.</u>	<u>5</u>		<u>ND</u>	
4. <u>Potentilla simplex</u>	<u>5</u>		<u>FACU</u>	
5. <u>Packera aurea</u>	<u>10</u>		<u>FACW</u>	
6. <u>Microstegium vimineum</u>	<u>35</u>	☒	<u>FAC</u>	
7. <u>Carex lurida</u>	<u>30</u>	☒	<u>OBL</u>	
8. <u>Toxicodendron radicans</u>	<u>5</u>		<u>FAC</u>	
9. <u>Rumex crispus</u>	<u>5</u>		<u>FAC</u>	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>120</u> = Total Cover 50% of total cover: <u>60</u> 20% of total cover: <u>24</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: W-I16

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-7	7.5yr 5/6	100					Clay	
7-14	7.5yr 5/2	90	Gley2 6/5bg	10			SaCI	Sandy clay

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:			Indicators for Problematic Hydric Soils³:		
☐ Histosol (A1)	☐ Dark Surface (S7)	☐ 2 cm Muck (A10) (MLRA 147)			
☐ Histic Epipedon (A2)	☐ Polyvalue Below Surface (S8) (MLRA 147, 148)	☐ Coast Prairie Redox (A16)			
☐ Black Histic (A3)	☐ Thin Dark Surface (S9) (MLRA 147, 148)	☒ (MLRA 147, 148)			
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	☐ Piedmont Floodplain Soils (F19)			
☐ Stratified Layers (A5)	☒ Depleted Matrix (F3)	☒ (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 Mucky Mineral (S1) (LRR N,	☐ Iron-Manganese Masses (F12) (LRR N,				
☒ MLRA 147, 148)	☒ MLRA 136)				
☐ Sandy Gleyed Matrix (S4)	☐ Umbric Surface (F13) (MLRA 136, 122)				
☐ Sandy Redox (S5)	☐ Piedmont Floodplain Soils (F19) (MLRA 148)				
☐ Stripped Matrix (S6)	☐ Red Parent Material (F21) (MLRA 127, 147)				

Restrictive Layer (if observed):

Type: Gravel

Depth (inches): 14

Hydric Soil Present? Yes ☒ No ☐

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Remarks:

Wetland Photograph Page

Wetland ID W-I16



Photograph Direction NNE

Date: 05/16/2015

Comments: 2015 wetland delineation.



Photograph Direction North

Date: 09/25/19

Comments: 2019 wetland delineation confirmation.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/16/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-I16-UP1
 Investigator(s): SET SJT GS Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): N/A
 Subregion (LRR or MLRA): LRRN Lat: 38.964768 Long: -80.590849 Datum: NAD 83
 Soil Map Unit Name: Gilpin-Upshur silt loams, 35 to 70 percent slopes, severely eroded (GwF3) NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

Modified veg/soils due to access road during 2015 survey.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-I16-UP1

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Asclepias syriaca</u>	<u>15</u>	_____	<u>FACU</u>	
2. <u>Solidago canadensis</u>	<u>20</u>	☒	<u>FACU</u>	
3. <u>Trifolium repens</u>	<u>50</u>	☒	<u>FACU</u>	
4. <u>Parthenocissus quinquefoil</u>	<u>5</u>	_____	<u>FACU</u>	
5. <u>Persicaria sagitata</u>	<u>15</u>	_____	<u>OBL</u>	
6. <u>Carex novae-angliae</u>	<u>5</u>	_____	<u>FACU</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>110</u> = Total Cover 50% of total cover: <u>55</u> 20% of total cover: <u>22</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes <u> </u> No ☒

SOIL

Sampling Point: W-I16-UP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	2.5yr 7/6	100					C	
2-10	10yr 6/4	100					C	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:			Indicators for Problematic Hydric Soils ³ :		
☐ Histosol (A1)	☐ Dark Surface (S7)	☐ 2 cm Muck (A10) (MLRA 147)			
☐ Histic Epipedon (A2)	☐ Polyvalue Below Surface (S8) (MLRA 147, 148)	☐ Coast Prairie Redox (A16)			
☐ Black Histic (A3)	☐ Thin Dark Surface (S9) (MLRA 147, 148)	☐ (MLRA 147, 148)			
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	☐ Piedmont Floodplain Soils (F19)			
☐ Stratified Layers (A5)	☐ Depleted Matrix (F3)	☐ (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 Mucky Mineral (S1) (LRR N,	☐ Iron-Manganese Masses (F12) (LRR N,				
☐ MLRA 147, 148)	☐ MLRA 136)				
☐ Sandy Gleyed Matrix (S4)	☐ Umbric Surface (F13) (MLRA 136, 122)				
☐ 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: MVP City/County: Lewis Sampling Date: 05/16/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-117
 Investigator(s): G. Stevens, S. Townsend, S. Therkildson Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): N/A
 Subregion (LRR or MLRA): LRRN Lat: 38.962127 Long: -80.59074 Datum: NAD 83
 Soil Map Unit Name: Gilpin-Upshur silt loams, 35 to 70 percent slopes, severely eroded (GwF3) NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:

Cowardin Code: pem; HGM: depressional; WT: NRPWW

Information listed on this form represents the data collected in 2015. The wetland was revisited on 09/25/2019. Presence of wetland hydrology, hydrophytic vegetation, and hydric soils was confirmed using the USACE EMP Regional Supplement delineation methodology.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☒ 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 on 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? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

On access road

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-117

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Carpinus caroliniana</u>	<u>10</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)
2. <u>Acer saccharinum</u>	<u>3</u>	☒	<u>FACW</u>	
3. _____				Total Number of Dominant Species Across All Strata: <u>6</u> (B)
4. _____				
5. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>83.3%</u> (A/B)
6. _____				
7. _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
_____ = Total Cover 50% of total cover: <u>6.5</u> 20% of total cover: <u>2.6</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Smilax rotundifolia</u>	<u>10</u>	☒	<u>FAC</u>	
2. <u>Quercus montana</u>	<u>3</u>	☒	<u>UPL</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
_____ = Total Cover 50% of total cover: <u>6.5</u> 20% of total cover: <u>2.6</u>				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Leersia oryzoides</u>	<u>50</u>	☒	<u>OBL</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Bidens sp.</u>	<u>25</u>		<u>ND</u>	
3. <u>Rubus idaeus</u>	<u>20</u>		<u>FAC</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
4. <u>Microstegium vimineum</u>	<u>40</u>	☒	<u>FAC</u>	
5. _____				Hydrophytic Vegetation Present? Yes ☒ No _____
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
_____ = Total Cover 50% of total cover: <u>67.5</u> 20% of total cover: <u>27</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-I17

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10yr5/1	80	7.5yr5/3	20	C	M/PL	SiLo	
2-12	10yr7/1	40	2.5yr4/8	40	C	M/PL	SiCL	
			7.5yr 6/6	20	C	M/PL	SiCL	
12-16	Gley 1 5/N	100					C	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators:								
☐ Histosol (A1) ☐ Dark Surface (S7)								
☐ Histic Epipedon (A2) ☐ Polyvalue Below Surface (S8) (MLRA 147, 148)								
☐ Black Histic (A3) ☐ Thin Dark Surface (S9) (MLRA 147, 148)								
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2)								
☐ Stratified Layers (A5) ☒ Depleted Matrix (F3)								
☐ 2 cm Muck (A10) (LRR N) ☐ Redox Dark Surface (F6)								
☐ Depleted Below Dark Surface (A11) ☐ Depleted Dark Surface (F7)								
☐ Thick Dark Surface (A12) ☒ Redox Depressions (F8)								
☐ Sandy Mucky Mineral (S1) (LRR N,								
☐ MLRA 147, 148) ☐ Iron-Manganese Masses (F12) (LRR N,								
☐ Sandy Gleyed Matrix (S4) ☐ MLRA 136)								
☐ Sandy Redox (S5) ☐ Umbric Surface (F13) (MLRA 136, 122)								
☐ Stripped Matrix (S6) ☐ Piedmont Floodplain Soils (F19) (MLRA 148)								
☐ Red Parent Material (F21) (MLRA 127, 147)								
Indicators for Problematic Hydric Soils³:								
☐ 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 Photograph Page

Wetland ID W-I17



Photograph Direction North

Date: 05/16/2015

Comments: 2015 wetland delineation.



Photograph Direction SE

Date: 09/25/19

Comments: 2019 wetland delineation confirmation.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/16/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-I17-UP1
 Investigator(s): G. Stevens, S. Townsend, S. Therkildson Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Hill slope Local relief (concave, convex, none): Convex Slope (%): N/A
 Subregion (LRR or MLRA): LRRN Lat: 38.962159 Long: -80.590771 Datum: NAD 83
 Soil Map Unit Name: Gilpin-Upshur silt loams, 35 to 70 percent slopes, severely eroded (GwF3) NWI classification: None

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 ☐	Is the Sampled Area within a Wetland?	Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒		
Wetland Hydrology Present?	Yes ☐ No ☒		

Remarks:

Upland

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-I17-UP1

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Carpinus caroliniana</u>	<u>40</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80</u> (A/B)
4. _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____				
6. _____				
7. _____				
8. _____				
40 = Total Cover 50% of total cover: <u>20</u> 20% of total cover: <u>8</u>				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Rubus allegheniensis</u>	<u>40</u>	☒	<u>FACU</u>	
2. _____				
3. _____				
4. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5. _____				
6. _____				
7. _____				
8. _____				
40 = Total Cover 50% of total cover: <u>20</u> 20% of total cover: <u>8</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Asclepius syriaca</u>	<u>5</u>		<u>FACU</u>	
2. <u>Rubus idaeus</u>	<u>25</u>	☒	<u>FAC</u>	
3. <u>Microstegium vimineum</u>	<u>15</u>	☒	<u>FAC</u>	
4. <u>Bohmeria cylindrica</u>	<u>10</u>		<u>FACW</u>	Hydrophytic Vegetation Present? Yes ☒ No _____
5. <u>Smilax rotundifolia</u>	<u>20</u>	☒	<u>FAC</u>	
6. _____				
7. _____				
8. _____				
75 = Total Cover 50% of total cover: <u>37.5</u> 20% of total cover: <u>15</u>				Woody Vine Stratum (Plot size: <u>15'</u>)
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____				
2. _____				
3. _____				
4. _____				Hydrophytic Vegetation Present? Yes ☒ No _____
5. _____				
0 = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
0 = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
0 = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-I17-UP1

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/17/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-I20
 Investigator(s): G. Stevens, S. Townsend, S. Therkildson Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): N/A
 Subregion (LRR or MLRA): LRRN Lat: 38.961947 Long: -80.590239 Datum: NAD 83
 Soil Map Unit Name: Gilpin-Upshur silt loams, 35 to 70 percent slopes, severely eroded (GwF3) NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:

Cowardin Code: pem; HGM: slope; WT: NRPWW

Information listed on this form represents the data collected in 2015. The wetland was revisited on 09/25/2019. The presence of wetland hydrology, hydrophytic vegetation, and hydric soils was unable to be confirmed because the wetland was obstructed by timber matting.

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>	
☒ Surface Water (A1)	☐ Surface Soil Cracks (B6)
☒ High Water Table (A2)	☐ Sparsely Vegetated Concave Surface (B8)
☒ Saturation (A3)	☒ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ 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)
☐ True Aquatic Plants (B14)	☐ FAC-Neutral Test (D5)
☐ Hydrogen Sulfide Odor (C1)	
☐ Oxidized Rhizospheres on Living Roots (C3)	
☐ Presence of Reduced Iron (C4)	
☐ Recent Iron Reduction in Tilled Soils (C6)	
☐ Thin Muck Surface (C7)	
☐ Other (Explain in Remarks)	

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): <u>5</u>	Wetland Hydrology Present? Yes ☒ No ☐
Water Table Present? Yes ☐ No ☒ Depth (inches): <u>8</u>	
Saturation Present? Yes ☒ No ☐ Depth (inches): <u>8</u> (includes capillary fringe)	

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

Remarks:

Wetlands forming on access road. Probably was wetland terrace historically until the access road was constructed. Surface water present with salamanders and tadpoles. Ephemeral. During 2015 survey.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-I20

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>83</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Fraxinus pennsylvanica</u>	<u>3</u>	☒	<u>FACW</u>	
2. <u>Rubus allegheniensis</u>	<u>3</u>	☒	<u>FACU</u>	
3. <u>Acer rubrum</u>	<u>3</u>	☒	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>9</u> = Total Cover 50% of total cover: <u>4.5</u> 20% of total cover: <u>1.8</u>				
Herb Stratum (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Dichanthelium clandestinum</u>	<u>10</u>	_____	<u>FAC</u>	
2. <u>Scirpus atrovirens</u>	<u>5</u>	_____	<u>OBL</u>	
3. <u>Microstegium vimineum</u>	<u>40</u>	☒	<u>FAC</u>	
4. <u>Carex vulpinoidea</u>	<u>10</u>	_____	<u>OBL</u>	
5. <u>Polygonum sp.</u>	<u>10</u>	_____	<u>ND</u>	
6. <u>Persicaria sagittata</u>	<u>15</u>	☒	<u>OBL</u>	
7. <u>Carex lurida</u>	<u>15</u>	☒	<u>OBL</u>	
8. <u>Impatiens capensis</u>	<u>10</u>	_____	<u>FACW</u>	
9. <u>Rumex crispus</u>	<u>5</u>	_____	<u>FAC</u>	
10. <u>Galium aparine</u>	<u>5</u>	_____	<u>FACU</u>	
11. _____	_____	_____	_____	
<u>125</u> = Total Cover 50% of total cover: <u>62.5</u> 20% of total cover: <u>25</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>

SOIL

Sampling Point: W-I20

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10yr 4/2	50	10yr 5/2	40	C	M	SiLo	
			7.5yr 5/6	10	C	M	SiC	
4-12	10YR 8/2	60	7.5yr 6/8	25	C	M	SiC	
			7.5yr 4/6	15	C	M	SiC	
					C			

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: 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 Mucky 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 Soils³:

- ☐ 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)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

Mixed coal finds within matrix.

Wetland Photograph Page

Wetland ID W-I20



Photograph Direction SW

Date: 05/17/2015

Comments: 2015 wetland delineation.



Photograph Direction SSE

Date: 09/25/19

Comments: 2019 wetland delineation confirmation.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/17/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-I20-UP1
 Investigator(s): G. Stevens, S. Townsend, S. Therkildson Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): N/A
 Subregion (LRR or MLRA): LRRN Lat: 38.961590 Long: -80.590006 Datum: NAD 83
 Soil Map Unit Name: Gilpin-Upshur silt loams, 35 to 70 percent slopes, severely eroded (GwF3) NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-I20-UP1

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Acer rubrum</u>	<u>15</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)
2. <u>Liriodendron tulipifera</u>	<u>15</u>	☒	<u>FACU</u>	
3. _____				Total Number of Dominant Species Across All Strata: <u>6</u> (B)
4. _____				
5. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.6%</u> (A/B)
6. _____				
7. _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
50% of total cover: <u>15</u> 20% of total cover: <u>6</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>Betula allegheniensis</u>	<u>5</u>	☒	<u>FAC</u>	
2. <u>Rosa multiflora</u>	<u>15</u>	☒	<u>FACU</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. _____				
4. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft in height. Woody vine – All woody vines greater than 3.28 ft in height.
5. _____				
6. _____				Hydrophytic Vegetation Present? Yes _____ No ☒
7. _____				
8. _____				50% of total cover: <u>10</u> 20% of total cover: <u>4</u>
9. _____				
Herb Stratum (Plot size: <u>5'</u>)				Woody Vine Stratum (Plot size: <u>15'</u>)
1. <u>Asclepius syriaca</u>	<u>15</u>		<u>FACU</u>	
2. <u>Erigeron annuus</u>	<u>5</u>		<u>FACU</u>	50% of total cover: <u>52.5</u> 20% of total cover: <u>21</u>
3. <u>Scirpus atrovirens</u>	<u>5</u>		<u>OBL</u>	
4. <u>Microstegium vimineum</u>	<u>40</u>	☒	<u>FAC</u>	Remarks: (Include photo numbers here or on a separate sheet.)
5. <u>Carex lurida</u>	<u>5</u>		<u>OBL</u>	
6. <u>Persicaria saggitata</u>	<u>25</u>	☒	<u>OBL</u>	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
7. <u>Impatiens capensis</u>	<u>5</u>		<u>FACW</u>	
8. <u>Parthenocissus quinquefolia</u>	<u>5</u>		<u>FACU</u>	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
9. _____				
10. _____				50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
11. _____				

SOIL

Sampling Point: W-I20-UP1**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR 4/6	100					SaCL	
3+								Refusal: Hard pan clay

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: 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 Mucky 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 Soils³:

- ☐ 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)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Hard pan clay
 Depth (inches): 3

Hydric Soil Present? Yes ☐ No ☒

Remarks:

Wetland veg forming over top of hardpan layer, no hydric soils, no hydrology.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/17/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-I21
 Investigator(s): SET SJT GS Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): N/A
 Subregion (LRR or MLRA): LRRN Lat: 38.964281 Long: -80.59092 Datum: NAD 83
 Soil Map Unit Name: Gilpin-Upshur silt loams, 35 to 70 percent slopes, severely eroded (GwF3) NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks:

Cowardin Code:pem HGM: depressional WT: NRPWW

Information listed on this form represents the data collected in 2015. The wetland was revisited on 09/25/2019. The presence of wetland hydrology, hydrophytic vegetation, and hydric soils was unable to be confirmed because the wetland was obstructed by timber matting.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☒ 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 on 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): 0.5
 Water Table Present? Yes ☐ No ☐ Depth (inches):
 Saturation Present? Yes ☐ No ☐ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-I21

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Eleagnus umbellata</u>	<u>10</u>	☒	<u>UPL</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>71.4%</u> (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
<u>10</u> = Total Cover 50% of total cover: <u>5</u> 20% of total cover: <u>2</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
<u>10</u> = Total Cover 50% of total cover: <u>5</u> 20% of total cover: <u>2</u>				
<u>10</u> = Total Cover 50% of total cover: <u>5</u> 20% of total cover: <u>2</u>				
<u>10</u> = Total Cover 50% of total cover: <u>5</u> 20% of total cover: <u>2</u>				
<u>10</u> = Total Cover 50% of total cover: <u>5</u> 20% of total cover: <u>2</u>				
<u>10</u> = Total Cover 50% of total cover: <u>5</u> 20% of total cover: <u>2</u>				
<u>10</u> = Total Cover 50% of total cover: <u>5</u> 20% of total cover: <u>2</u>				
<u>10</u> = Total Cover 50% of total cover: <u>5</u> 20% of total cover: <u>2</u>				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
<u>120</u> = Total Cover 50% of total cover: <u>60</u> 20% of total cover: <u>24</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>

SOIL

Sampling Point: W-I21

[illegible]

Wetland Photograph Page

Wetland ID W-I21



Photograph Direction South

Date: 05/17/2015

Comments: 2015 wetland delineation.



Photograph Direction North

Date: 09/25/19

Comments: 2019 wetland delineation confirmation.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/16/2015
Applicant/Owner: MVP State: WV Sampling Point: W-I21-UP1
Investigator(s): SET SJT GS Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): N/A
Subregion (LRR or MLRA): LRRN Lat: 38.964768 Long: -80.590849 Datum: NAD 83
Soil Map Unit Name: Gilpin-Upshur silt loams, 35 to 70 percent slopes, severely eroded (GwF3) NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland

HYDROLOGY

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

Field Observations:

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

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

Remarks:

Modified veg/soils due to access road

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-I21-UP1

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Asclepias syriaca</u>	<u>15</u>		<u>FACU</u>	
2. <u>Solidago canadensis</u>	<u>20</u>	☒	<u>FACU</u>	
3. <u>Trifolium repens</u>	<u>50</u>	☒	<u>FACU</u>	
4. <u>Parthenocissus quinquefoil</u>	<u>5</u>		<u>FACU</u>	
5. <u>Persicaria sagittata</u>	<u>15</u>		<u>OBL</u>	
6. <u>Carex novae-angliae</u>	<u>5</u>		<u>FACU</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>110</u> = Total Cover 50% of total cover: <u>55</u> 20% of total cover: <u>22</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>☒</u>

SOIL

Sampling Point: W-I21-UP1

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 09/27/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-UU7
 Investigator(s): Townsend, Therkildson, Pulver, Gracie Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Small ditch Slope (%): 5%
 Subregion (LRR or MLRA): LRRN Lat: 38.933637 Long: -80.585047 Datum: NAV83
 Soil Map Unit Name: Gilpin-Upshur silt loams, 35 to 70 percent slopes, severely eroded NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:

Cowardin Code: PEM; HGM: slope; WT: nrpww

Information on this form represents the data collected in 2015. The wetland was revisited on 09/26/2019. Presence of wetland hydrology, hydrophytic vegetation, and hydric soils was confirmed using the USACE EMP Regional Supplement delineation methodology.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

No saturation. In field, narrow band of wetland which drains to ravine during 2015 survey.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-UU7

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Cyperus odoratus</u>	<u>35</u>	<u>✓</u>	<u>FACW</u>	
2. <u>Schoenoplectus tabernaemontani</u>	<u>15</u>		<u>OBL</u>	
3. <u>Rosa sp.</u>	<u>5</u>		<u>ND</u>	
4. <u>Poa annua</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>	
5. <u>Arthraxon hispidus</u>	<u>10</u>		<u>FAC</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>85</u> = Total Cover 50% of total cover: <u>42.5</u> 20% of total cover: <u>17</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u>✓</u> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-UU7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-1	10YR 3/1	100					O	
1-16	10YR 4/4	35					Clay silt	
	10YR 4/1	60	5yr4/6	5	C	M/PL	Clay silt	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:			Indicators for Problematic Hydric Soils³:		
☐ Histosol (A1)	☐ Dark Surface (S7)	☐ 2 cm Muck (A10) (MLRA 147)			
☐ Histic Epipedon (A2)	☐ Polyvalue Below Surface (S8) (MLRA 147, 148)	☐ Coast Prairie Redox (A16)			
☐ Black Histic (A3)	☐ Thin Dark Surface (S9) (MLRA 147, 148)	☐ (MLRA 147, 148)			
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	☐ Piedmont Floodplain Soils (F19)			
☐ Stratified Layers (A5)	☒ Depleted Matrix (F3)	☐ (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 Mucky Mineral (S1) (LRR N,	☐ Iron-Manganese Masses (F12) (LRR N,				
☐ MLRA 147, 148)	☐ MLRA 136)				
☐ Sandy Gleyed Matrix (S4)	☐ Umbric Surface (F13) (MLRA 136, 122)				
☐ 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 _____

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Remarks:

Mottles are faint but abundant and oxidized rhizospheres present during 2015 survey.

Wetland Photograph Page

Wetland ID W-UU7



Photograph Direction South

Date: 09/27/2015

Comments: 2015 wetland delineation.



Photograph Direction WSW

Date: 09/26/19

Comments: 2019 wetland delineation confirmation.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 09/27/2015
Applicant/Owner: MVP State: WV Sampling Point: W-UU7-UP1
Investigator(s): Townsend, Therkildson, Pulver, Gracie Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Small ditch Slope (%): 5%
Subregion (LRR or MLRA): LRRN Lat: 4309493.41 n Long: 535963.80 e Datum: NAV83
Soil Map Unit Name: Gilpin-Upshur silt loams, 35 to 70 percent slopes, severely eroded NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	
Remarks: Cowardin Code: HGM: WT:	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
<u>Primary Indicators (minimum of one is required; check all that apply)</u>			
☐ 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 on 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): _____	Wetland Hydrology Present? Yes _____ No ☒	
Water Table Present? Yes _____ No ☒	Depth (inches): _____		
Saturation Present? Yes _____ No ☒ (includes capillary fringe)	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Fill materials begin at 4" and prevented further digging at 12". Angular 2"+ rock.			

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-UU7-UP1

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Panicum anceps</u>	<u>30</u>	<u>✓</u>	<u>FAC</u>	
2. <u>Trifolium repens</u>	<u>15</u>	<u>✓</u>	<u>FACU</u>	
3. <u>Eupatorium capillifolium</u>	<u>5</u>		<u>FACU</u>	
4. <u>Solanum sp.</u>	<u>5</u>		<u>ND</u>	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
5. <u>Chamaesyce prostrata</u>	<u>15</u>	<u>✓</u>	<u>FACU</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>70</u> = Total Cover 50% of total cover: <u>35</u> 20% of total cover: <u>14</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				

Remarks: (Include photo numbers here or on a separate sheet.)
 ND - Species not determined
 Species labeled ND were not included in dominance test

SOIL

Sampling Point: W-UU7-UP1

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/19/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-H103
 Investigator(s): A. Stott, A. Grech, D. McCullough Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Valley bottom Local relief (concave, convex, none): Concave Slope (%): 0-3%
 Subregion (LRR or MLRA): LRRN Lat: 38.933289 Long: -80.58482 Datum: NAD 83
 Soil Map Unit Name: Chagrin silt loam, 0 to 3 percent slopes, occasionally flooded (Cn) NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:
 Cowardin Code: PEM; HGM: depression; WT: rpwwn
 Information listed on this form represents the data collected in 2015. The wetland was revisited on 09/26/2019. Presence of wetland hydrology, hydrophytic vegetation, and hydric soils was confirmed using the USACE EMP Regional Supplement delineation methodology.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☒ No ☐
Surface Water Present? Yes ☐ No ☒	Depth (inches): <u>0"</u>	
Water Table Present? Yes ☒ No ☐	Depth (inches): <u>0"</u>	
Saturation Present? Yes ☒ No ☐	Depth (inches): <u>0"</u>	

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-H103

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3*</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Lysimachia nummularia</u>	<u>30</u>	☒	<u>FACW</u>	
2. <u>Scirpus atrovirens</u>	<u>20</u>	☒	<u>FACW</u>	
3. <u>Eleocharis acicularis</u>	<u>15</u>	☒	<u>OBL</u>	
4. <u>Carex sp.</u>	<u>15</u>	☒	<u>ND</u>	Hydrophytic Vegetation Present? Yes ☒ No _____
5. <u>Juncus tenuis</u>	<u>10</u>		<u>FAC</u>	
6. <u>Acorus calamus</u>	<u>5</u>		<u>OBL</u>	
7. <u>Trifolium pratense</u>	<u>5</u>		<u>FACU</u>	
8. <u>Holcus lanatus</u>	<u>5</u>		<u>FAC</u>	
9. _____	_____	_____	_____	105 = Total Cover 50% of total cover: <u>52.5</u> 20% of total cover: <u>21</u>
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	0 = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
0 = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.) ND - Not Determined. * Vegetation not ID'd to species level not included in dominance test.				

SOIL

Sampling Point: W-H103

[illegible]

Wetland Photograph Page

Wetland ID W-H103



Photograph Direction East

Date: 05/19/2015

Comments: 2015 wetland delineation.



Photograph Direction East

Date: 09/26/19

Comments: 2019 wetland delineation confirmation.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/19/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-H102
 Investigator(s): A. Stott, A. Grech, D. McCullough Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Valley bottom Local relief (concave, convex, none): Concave Slope (%): 0-3%
 Subregion (LRR or MLRA): LRRN Lat: 38.933172 Long: -80.58499 Datum: NAD 83
 Soil Map Unit Name: Chagrin silt loam, 0 to 3 percent slopes, occasionally flooded (Cn) NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:

Cowardin Code: PEM; HGM: depression; WT: rpwwn

Information listed on this form represents the data collected in 2015. The wetland was revisited on 09/26/2019. Presence of wetland hydrology, hydrophytic vegetation, and hydric soils was confirmed using the USACE EMP Regional Supplement delineation methodology.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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): 0"
 Water Table Present? Yes ☒ No ☐ Depth (inches): 0"
 Saturation Present? Yes ☒ No ☐ Depth (inches): 0"
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-H102

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Lysimachia nummularia</u>	<u>40</u>	<u>✓</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>✓</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Juncus tenuis</u>	<u>20</u>	<u>✓</u>	<u>FAC</u>	
3. <u>Scirpus atrovirens</u>	<u>20</u>	<u>✓</u>	<u>FACW</u>	
4. <u>Unknown carex (pics)</u>	<u>10</u>	_____	<u>ND</u>	
5. <u>Festuca rubra</u>	<u>10</u>	_____	<u>FACU</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>100</u> = Total Cover 50% of total cover: <u>50</u> 20% of total cover: <u>20</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u>✓</u> No <u> </u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.) ND - Not Determined.				

SOIL

Sampling Point: W-H102

[illegible]

Wetland Photograph Page

Wetland ID W-H102



Photograph Direction NE

Date: 05/19/2015

Comments: 2015 wetland delineation.



Photograph Direction NNE

Date: 09/26/19

Comments: 2019 wetland delineation confirmation.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/19/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-H102,103, 104-UP
 Investigator(s): A.Stott, A.Grech, D. McCullough Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Valley bottom Local relief (concave, convex, none): Convex Slope (%): 0-3%
 Subregion (LRR or MLRA): LRRN Lat: 38.933092 Long: -80.584964 Datum: NAD 83
 Soil Map Unit Name: Chagrin silt loam, 0 to 3 percent slopes, occasionally flooded (Cn) NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:
 Upland w-H102,103,and 104

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☐ No ☒
Surface Water Present? Yes ☐ No ☒	Depth (inches): _____	
Water Table Present? Yes ☐ No ☒	Depth (inches): _____	
Saturation Present? Yes ☐ No ☒ (includes capillary fringe)	Depth (inches): _____	

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-H102,103, 104-UP

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.3%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Holcus lanatus</u>	<u>20</u>	<u>✓</u>	<u>FAC</u>	
2. <u>Dactylis glomerata</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>	
3. <u>Trifolium pratense</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>	
4. <u>Asclepias exaltata</u>	<u>10</u>	_____	<u>FACU</u>	
5. <u>Ranunculus sp.</u>	<u>10</u>	_____	<u>ND</u>	
6. <u>Phleum pratense</u>	<u>10</u>	_____	<u>FACU</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>90</u> = Total Cover 50% of total cover: <u>45</u> 20% of total cover: <u>18</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.) ND - Not Determined.				Hydrophytic Vegetation Present? Yes <u> </u> No <u>✓</u>

SOIL

Sampling Point: W-H102,103, 104-UP

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/19/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-H107
 Investigator(s): A.Stott, A.Grech, D. McCullough Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Side-slope Local relief (concave, convex, none): Concave Slope (%): 3-8%
 Subregion (LRR or MLRA): LRRN Lat: 38.93318 Long: -80.583933 Datum: NAD 83
 Soil Map Unit Name: Sensabaugh silt loam (Su) NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:
 Cowardin Code: PEM; HGM: slope; WT: rpwwd
 Information listed on this data form represents the data collected in 2015. The wetland was revisited on 09/26/2019.
 Presence of wetland hydrology, hydrophytic vegetation, and hydric soils was confirmed using the USACE EMP Regional Supplement delineation methodology.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☒ No ☐
Surface Water Present? Yes ☐ No ☒	Depth (inches): <u>0"</u>	
Water Table Present? Yes ☒ No ☐	Depth (inches): <u>0"</u>	
Saturation Present? Yes ☒ No ☐	Depth (inches): <u>0"</u>	

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: W-H107

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
				Hydrophytic Vegetation Present? Yes ☒ No ☐
Sapling/Shrub Stratum (Plot size: <u>15'</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>) 1. <u>Eleocharis palustris</u> <u>45</u> ☒ <u>FACW</u> 2. <u>Holcus lanatus</u> <u>35</u> ☒ <u>FAC</u> 3. <u>Scirpus atrovirens</u> <u>25</u> ☒ <u>FACW</u> 4. <u>Panicum capillare</u> <u>10</u> ☐ <u>OBL</u> 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 11. _____ 50% of total cover: <u>57.5</u> 20% of total cover: <u>23</u>				
Woody Vine Stratum (Plot size: <u>15'</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-H107

[illegible]

Wetland Photograph Page

Wetland ID W-H107



Photograph Direction East

Date: 05/19/2015

Comments: 2015 wetland delineation.



Photograph Direction NNW

Date: 09/26/19

Comments: 2019 wetland delineation confirmation.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/19/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-H107-UP1
 Investigator(s): A.Stott, A.Grech, D. McCullough Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Side-slope Local relief (concave, convex, none): Convex Slope (%): 3-6%
 Subregion (LRR or MLRA): LRRN Lat: 38.933172 Long: -80.584109 Datum: NAD 83
 Soil Map Unit Name: Sensabaugh silt loam (Su) NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-H107-UP1

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.3%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Holcus lanatus</u>	<u>20</u>	<u>✓</u>	<u>FAC</u>	
2. <u>Dactylis glomerata</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>	
3. <u>Trifolium pratense</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>	
4. <u>Asclepias exaltata</u>	<u>10</u>	_____	<u>FACU</u>	
5. <u>Ranunculus sp.</u>	<u>10</u>	_____	<u>ND</u>	
6. <u>Phleum pratense</u>	<u>10</u>	_____	<u>FACU</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>90</u> = Total Cover 50% of total cover: <u>45</u> 20% of total cover: <u>18</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.) ND - Not Determined.				Hydrophytic Vegetation Present? Yes <u> </u> No <u>✓</u>

SOIL

Sampling Point: W-H107-UP1

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/18/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-H98
 Investigator(s): A.Stott, A.Grech, D. McCullough Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 0-3%
 Subregion (LRR or MLRA): LRRN Lat: 38.925472 Long: -80.577918 Datum: NAD 83
 Soil Map Unit Name: Gilpin-Upshur silt loams, 35 to 70 percent slopes, severely eroded (GwF3) NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:

Cowardin Code: PEM HGM: slope WT: nrpww

Information listed on this form represents the data collected in 2015. The wetland was revisited on 10/1/2019. Presence of wetland hydrology, hydrophytic vegetation, and hydric soils was confirmed using the USACE EMP Regional Supplement delineation methodology.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☒ 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 on 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): 0"
 Saturation Present? Yes ☒ No ☐ Depth (inches): 0"
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

Heavy rain previous day

In cow pasture.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-H98

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Microstegium vimineum</u>	<u>25</u>	☒	<u>FAC</u>	
2. <u>Poa trivialis</u>	<u>20</u>	☒	<u>FACW</u>	
3. <u>Pilea pumila</u>	<u>15</u>	☒	<u>FACW</u>	
4. <u>Juncus tenuis</u>	<u>15</u>	☒	<u>FAC</u>	
5. <u>Persicaria saggitata</u>	<u>15</u>	☒	<u>OBL</u>	
6. <u>Impatiens capensis</u>	<u>5</u>	_____	<u>FACW</u>	
7. <u>Onoclea sensibilis</u>	<u>5</u>	_____	<u>FACW</u>	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>100</u> = Total Cover 50% of total cover: <u>50</u> 20% of total cover: <u>20</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-H98

[illegible]

Wetland Photograph Page

Wetland ID W-H98



Photograph Direction SW

Date: 05/18/2015

Comments: 2015 wetland delineation.



Photograph Direction SW

Date: 10/01/19

Comments: 2019 wetland delineation confirmation.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/18/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-H98-UP1
 Investigator(s): A.Stott, A.Grech, D. McCullough Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Side-slope Local relief (concave, convex, none): Convex Slope (%): 4-8%
 Subregion (LRR or MLRA): LRRN Lat: 38.925226° Long: -80.577659° Datum: NAD 83
 Soil Map Unit Name: Gilpin-Upshur silt loams, 35 to 70 percent slopes, severely eroded NWI classification: None

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 ☒ Wetland Hydrology Present? Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Remarks: Upland	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ☐ Surface Water (A1) ☐ True Aquatic Plants (B14) ☐ High Water Table (A2) ☐ Hydrogen Sulfide Odor (C1) ☐ Saturation (A3) ☐ Oxidized Rhizospheres on 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) ☐ Geomorphic Position (D2) ☐ Inundation Visible on Aerial Imagery (B7) ☐ Shallow Aquitard (D3) ☐ Water-Stained Leaves (B9) ☐ Microtopographic Relief (D4) ☐ Aquatic Fauna (B13) ☐ FAC-Neutral Test (D5)		<u>Secondary Indicators (minimum of two required)</u> ☐ 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? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes ☐ No ☒	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-H98-UP1

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Quercus rubra</u>	<u>15</u>	☒	<u>FACU</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>4*</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____	_____	_____	_____	
<u>15</u> = Total Cover 50% of total cover: <u>7.5</u> 20% of total cover: <u>3</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No ☒
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Festuca rubra</u>	<u>30</u>	☒	<u>FACU</u>	Hydrophytic Vegetation Present? Yes _____ No ☒
2. <u>Ranunculus sp.</u>	<u>15</u>	☒	<u>ND</u>	
3. <u>Achillea millefolium</u>	<u>15</u>	☒	<u>FACU</u>	
4. <u>Potentilla indica</u>	<u>15</u>	☒	<u>FACU</u>	
5. <u>Prunella vulgaris</u>	<u>5</u>	_____	<u>FACU</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>80</u> = Total Cover 50% of total cover: <u>40</u> 20% of total cover: <u>16</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No ☒
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				

Remarks: (Include photo numbers here or on a separate sheet.)
 ND - Not Determined.

 * Vegetation not ID'd to species level not included in dominance test.

SOIL

Sampling Point: W-H98-UP1

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/19/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-H108
 Investigator(s): A.Stott, A.Grech, D. McCullough Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 0-4%
 Subregion (LRR or MLRA): LRRN Lat: 38.918701 Long: -80.573688 Datum: NAD 83
 Soil Map Unit Name: Gilpin-Upshur silt loams, 35 to 70 percent slopes, severely eroded (GwF3) NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:

Cowardin Code: PEM; HGM: depression; WT: rpwwn

Information listed on this form represents the data collected in 2015. The wetland was revisited on 10/1/2019. Presence of wetland hydrology, hydrophytic vegetation, and hydric soils was confirmed using the USACE EMP Regional Supplement delineation methodology.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☒ 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 on 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): 0.5"
 Water Table Present? Yes ☒ No ☐ Depth (inches): 0"
 Saturation Present? Yes ☒ No ☐ Depth (inches): 0"
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-H108

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Poa trivialis</u>	<u>40</u>	<u>✓</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Carex lurida</u>	<u>15</u>	<u>✓</u>	<u>OBL</u>	
3. <u>Packera aurea</u>	<u>15</u>	<u>✓</u>	<u>FACW</u>	
4. <u>Pilea pumila</u>	<u>10</u>	_____	<u>FACW</u>	
5. <u>Trifolium pratense</u>	<u>10</u>	_____	<u>FACU</u>	
6. <u>Scirpus atrovirens</u>	<u>10</u>	_____	<u>OBL</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>100</u> = Total Cover 50% of total cover: <u>50</u> 20% of total cover: <u>20</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes <u>✓</u> No <u> </u>

SOIL

Sampling Point: W-H108

[illegible]

Wetland Photograph Page

Wetland ID W-H108



Photograph Direction SW

Date: 05/19/2015

Comments: 2015 wetland delineation.



Photograph Direction SW

Date: 10/01/19

Comments: 2019 wetland delineation confirmation.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/19/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-H108-UP1
 Investigator(s): A.Stott, A.Grech, D. McCullough Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Side-slope Local relief (concave, convex, none): Convex Slope (%): 3-6%
 Subregion (LRR or MLRA): LRRN Lat: 38.918543 Long: -80.573715 Datum: NAD 83
 Soil Map Unit Name: Gilpin-Upshur silt loams, 35 to 70 percent slopes, severely eroded (GwF3) NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	
Remarks: Upland	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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): _____	Wetland Hydrology Present? Yes ☐ No ☒
Water Table Present? Yes ☐ No ☒	Depth (inches): _____	
Saturation Present? Yes ☐ No ☒ (includes capillary fringe)	Depth (inches): _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-H108-UP1

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Liriodendron tulipifera</u>	<u>10</u>	☒	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>6*</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
2. <u>Acer saccharum</u>	<u>10</u>	☒	<u>FACU</u>	
3. <u>Juglans nigra</u>	<u>5</u>	☒	<u>FACU</u>	
4. _____				
5. _____				
6. _____				
7. _____				
<u>25</u> = Total Cover 50% of total cover: <u>12.5</u> 20% of total cover: <u>5</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
<u>5</u> = Total Cover 50% of total cover: <u>2.5</u> 20% of total cover: <u>1</u>				
<u>90</u> = Total Cover 50% of total cover: <u>45</u> 20% of total cover: <u>18</u>				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes <u> </u> No ☒
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.) ND - Not Determined. * Vegetation not ID'd to species level not included in dominance test.				

SOIL

Sampling Point: W-H108-UP1

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/16/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-H96
 Investigator(s): A. Stott, A. Grech, D. McCullough Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Side-slope Local relief (concave, convex, none): Concave Slope (%): 6-10%
 Subregion (LRR or MLRA): LRRN Lat: 38.913938 Long: -80.571897 Datum: NAD 83
 Soil Map Unit Name: Gilpin-Upshur silt loams, 35 to 70 percent slopes, severely eroded (GwF3) NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:
 Cowardin Code: PEM; HGM: riverine ; WT: rpwwd
 Information listed on this form represents the data collected in 2015. The wetland was revisited on 10/01/2019. Presence of wetland hydrology, hydrophytic vegetation, and hydric soils was confirmed using the USACE EMP Regional Supplement delineation methodology.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☒ No ☐
Surface Water Present? Yes ☐ No ☒	Depth (inches): <u> </u>	
Water Table Present? Yes ☒ No ☐	Depth (inches): <u>12"</u>	
Saturation Present? Yes ☒ No ☐ (includes capillary fringe)	Depth (inches): <u>0"</u>	

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-H96

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
0 = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
0 = Total Cover				Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Scirpus cyperinus</u>	<u>50</u>	☒	<u>FACW</u>	
2. <u>Juncus effusus</u>	<u>10</u>		<u>FACW</u>	
3. <u>Persicaria saggitata</u>	<u>10</u>		<u>OBL</u>	
4. <u>Microstegium vimineum</u>	<u>10</u>		<u>FAC</u>	
5. <u>Mimulus ringens</u>	<u>5</u>		<u>OBL</u>	
6. <u>Verbesina alternifolia</u>	<u>5</u>		<u>FAC</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
90 = Total Cover				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
50% of total cover: <u>45</u>		20% of total cover: <u>18</u>		
Woody Vine Stratum (Plot size: <u>15'</u>)				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
0 = Total Cover				Hydrophytic Vegetation Present? Yes ☒ No _____
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-H96

[illegible]

Wetland Photograph Page

Wetland ID W-H96



Photograph Direction South

Date: 05/16/2015

Comments: 2015 wetland delineation.



Photograph Direction East

Date: 10/01/19

Comments: 2019 wetland delineation confirmation.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/16/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-H96-UP1
 Investigator(s): A.Stott, A.Grech, D. McCullough Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Side-slope Local relief (concave, convex, none): Convex Slope (%): 4-8%
 Subregion (LRR or MLRA): LRRN Lat: 38.913869 Long: -80.571963 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 15 to 25 percent slopes (VaD) NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-H96-UP1

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.6%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Elaeagnus umbellata</u>	<u>25</u>	☒	<u>UPL</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>25</u> = Total Cover 50% of total cover: <u>12.5</u> 20% of total cover: <u>5</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Verbesina alternifolia</u>	<u>30</u>	☒	<u>FAC</u>	
2. <u>Holcus lanatus</u>	<u>20</u>	☒	<u>FAC</u>	
3. <u>Microstegium vimineum</u>	<u>10</u>	_____	<u>FAC</u>	
4. <u>Poa sp</u>	<u>10</u>	_____	<u>ND</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>70</u> = Total Cover 50% of total cover: <u>35</u> 20% of total cover: <u>14</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>

SOIL

Sampling Point: W-H96-UP1

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/16/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-H95
 Investigator(s): A.Stott, A.Grech, D. McCullough Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Side-slope Local relief (concave, convex, none): Concave Slope (%): 0-4%
 Subregion (LRR or MLRA): LRRN Lat: 38.913257 Long: -80.571925 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 15 to 25 percent slopes (VaD) NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:
 Cowardin Code: PEM
 HGM: riverine
 WT: rpwwd

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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): <u> </u> Water Table Present? Yes ☒ No ☐ Depth (inches): <u>4"</u> Saturation Present? Yes ☒ No ☐ Depth (inches): <u>0"</u> (includes capillary fringe)		Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-H95

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80%</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Sambucus nigra</u>	<u>5</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)
2. <u>Elaeagnus umbellata</u>	<u>5</u>	☒	<u>UPL</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>5</u> 20% of total cover: <u>2</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Carex lurida</u>	<u>30</u>	☒	<u>FACW</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Juncus effusus</u>	<u>30</u>	☒	<u>FACW</u>	
3. <u>Dichanthelium clandestinum</u>	<u>10</u>	_____	<u>FAC</u>	
4. <u>Mentha spicata</u>	<u>5</u>	_____	<u>FACW</u>	
5. <u>Holcus lanatus</u>	<u>5</u>	_____	<u>FAC</u>	
6. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>40</u> 20% of total cover: <u>16</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. <u>Toxicodendron radicans</u>	<u>30</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Present? Yes ☒ No _____
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>15</u> 20% of total cover: <u>6</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-H95

[illegible]

Wetland Photograph Page

Wetland ID W-H95 Date 05/16/2015



Photograph Direction North

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 05/16/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-H95-UP1
 Investigator(s): A.Stott, A.Grech, D. McCullough Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Side-slope Local relief (concave, convex, none): Convex Slope (%): 0-2%
 Subregion (LRR or MLRA): LRRN Lat: 38.913235° Long: -80.572075° Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 15 to 25 percent slopes (VaD) NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	
Remarks: Upland	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☐ No ☒
Surface Water Present? Yes ☐ No ☒ Depth (inches): _____	Water Table Present? Yes ☐ No ☒ Depth (inches): _____	
Saturation Present? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-H95-UP1

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2*</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Eleagnus umbellata</u>	<u>25</u>	<u>✓</u>	<u>UPL</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>25</u> = Total Cover 50% of total cover: <u>12.5</u> 20% of total cover: <u>5</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Trifolium repens</u>	<u>30</u>	<u>✓</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Ranunculus sp.</u>	<u>20</u>	<u>✓</u>	<u>ND</u>	
3. <u>Achillea millefolium</u>	<u>10</u>	_____	<u>FACU</u>	
4. <u>Poa sp.</u>	<u>10</u>	_____	<u>ND</u>	
5. <u>Plantago lanceolata</u>	<u>10</u>	_____	<u>UPL</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
<u>80</u> = Total Cover 50% of total cover: <u>40</u> 20% of total cover: <u>16</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u> </u> No <u>✓</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.) ND - Not Determined. * Vegetation not ID'd to species level not included in dominance test.				

SOIL

Sampling Point: W-H95-UP1

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 12/10/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-VV9
 Investigator(s): Jason McGuirk, Kevin Pulver Section, Township, Range: NA
 Landform (hillslope, terrace, etc.): valley bottom Local relief (concave, convex, none): Linear Slope (%): 1-2
 Subregion (LRR or MLRA): LRRN Lat: 38.904826 Long: -80.563874 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 25 to 35 percent slopes NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks:

Cowardin Code: PEM

HGM: Slope

WT: RPWWD

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☒ 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 on 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): .25
 Water Table Present? Yes ☒ No ☐ Depth (inches): 0
 Saturation Present? Yes ☒ No ☐ Depth (inches): 0
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-VV9

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status		
1. <u>Platanus occidentalis</u>	<u>10</u>	☒	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)	
2. <u>Carpinus caroliniana</u>	<u>10</u>	☒	<u>FAC</u>		
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
50% of total cover: <u>10</u> 20% of total cover: <u>4</u>					
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
1. _____					
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>					
Herb Stratum (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
1. <u>Carex lurida</u>	<u>25</u>	☒	<u>OBL</u>		
2. <u>Dichanthelium clandestinum</u>	<u>10</u>		<u>FAC</u>		
3. <u>Microstegium vimineum</u>	<u>20</u>	☒	<u>FAC</u>		
4. <u>Mimulus ringens</u>	<u>15</u>	☒	<u>OBL</u>		
5. <u>Scirpus atrovirens</u>	<u>10</u>		<u>OBL</u>		
6. <u>Juncus effusus</u>	<u>10</u>		<u>FACW</u>		
7. <u>Typha latifolia</u>	<u>5</u>		<u>OBL</u>		
8. <u>Scirpus cyperinus</u>	<u>5</u>		<u>OBL</u>		
9. _____					
10. _____					
11. _____					
50% of total cover: <u>50</u> 20% of total cover: <u>20</u>					
Woody Vine Stratum (Plot size: <u>15'</u>)				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes ☒ No _____	
1. _____					
2. _____					
3. _____					
4. _____					
5. _____					
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>					
Remarks: (Include photo numbers here or on a separate sheet.)					

SOIL

Sampling Point: W-VV9

[illegible]

Wetland Photograph Page

Wetland ID W-VV9 Date 12/10/2015



Photograph Direction SW

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 12/10/2015
Applicant/Owner: MVP State: WV Sampling Point: W-vv8, vv9, vv10, vv11-UPL
Investigator(s): Jason McGuirk, Kevin Pulver Section, Township, Range: NA
Landform (hillslope, terrace, etc.): valley bottom Local relief (concave, convex, none): Linear Slope (%): 1-2
Subregion (LRR or MLRA): LRRN Lat: 38.903626 Long: -80.563397 Datum: NAD 83
Soil Map Unit Name: Vandalia silt loam, 25 to 35 percent slopes NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	
Remarks: Upland	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☐ No ☒
Surface Water Present? Yes ☐ No ☒ Depth (inches): _____	Water Table Present? Yes ☐ No ☒ Depth (inches): _____	
Saturation Present? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-w8, w9, w10, w11-UPL

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>20</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Prunus serotina</u>	<u>5</u>	☒	<u>FACU</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>5</u> = Total Cover 50% of total cover: <u>2.5</u> 20% of total cover: <u>1</u>				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Verbesina alternifolia</u>	<u>10</u>	_____	<u>FAC</u>	
2. <u>Phleum pratense</u>	<u>15</u>	☒	<u>FACU</u>	
3. <u>Daucus carata</u>	<u>15</u>	☒	<u>UPL</u>	
4. <u>Rubus allegheniensis</u>	<u>15</u>	☒	<u>FACU</u>	
5. <u>Trifolium pratense</u>	<u>5</u>	_____	<u>FACU</u>	
6. <u>Microstegium vimineum</u>	<u>15</u>	☒	<u>FAC</u>	
7. <u>Juncus effusus</u>	<u>5</u>	_____	<u>FACW</u>	
8. <u>Scirpus atrovirens</u>	<u>5</u>	_____	<u>OBL</u>	
9. <u>Dichanthelium clandestinum</u>	<u>5</u>	_____	<u>FAC</u>	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>90</u> = Total Cover 50% of total cover: <u>45</u> 20% of total cover: <u>18</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes <u> </u> No ☒
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-vv8, wv9, w10, w11-UPL

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 06/09/2016
 Applicant/Owner: MVP State: WV Sampling Point: W-CD17
 Investigator(s): HBS, CV Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 0-3
 Subregion (LRR or MLRA): LRRN Lat: 38.904118 Long: -80.563696 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 25 to 35 percent slopes NWI classification: None

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 ☐ Wetland Hydrology Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Remarks: Cowardin Code: <u>PEM</u> HGM: <u>Riverine</u> Water Type: <u>RPWWD</u> <u>Abuts S-CD16 in an excavated roadside ditch.</u>	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ☒ Surface Water (A1) ☐ True Aquatic Plants (B14) ☒ High Water Table (A2) ☐ Hydrogen Sulfide Odor (C1) ☒ Saturation (A3) ☐ Oxidized Rhizospheres on 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)		<u>Secondary Indicators (minimum of two required)</u> ☐ 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): <u>1</u> Water Table Present? Yes ☒ No ☐ Depth (inches): <u>5</u> Saturation Present? Yes ☒ No ☐ Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes ☒ No ☐	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-CD17

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Acorus calamus</u>	<u>25</u>	☒	<u>OBL</u>	
2. <u>Poa trivialis</u>	<u>15</u>	☒	<u>FACW</u>	
3. <u>Onoclea sensibilis</u>	<u>15</u>	☒	<u>FACW</u>	
4. <u>Equisetum arvense</u>	<u>15</u>	☒	<u>FAC</u>	
5. <u>Dichanthelium clandestinum</u>	<u>5</u>	_____	<u>FAC</u>	
6. <u>Impatiens capensis</u>	<u>5</u>	_____	<u>FACW</u>	
7. <u>Carex lurida</u>	<u>3</u>	_____	<u>OBL</u>	
8. <u>Carex vulpinoidea</u>	<u>3</u>	_____	<u>OBL</u>	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>86</u> = Total Cover 50% of total cover: <u>43</u> 20% of total cover: <u>17.2</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-CD17

[illegible]

Wetland Photograph Page

Wetland ID W-CD17 Date 06/09/2016



Photograph Direction South

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 06/09/2016
 Applicant/Owner: MVP State: WV Sampling Point: W-CD16
 Investigator(s): HBS, CV Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 5-8
 Subregion (LRR or MLRA): LRRN Lat: 38.903761 Long: -80.563371 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 25 to 35 percent slopes NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks: Cowardin Code: PEM HGM: Slope Water Type: RPWWN
 Adjacent to S-VV12 & S-VV13. Disturbed roadside wetland. Compacted and disturbed soils. Low drainage collection point at the intersection of two existing dirt roads.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☒ No ☐
Surface Water Present? Yes ☐ No ☒	Depth (inches): _____	
Water Table Present? Yes ☐ No ☒	Depth (inches): _____	
Saturation Present? Yes ☐ No ☒ (includes capillary fringe)	Depth (inches): _____	

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-CD16

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>45</u></td> <td>x 1 = <u>45</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>20</u></td> <td>x 5 = <u>100</u></td> </tr> <tr> <td>Column Totals: <u>85</u> (A)</td> <td><u>205</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.41</u>	Total % Cover of:	Multiply by:	OBL species <u>45</u>	x 1 = <u>45</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>20</u>	x 5 = <u>100</u>	Column Totals: <u>85</u> (A)	<u>205</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>45</u>	x 1 = <u>45</u>																	
FACW species <u>5</u>	x 2 = <u>10</u>																	
FAC species <u>10</u>	x 3 = <u>30</u>																	
FACU species <u>5</u>	x 4 = <u>20</u>																	
UPL species <u>20</u>	x 5 = <u>100</u>																	
Column Totals: <u>85</u> (A)	<u>205</u> (B)																	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																		
Herb Stratum (Plot size: <u>5'</u>)																		
1. <u>Carex frankii</u>	<u>40</u>	☒	<u>OBL</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Bromus inermis</u>	<u>15</u>	☒	<u>UPL</u>															
3. <u>Juncus tenuis</u>	<u>10</u>		<u>FAC</u>															
4. <u>Trifolium campestre</u>	<u>5</u>		<u>UPL</u>															
5. <u>Trifolium pratense</u>	<u>5</u>		<u>FACU</u>															
6. <u>Carex vulpinoidea</u>	<u>5</u>		<u>OBL</u>															
7. <u>Scirpus atrovirens</u>	<u>5</u>		<u>FACW</u>															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>85</u> = Total Cover 50% of total cover: <u>42.5</u> 20% of total cover: <u>17</u>																		
Woody Vine Stratum (Plot size: <u>15'</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																		
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes ☒ No _____														

SOIL

Sampling Point: W-CD16

[illegible]

Wetland Photograph Page

Wetland ID W-CD16 Date 06/09/2016



Photograph Direction NE

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 06/09/2016
 Applicant/Owner: MVP State: WV Sampling Point: W-CD16/17-UP
 Investigator(s): HBS, CV Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 3-5
 Subregion (LRR or MLRA): LRRN Lat: 38.903786 Long: -80.563538 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 25 to 35 percent slopes NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks: Cowardin Code: UPLAND HGM: Water Type:

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☐ No ☒
Surface Water Present? Yes ☐ No ☒	Depth (inches): <u></u>	
Water Table Present? Yes ☐ No ☒	Depth (inches): <u></u>	
Saturation Present? Yes ☐ No ☒ (includes capillary fringe)	Depth (inches): <u></u>	

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-CD16/17-UP

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Sapling/Shrub Stratum (Plot size: <u>15'</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____				
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>) 1. <u>Bromus inermis</u> <u>50</u> ☒ <u>UPL</u> 2. <u>Carex frankii</u> <u>10</u> ☒ <u>OBL</u> 3. <u>Trifolium repens</u> <u>10</u> ☒ <u>FACU</u> 4. <u>Solidago gigantea</u> <u>5</u> ☐ <u>FACW</u> 5. <u>Apocynum cannabinum</u> <u>5</u> ☐ <u>FACU</u> 6. <u>Trifolium campestre</u> <u>5</u> ☐ <u>UPL</u> 7. <u>Dactylis glomerata</u> <u>5</u> ☐ <u>FACU</u> 8. _____ 9. _____ 10. _____ 11. _____				
_____ = Total Cover 50% of total cover: <u>45</u> 20% of total cover: <u>18</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>15'</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____				
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Hydrophytic Vegetation Present? Yes _____ No ☒				
Remarks: (Include photo numbers here or on a separate sheet.) 				

SOIL

Sampling Point: W-CD16/17-UP

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 12/10/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-VV8
 Investigator(s): Jason McGuirk, Kevin Pulver Section, Township, Range: NA
 Landform (hillslope, terrace, etc.): valley bottom Local relief (concave, convex, none): Concave Slope (%): 1-2
 Subregion (LRR or MLRA): LRRN Lat: 38.903519 Long: -80.563147 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 25 to 35 percent slopes NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks:

Cowardin Code: PEM

HGM: Riverine

WT: RPWWD

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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? Yes ☒ No ☐ Depth (inches): 0
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-VV8

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Platanus occidentalis</u>	<u>10</u>	☒	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>83</u> (A/B)
2. <u>Prunus serotina</u>	<u>5</u>	☒	<u>FACU</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
15 = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
50% of total cover: <u>7.5</u> 20% of total cover: <u>3</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Lindera benzoin</u>	<u>20</u>	☒	<u>FAC</u>	
2. <u>Acer negundo</u>	<u>5</u>	☒	<u>FAC</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
25 = Total Cover				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: <u>12.5</u> 20% of total cover: <u>5</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Dichanthelium clandestinum</u>	<u>45</u>	☒	<u>FAC</u>	
2. <u>Microstegium vimineum</u>	<u>35</u>	☒	<u>FAC</u>	
3. <u>Scirpus atrovirens</u>	<u>10</u>		<u>OBL</u>	
4. <u>Boehmeria cylindrica</u>	<u>5</u>		<u>FACW</u>	
5. <u>Onoclea sensibilis</u>	<u>5</u>		<u>FACW</u>	
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
100 = Total Cover				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
50% of total cover: <u>50</u> 20% of total cover: <u>20</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
0 = Total Cover				Hydrophytic Vegetation Present? Yes ☒ No _____
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-VV8

[illegible]

Wetland Photograph Page

Wetland ID W-VV8 Date 12/10/2015



Photograph Direction East

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 06/09/2016
 Applicant/Owner: MVP State: WV Sampling Point: W-CD18
 Investigator(s): HBS, CV Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Valley Local relief (concave, convex, none): Concave Slope (%): 0-3
 Subregion (LRR or MLRA): LRRN Lat: 38.902780 Long: -80.564629 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 25 to 35 percent slopes NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks: Cowardin Code: PEM HGM: Slope Water Type: RPWWD
 Abutting S-VV13. Follows ditch abutting access road.

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>	
☒ Surface Water (A1)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ 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)
☐ True Aquatic Plants (B14)	☒ FAC-Neutral Test (D5)
☐ Hydrogen Sulfide Odor (C1)	
☐ Oxidized Rhizospheres on Living Roots (C3)	
☐ Presence of Reduced Iron (C4)	
☐ Recent Iron Reduction in Tilled Soils (C6)	
☐ Thin Muck Surface (C7)	
☐ Other (Explain in Remarks)	

Field Observations: Surface Water Present? Yes ☒ No ☐ Depth (inches): <u>0.5</u> Water Table Present? Yes ☐ No ☒ Depth (inches): <u> </u> Saturation Present? Yes ☐ No ☒ Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-CD18

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Dulichium arundinaceum</u>	<u>30</u>	☒	<u>OBL</u>	Hydrophytic Vegetation Present? Yes ☒ No _____
2. <u>Carex frankii</u>	<u>20</u>	☒	<u>OBL</u>	
3. <u>Carex crinita</u>	<u>20</u>	☒	<u>OBL</u>	
4. <u>Leersia oryzoides</u>	<u>15</u>		<u>OBL</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>85</u> = Total Cover 50% of total cover: <u>42.5</u> 20% of total cover: <u>17</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-CD18

[illegible]

Wetland Photograph Page

Wetland ID W-CD18 Date 06/09/2016



Photograph Direction NE

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 06/09/2016
Applicant/Owner: MVP State: WV Sampling Point: W-CD19
Investigator(s): HBS, CV Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Valley Local relief (concave, convex, none): Concave Slope (%): 3-5
Subregion (LRR or MLRA): LRRN Lat: 38.902649 Long: -80.564675 Datum: NAD 83
Soil Map Unit Name: Vandalia silt loam, 25 to 35 percent slopes NWI classification: None

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 ☐ Wetland Hydrology Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Remarks: Cowardin Code: <u>PEM</u> HGM: <u>Riverine</u> Water Type: <u>RPWWD</u> <u>Abuts S-VV13</u>	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		☐ Surface Soil Cracks (B6)
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Sparsely Vegetated Concave Surface (B8)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Stunted or Stressed Plants (D1)
☐ Iron Deposits (B5)		☒ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Shallow Aquitard (D3)
☐ Water-Stained Leaves (B9)		☐ Microtopographic Relief (D4)
☐ Aquatic Fauna (B13)		☒ FAC-Neutral Test (D5)
Field Observations:		Wetland Hydrology Present? Yes ☒ No ☐
Surface Water Present? Yes ☐ No ☒ Depth (inches): <u> </u>	Water Table Present? Yes ☐ No ☒ Depth (inches): <u> </u>	
Saturation Present? Yes ☐ No ☒ Depth (inches): <u> </u> (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-CD19

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Symphyotrichum prenanthoides</u>	<u>20</u>	☒	<u>FAC</u>	
2. <u>Microstegium vimineum</u>	<u>20</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Present? Yes ☒ No _____
3. <u>Carex crinita</u>	<u>15</u>	☒	<u>OBL</u>	
4. <u>Carex lurida</u>	<u>5</u>	_____	<u>OBL</u>	
5. <u>Dichanthelium clandestinum</u>	<u>5</u>	_____	<u>FAC</u>	
6. <u>Allium cernuum</u>	<u>5</u>	_____	<u>FACU</u>	
7. <u>Impatiens capensis</u>	<u>5</u>	_____	<u>FACW</u>	
8. <u>Leersia oryzoides</u>	<u>5</u>	_____	<u>OBL</u>	
9. <u>Persicaria sagittata</u>	<u>5</u>	_____	<u>OBL</u>	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>85</u> = Total Cover 50% of total cover: <u>42.5</u> 20% of total cover: <u>17</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-CD19

[illegible]

Wetland Photograph Page

Wetland ID W-CD19 Date 06/09/2016



Photograph Direction NE

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 06/09/2016
 Applicant/Owner: MVP State: WV Sampling Point: W-CD18/CD19-UP
 Investigator(s): HBS, CV Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Valley Local relief (concave, convex, none): Convex Slope (%): 3-5
 Subregion (LRR or MLRA): LRRN Lat: 38.902814 Long: -80.564578 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 25 to 35 percent slopes NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks: Cowardin Code: UPLAND HGM: Water Type:

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☐ No ☒
Surface Water Present? Yes ☐ No ☒	Depth (inches): <u></u>	
Water Table Present? Yes ☐ No ☒	Depth (inches): <u></u>	
Saturation Present? Yes ☐ No ☒ (includes capillary fringe)	Depth (inches): <u></u>	

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-CD18/CD19-UP

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Acer saccharum</u>	<u>15</u>	☒	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>86%</u> (A/B)
2. <u>Platanus occidentalis</u>	<u>10</u>	☒	<u>FACW</u>	
3. <u>Acer negundo</u>	<u>10</u>	☒	<u>FAC</u>	
4. _____				
5. _____				
6. _____				
7. _____				
<u>35</u> = Total Cover 50% of total cover: <u>17.5</u> 20% of total cover: <u>7</u>				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Lindera benzoin</u>	<u>10</u>	☒	<u>FAC</u>	
2. _____				
3. _____				
4. _____				
5. _____				
<u>10</u> = Total Cover 50% of total cover: <u>5</u> 20% of total cover: <u>2</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Symphytotrichum prenanthoides</u>	<u>30</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Equisetum arvense</u>	<u>20</u>	☒	<u>FAC</u>	
3. <u>Dichanthelium clandestinum</u>	<u>15</u>	☒	<u>FAC</u>	
4. <u>Verbesina alternifolia</u>	<u>5</u>		<u>FAC</u>	
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
<u>70</u> = Total Cover 50% of total cover: <u>35</u> 20% of total cover: <u>14</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Hydrophytic Vegetation Present? Yes ☒ No _____				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-CD18/CD19-UP

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 06/09/2016
 Applicant/Owner: MVP State: WV Sampling Point: W-CD21
 Investigator(s): HBS, CV Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Valley Local relief (concave, convex, none): Concave Slope (%): 0-3
 Subregion (LRR or MLRA): LRRN Lat: 38.901136 Long: -80.566482 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 25 to 35 percent slopes NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks: Cowardin Code: PEM HGM: Slope Water Type: RPWWN
 Adjacent to S-VV13. In ditch along existing access road.

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>	
☒ Surface Water (A1)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☒ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ 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)
☐ True Aquatic Plants (B14)	☒ FAC-Neutral Test (D5)
☐ Hydrogen Sulfide Odor (C1)	
☐ Oxidized Rhizospheres on Living Roots (C3)	
☐ Presence of Reduced Iron (C4)	
☐ Recent Iron Reduction in Tilled Soils (C6)	
☐ Thin Muck Surface (C7)	
☐ Other (Explain in Remarks)	

Field Observations: Surface Water Present? Yes ☒ No ☐ Depth (inches): <u>0.25</u> Water Table Present? Yes ☐ No ☒ Depth (inches): <u> </u> Saturation Present? Yes ☐ No ☒ Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-CD21

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Salix interior</u>	<u>2</u>		<u>FACW</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>2</u> = Total Cover 50% of total cover: <u>1</u> 20% of total cover: <u>0.4</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Juncus effusus</u>	<u>15</u>	☒	<u>FACW</u>	
2. <u>Carex vulpinoidea</u>	<u>15</u>	☒	<u>OBL</u>	
3. <u>Rosa multiflora</u>	<u>10</u>	☒	<u>FACU</u>	
4. <u>Lysimachia nummularia</u>	<u>10</u>	☒	<u>FACW</u>	
5. <u>Dichanthelium clandestinum</u>	<u>10</u>	☒	<u>FAC</u>	
6. <u>Packera aurea</u>	<u>5</u>		<u>FACW</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>65</u> = Total Cover 50% of total cover: <u>32.5</u> 20% of total cover: <u>13</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes ☒ No ☐

SOIL

Sampling Point: W-CD21

[illegible]

Wetland Photograph Page

Wetland ID W-CD21 Date 06/09/2016



Photograph Direction SW

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 06/09/2016
 Applicant/Owner: MVP State: WV Sampling Point: W-CD20-UP
 Investigator(s): HBS, CV Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Valley Local relief (concave, convex, none): Convex Slope (%): 0-3
 Subregion (LRR or MLRA): LRRN Lat: 38.901087 Long: -80.566425 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 25 to 35 percent slopes NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks: Cowardin Code: UPLAND HGM: Water Type:

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☐ No ☒
Surface Water Present? Yes ☐ No ☒	Depth (inches): <u></u>	
Water Table Present? Yes ☐ No ☒	Depth (inches): <u></u>	
Saturation Present? Yes ☐ No ☒ (includes capillary fringe)	Depth (inches): <u></u>	

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-CD20-UP

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Bromus inermis</u>	<u>30</u>	☒	<u>UPL</u>	
2. <u>Dichanthelium clandestinum</u>	<u>20</u>	☒	<u>FAC</u>	
3. <u>Juncus tenuis</u>	<u>10</u>	☐	<u>FAC</u>	
4. <u>Dactylis glomerata</u>	<u>10</u>	☐	<u>FACU</u>	
5. <u>Apocynum cannabinum</u>	<u>10</u>	☐	<u>FACU</u>	
6. <u>Toxicodendron radicans</u>	<u>5</u>	☐	<u>FAC</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>85</u> = Total Cover 50% of total cover: <u>42.5</u> 20% of total cover: <u>17</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes <u> </u> No ☒

SOIL

Sampling Point: W-CD20-UP

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 06/09/2016
Applicant/Owner: MVP State: WV Sampling Point: W-CD23
Investigator(s): HBS, CV Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Valley Local relief (concave, convex, none): Concave Slope (%): 3-5
Subregion (LRR or MLRA): LRRN Lat: 38.898574 Long: -80.568293 Datum: NAD 83
Soil Map Unit Name: Vandalia silt loam, 15 to 25, 25 to 35 percent slopes NWI classification: None

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 ☐ Wetland Hydrology Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Remarks: Cowardin Code: <u>PEM</u> HGM: <u>Slope</u> Water Type: <u>RPWWD</u> <u>Abuts S-VV13</u>	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		☐ Surface Soil Cracks (B6)
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Sparsely Vegetated Concave Surface (B8)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☒ Drainage Patterns (B10)
☐ Saturation (A3)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Stunted or Stressed Plants (D1)
☐ Iron Deposits (B5)		☒ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Shallow Aquitard (D3)
☐ Water-Stained Leaves (B9)		☐ Microtopographic Relief (D4)
☐ Aquatic Fauna (B13)		☒ FAC-Neutral Test (D5)
Field Observations:		Wetland Hydrology Present? Yes ☒ No ☐
Surface Water Present? Yes ☐ No ☒ Depth (inches): <u> </u>		
Water Table Present? Yes ☐ No ☒ Depth (inches): <u> </u>		
Saturation Present? Yes ☐ No ☒ Depth (inches): <u> </u> (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-CD23

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Carex vulpinoidea</u>	<u>20</u>	☒	<u>OBL</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
2. <u>Carex lurida</u>	<u>15</u>	☒	<u>OBL</u>	
3. <u>Bromus inermis</u>	<u>20</u>	☒	<u>UPL</u>	
4. <u>Persicaria sagittatum</u>	<u>5</u>	_____	<u>OBL</u>	
5. <u>Equisetum arvense</u>	<u>10</u>	_____	<u>FAC</u>	Hydrophytic Vegetation Present? Yes ☒ No _____
6. <u>Poa trivialis</u>	<u>10</u>	_____	<u>FACW</u>	
7. <u>Dulichium arundinaceum</u>	<u>5</u>	_____	<u>OBL</u>	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>42.5</u> 20% of total cover: <u>17</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-CD23

[illegible]

Wetland Photograph Page

Wetland ID W-CD23 Date 06/09/2016



Photograph Direction North

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 06/09/2016
 Applicant/Owner: MVP State: WV Sampling Point: W-CD24
 Investigator(s): HBS, CV Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Valley Local relief (concave, convex, none): Concave Slope (%): 3-5
 Subregion (LRR or MLRA): LRRN Lat: 38.898684 Long: -80.568238 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 15 to 25, 25 to 35 percent slopes NWI classification: None

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 ☐ Wetland Hydrology Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Remarks: Cowardin Code: <u>PEM</u> HGM: <u>Slope</u> Water Type: <u>RPWWD</u> <u>Abuts S-VV13</u>	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ☐ Surface Water (A1) ☐ True Aquatic Plants (B14) ☐ High Water Table (A2) ☐ Hydrogen Sulfide Odor (C1) ☐ Saturation (A3) ☒ Oxidized Rhizospheres on 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) ☒ Geomorphic Position (D2) ☐ Inundation Visible on Aerial Imagery (B7) ☐ Shallow Aquitard (D3) ☐ Water-Stained Leaves (B9) ☐ Microtopographic Relief (D4) ☐ Aquatic Fauna (B13) ☒ FAC-Neutral Test (D5)		<u>Secondary Indicators (minimum of two required)</u> ☐ 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? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes ☒ No ☐	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-CD24

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: <u>5'</u>)				
1. <i>Carex vulpinoidea</i>	<u>20</u>	☒	OBL	
2. <i>Carex lurida</i>	<u>15</u>	☒	OBL	
3. <i>Bromus inermis</i>	<u>20</u>	☒	UPL	
4. <i>Persicaria sagittatum</i>	<u>5</u>	_____	OBL	
5. <i>Equisetum arvense</i>	<u>10</u>	_____	FAC	
6. <i>Poa trivialis</i>	<u>10</u>	_____	FACW	
7. <i>Dulichium arundinaceum</i>	<u>5</u>	_____	OBL	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>85</u> = Total Cover 50% of total cover: <u>42.5</u> 20% of total cover: <u>17</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: W-CD24

[illegible]

Wetland Photograph Page

Wetland ID W-CD24 Date 06/09/2016



Photograph Direction South

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 06/09/2016
 Applicant/Owner: MVP State: WV Sampling Point: W-CD23,24-UP
 Investigator(s): HBS, CV Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Valley Local relief (concave, convex, none): Concave Slope (%): 3-5
 Subregion (LRR or MLRA): LRRN Lat: 38.898767 Long: -80.56823 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 15 to 25 percent slopes NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks: Cowardin Code: UPLAND HGM: Water Type:

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☐ No ☒
Surface Water Present? Yes ☐ No ☒	Depth (inches): <u></u>	
Water Table Present? Yes ☐ No ☒	Depth (inches): <u></u>	
Saturation Present? Yes ☐ No ☒ (includes capillary fringe)	Depth (inches): <u></u>	

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-CD23,24-UP

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Glechoma hederacea</u>	<u>20</u>	☒	<u>FACU</u>	
2. <u>Microstegium vimineum</u>	<u>20</u>	☒	<u>FAC</u>	
3. <u>Bromus inermis</u>	<u>15</u>	☒	<u>UPL</u>	
4. <u>Symphyotrichum prenanthoides</u>	<u>10</u>		<u>FAC</u>	
5. <u>Packera aurea</u>	<u>10</u>		<u>FACW</u>	
6. <u>Holcus lanatus</u>	<u>10</u>		<u>FAC</u>	
7. <u>Dactylis glomerata</u>	<u>5</u>		<u>FACU</u>	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
50% of total cover: <u>45</u> 20% of total cover: <u>18</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-CD23,24-UP

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 06/09/2016
 Applicant/Owner: MVP State: WV Sampling Point: W-CD36
 Investigator(s): HBS, CV Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Valley Local relief (concave, convex, none): Concave Slope (%): 0-3
 Subregion (LRR or MLRA): LRRN Lat: 38.898164 Long: -80.56828 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 15 to 25 percent slopes NWI classification: None

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 ☐ Wetland Hydrology Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Remarks: Cowardin Code: <u>PEM</u> HGM: <u>Slope</u> Water Type: <u>RPWWN</u> <u>Adjacent to S-VV13</u>	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ☐ Surface Water (A1) ☐ True Aquatic Plants (B14) ☐ High Water Table (A2) ☐ Hydrogen Sulfide Odor (C1) ☐ Saturation (A3) ☐ Oxidized Rhizospheres on 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) ☐		<u>Secondary Indicators (minimum of two required)</u> ☐ 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? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes ☒ No ☐	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-CD36

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>6</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>83</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
Herb Stratum (Plot size: <u>5'</u>)				Hydrophytic Vegetation Present? Yes ☒ No _____
1. <u>Microstegium vimineum</u>	<u>20</u>	☒	<u>FAC</u>	
2. <u>Bromus inermis</u>	<u>20</u>	☒	<u>UPL</u>	
3. <u>Symphyotrichum prenanthoides</u>	<u>10</u>	☒	<u>FAC</u>	
4. <u>Dichanthelium clandestinum</u>	<u>10</u>	☒	<u>FAC</u>	
5. <u>Poa trivialis</u>	<u>10</u>	☒	<u>FACW</u>	
6. <u>Carex vulpinoidea</u>	<u>10</u>	☒	<u>OBL</u>	
7. <u>Carex lurida</u>	<u>5</u>	_____	<u>OBL</u>	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>42.5</u> 20% of total cover: <u>17</u>				
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-CD36[illegible]

Wetland Photograph Page

Wetland ID W-CD36 Date 06/09/2016



Photograph Direction South

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 06/09/2016
 Applicant/Owner: MVP State: WV Sampling Point: W-CD25
 Investigator(s): HBS, CV Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Valley Local relief (concave, convex, none): Concave Slope (%): 0-3
 Subregion (LRR or MLRA): LRRN Lat: 38.898048 Long: -80.568181 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 15 to 25 percent slopes NWI classification: None

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 ☐ Wetland Hydrology Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Remarks: Cowardin Code: <u>PEM</u> HGM: <u>Slope</u> Water Type: <u>RPWWN</u> <u>Adjacent to S-VV13</u>	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ☐ Surface Water (A1) ☐ True Aquatic Plants (B14) ☐ High Water Table (A2) ☐ Hydrogen Sulfide Odor (C1) ☐ Saturation (A3) ☐ Oxidized Rhizospheres on 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)		<u>Secondary Indicators (minimum of two required)</u> ☐ 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? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes ☒ No ☐	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-CD25

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
Herb Stratum (Plot size: <u>5'</u>)				Hydrophytic Vegetation Present? Yes ☒ No _____
1. <u>Microstegium vimineum</u>	<u>30</u>	☒	<u>FAC</u>	
2. <u>Symphyotrichum prenanthoides</u>	<u>20</u>	☒	<u>FAC</u>	
3. <u>Verbesina alternifolia</u>	<u>10</u>	_____	<u>FAC</u>	
4. <u>Dichanthelium clandestinum</u>	<u>10</u>	_____	<u>FAC</u>	
5. <u>Poa trivialis</u>	<u>10</u>	_____	<u>FACW</u>	
6. <u>Acer negundo</u>	<u>5</u>	_____	<u>FAC</u>	
7. <u>Persicaria virginiana</u>	<u>5</u>	_____	<u>FAC</u>	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>45</u> 20% of total cover: <u>18</u>				
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-CD25[illegible]

Wetland Photograph Page

Wetland ID W-CD25 Date 06/09/2016



Photograph Direction North

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 06/09/2016
 Applicant/Owner: MVP State: WV Sampling Point: W-CD25,36-UP
 Investigator(s): HBS, CV Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 3-5
 Subregion (LRR or MLRA): LRRN Lat: 38.898064 Long: -80.568259 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 15 to 25 percent slopes NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks: Cowardin Code: UPLAND HGM: Water Type:

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☐ No ☒
Surface Water Present? Yes ☐ No ☒	Depth (inches): <u></u>	
Water Table Present? Yes ☐ No ☒	Depth (inches): <u></u>	
Saturation Present? Yes ☐ No ☒ (includes capillary fringe)	Depth (inches): <u></u>	

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-CD25,36-UP

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
0 = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
0 = Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Glechoma hederacea</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>	
2. <u>Microstegium vimineum</u>	<u>20</u>	<u>✓</u>	<u>FAC</u>	
3. <u>Bromus inermis</u>	<u>15</u>	<u>✓</u>	<u>UPL</u>	
4. <u>Symphyotrichum prenanthoides</u>	<u>10</u>	_____	<u>FAC</u>	
5. <u>Packera aurea</u>	<u>10</u>	_____	<u>FACW</u>	
6. <u>Holcus lanatus</u>	<u>10</u>	_____	<u>FAC</u>	
7. <u>Dactylis glomerata</u>	<u>5</u>	_____	<u>FACU</u>	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
90 = Total Cover				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
50% of total cover: <u>45</u>		20% of total cover: <u>18</u>		
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
0 = Total Cover				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-CD25,36-UP

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 06/09/2016
Applicant/Owner: MVP State: WV Sampling Point: W-CD26
Investigator(s): HBS, CV Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 0-3
Subregion (LRR or MLRA): LRRN Lat: 38.897495 Long: -80.568087 Datum: NAD 83
Soil Map Unit Name: Vandalia silt loam, 15 to 25 percent slopes NWI classification: None

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 ☐ Wetland Hydrology Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Remarks: Cowardin Code: <u>PEM</u> HGM: <u>Riverine</u> Water Type: <u>RPWWN</u> Adjacent to <u>S-VV13</u>	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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): <u> </u>	Wetland Hydrology Present? Yes ☒ No ☐
Water Table Present? Yes ☐ No ☒	Depth (inches): <u> </u>	
Saturation Present? Yes ☐ No ☒ (includes capillary fringe)	Depth (inches): <u> </u>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-CD26

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66%</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Bromus inermis</u>	<u>25</u>	☒	<u>UPL</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
2. <u>Carex vulpinoidea</u>	<u>25</u>	☒	<u>OBL</u>	
3. <u>Holcus lanatus</u>	<u>15</u>	☒	<u>FAC</u>	
4. <u>Scirpus atrovirens</u>	<u>10</u>	_____	<u>OBL</u>	
5. <u>Trifolium repens</u>	<u>10</u>	_____	<u>FACU</u>	Hydrophytic Vegetation Present? Yes ☒ No _____
6. <u>Symphytotrichum prenanthoides</u>	<u>10</u>	_____	<u>FAC</u>	
7. <u>Phleum pratense</u>	<u>5</u>	_____	<u>FACU</u>	
8. _____	_____	_____	_____	
<u>100</u> = Total Cover 50% of total cover: <u>50</u> 20% of total cover: <u>20</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-CD26[illegible]

Wetland Photograph Page

Wetland ID W-CD26 Date 06/09/2016



Photograph Direction North

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 06/09/2016
Applicant/Owner: MVP State: WV Sampling Point: W-CD26
Investigator(s): HBS, CV Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 0-3
Subregion (LRR or MLRA): LRRN Lat: 38.897724 Long: -80.568227 Datum: NAD 83
Soil Map Unit Name: Vandalia silt loam, 15 to 25 percent slopes NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks: Cowardin Code: UPLAND HGM: Water Type:

HYDROLOGY

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

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):
Water Table Present? Yes ☐ No ☒ Depth (inches):
Saturation Present? Yes ☐ No ☒ Depth (inches):
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-CD26

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>Holcus lanatus</u>	<u>30</u>	<u>✓</u>	<u>FAC</u>	
2. <u>Phleum pratense</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>	
3. <u>Bromus inermis</u>	<u>20</u>	<u>✓</u>	<u>UPL</u>	
4. <u>Trifolium pratense</u>	<u>10</u>		<u>FACU</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>80</u> = Total Cover 50% of total cover: <u>40</u> 20% of total cover: <u>16</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>

SOIL

Sampling Point: W-CD26

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 12/10/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-VV10
 Investigator(s): Jason McGuirk, Kevin Pulver Section, Township, Range: NAD 83
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Linear Slope (%): 2-5
 Subregion (LRR or MLRA): LRRN Lat: 38.897286 Long: -80.567018 Datum: NAD 83
 Soil Map Unit Name: Gilpin-Upshur silt loams, 35 to 70 percent slopes, severely eroded NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks:
 Cowardin Code: PEM
 HGM: Riverine
 WT: NRPWW

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☒ No ☐
Surface Water Present?	Yes ☐ No ☒ Depth (inches): _____	
Water Table Present?	Yes ☐ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes ☐ No ☒ Depth (inches): _____	

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-VV10

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Carex lurida</u>	<u>60</u>	☒	<u>OBL</u>	
2. <u>Dichanthelium clandestinum</u>	<u>10</u>	_____	<u>FAC</u>	
3. <u>Juncus effusus</u>	<u>10</u>	_____	<u>FACW</u>	
4. <u>Juncus tenuis</u>	<u>5</u>	_____	<u>FAC</u>	
5. <u>Microstegium vimineum</u>	<u>15</u>	_____	<u>FAC</u>	
6. _____	_____	_____	_____	
<u>100</u> = Total Cover 50% of total cover: <u>50</u> 20% of total cover: <u>20</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes ☒ No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-VV10

[illegible]

Wetland Photograph Page

Wetland ID W-VV10 Date 12/10/2015



Photograph Direction North

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 12/10/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-vv8, vv9, vv10, vv11-UPL
 Investigator(s): Jason McGuirk, Kevin Pulver Section, Township, Range: NA
 Landform (hillslope, terrace, etc.): valley bottom Local relief (concave, convex, none): Linear Slope (%): 1-2
 Subregion (LRR or MLRA): LRRN Lat: 38.903626 Long: -80.563397 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 25 to 35 percent slopes NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-w8, w9, w10, w11-UPL

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>20</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Prunus serotina</u>	<u>5</u>	☒	<u>FACU</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
50% of total cover: <u>2.5</u> 20% of total cover: <u>1</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Verbesina alternifolia</u>	<u>10</u>		<u>FAC</u>	
2. <u>Phleum pratense</u>	<u>15</u>	☒	<u>FACU</u>	
3. <u>Daucus carata</u>	<u>15</u>	☒	<u>UPL</u>	
4. <u>Rubus allegheniensis</u>	<u>15</u>	☒	<u>FACU</u>	
5. <u>Trifolium pratense</u>	<u>5</u>		<u>FACU</u>	
6. <u>Microstegium vimineum</u>	<u>15</u>	☒	<u>FAC</u>	
7. <u>Juncus effusus</u>	<u>5</u>		<u>FACW</u>	
8. <u>Scirpus atrovirens</u>	<u>5</u>		<u>OBL</u>	
9. <u>Dichanthelium clandestinum</u>	<u>5</u>		<u>FAC</u>	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
50% of total cover: <u>45</u> 20% of total cover: <u>18</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-vv8, wv9, w10, w11-UPL

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 06/16/2016
 Applicant/Owner: MVP State: WV Sampling Point: W-UV17
 Investigator(s): C. Stoliker J. Niergarth L. McCarrell Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 3-5
 Subregion (LRR or MLRA): LRR N Lat: 38.893178 Long: -80.556191 Datum: NAD 83
 Soil Map Unit Name: Sensabaugh silt loam, 0 to 3 percent slopes, occasionally flooded NWI classification: None

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 ☐ Wetland Hydrology Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Remarks: Cowardin Code: <u>PFO</u> HGM: <u>Riverine</u> Water Type: <u>RPWWN</u>	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ☐ Surface Water (A1) ☐ True Aquatic Plants (B14) ☒ High Water Table (A2) ☐ Hydrogen Sulfide Odor (C1) ☒ Saturation (A3) ☒ Oxidized Rhizospheres on 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) ☒ Geomorphic Position (D2) ☐ Inundation Visible on Aerial Imagery (B7) ☐ Shallow Aquitard (D3) ☒ Water-Stained Leaves (B9) ☐ Microtopographic Relief (D4) ☐ Aquatic Fauna (B13) ☐ FAC-Neutral Test (D5)		<u>Secondary Indicators (minimum of two required)</u> ☐ 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): <u> </u> Water Table Present? Yes ☒ No ☐ Depth (inches): <u>10</u> Saturation Present? Yes ☒ No ☐ Depth (inches): <u>10</u> (includes capillary fringe)	Wetland Hydrology Present? Yes ☒ No ☐	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-UV17

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Platanus occidentalis</u>	<u>60</u>	☒	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)
2. <u>Acer negundo</u>	<u>35</u>	☒	<u>FAC</u>	
3. <u>Aesculus glabra</u>	<u>15</u>		<u>FACU</u>	Total Number of Dominant Species Across All Strata: <u>5*</u> (B)
4. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80</u> (A/B)
5. _____				
6. _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
7. _____				
$\frac{110}{50\% \text{ of total cover: } \underline{55}} = \text{Total Cover}$ $\frac{22}{20\% \text{ of total cover: } \underline{22}}$				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Rosa multiflora</u>	<u>25</u>	☒	<u>FACU</u>	
2. <u>Aesculus glabra</u>	<u>15</u>	☒	<u>FACU</u>	
3. <u>Salix nigra</u>	<u>10</u>		<u>OBL</u>	
4. <u>Acer negundo</u>	<u>8</u>		<u>FAC</u>	
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is $\leq 3.0^1$ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
$\frac{58}{50\% \text{ of total cover: } \underline{29}} = \text{Total Cover}$ $\frac{11.6}{20\% \text{ of total cover: } \underline{11.6}}$				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Elymus sp.*</u>	<u>45</u>	☒	<u>ND</u>	
2. <u>Carex crinita</u>	<u>30</u>	☒	<u>OBL</u>	
3. <u>Lysimachia nummularia</u>	<u>25</u>		<u>FACW</u>	
4. <u>Glechoma hederacea</u>	<u>15</u>		<u>FACU</u>	
5. <u>Solidago sp.</u>	<u>10</u>		<u>ND</u>	
6. <u>Packera aurea</u>	<u>5</u>		<u>FACW</u>	
7. <u>Verbesina alternifolia</u>	<u>5</u>		<u>FAC</u>	
8. _____				
9. _____				
10. _____				
11. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
$\frac{135}{50\% \text{ of total cover: } \underline{67.5}} = \text{Total Cover}$ $\frac{27}{20\% \text{ of total cover: } \underline{27}}$				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				Hydrophytic Vegetation Present? Yes ☒ No _____
$\frac{0}{50\% \text{ of total cover: } \underline{0}} = \text{Total Cover}$ $\frac{0}{20\% \text{ of total cover: } \underline{0}}$				
Remarks: (Include photo numbers here or on a separate sheet.) ND - Not determined *Not identified to species, not included in dominance test				

SOIL

Sampling Point: W-UV17

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	5YR 4/2	90	5YR 5/8	10	C	M/PL	SCL	
6-15	5YR 5/2	80	5YR 4/6	20	C	M	SICL	
15-18	Gley 1 3/1	100					SICL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: 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 Mucky 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 Soils³:

- ☐ 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)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

Wetland Photograph Page

Wetland ID W-UV17 Date 06/16/2016



Photograph Direction SE

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 04/11/2016
Applicant/Owner: MVP State: WV Sampling Point: W-UV17-UPL
Investigator(s): C. Stoliker J. Niergarth L. McCarrell Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Convex Slope (%): 3-5
Subregion (LRR or MLRA): LRR N Lat: 38.893281 Long: -80.555978 Datum: NAD 83
Soil Map Unit Name: Sensabaugh silt loam, 0 to 3 percent slopes, occasionally flooded NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks: Cowardin Code: UPLAND HGM: Water Type:

HYDROLOGY

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

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):
Water Table Present? Yes ☐ No ☒ Depth (inches):
Saturation Present? Yes ☐ No ☒ Depth (inches):
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-UV17-UPL

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Acer saccharum</u>	<u>80</u>	☒	<u>FACU</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. <u>Aesculus glabra</u>	<u>15</u>		<u>FACU</u>	
3. <u>Acer negundo</u>	<u>10</u>		<u>FAC</u>	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
4. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>20%</u> (A/B)
5. _____				
6. _____				
7. _____				
$\frac{105}{100} = \text{Total Cover}$ 50% of total cover: <u>52.5</u> 20% of total cover: <u>21</u>				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Aesculus glabra</u>	<u>35</u>	☒	<u>FACU</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is $\leq 3.0^1$ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
2. <u>Rosa multiflora</u>	<u>15</u>	☒	<u>FACU</u>	
3. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. _____				
5. _____				
6. _____				
$\frac{50}{100} = \text{Total Cover}$ 50% of total cover: <u>25</u> 20% of total cover: <u>10</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Verbesina alternifolia</u>	<u>35</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Present? Yes _____ No ☒
2. <u>Glechoma hederacea</u>	<u>30</u>	☒	<u>FACU</u>	
3. <u>Packera aurea</u>	<u>15</u>		<u>FACW</u>	
4. <u>Asarum canadense</u>	<u>10</u>		<u>FACU</u>	
5. <u>Rosa multiflora</u>	<u>10</u>		<u>FACU</u>	
6. <u>Aesculus glabra</u>	<u>10</u>		<u>FACU</u>	
7. _____				
8. _____				
9. _____				
10. _____				
$\frac{110}{100} = \text{Total Cover}$ 50% of total cover: <u>55</u> 20% of total cover: <u>22</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
$\frac{0}{100} = \text{Total Cover}$ 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-UV17-UPL

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 07/19/2016
 Applicant/Owner: MVP State: WV Sampling Point: W-ST16
 Investigator(s): J. McGuirk, S. Therkildson, C. Sorden Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Concave Slope (%): 0-3
 Subregion (LRR or MLRA): LRR N Lat: 38.892523 Long: -80.556683 Datum: NAD 83
 Soil Map Unit Name: Sensabaugh silt loam, 0 to 3 percent slopes, occasionally flooded NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks: Cowardin Code: PEM HGM: Depressional Water Type: RPWWN

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-ST16

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Salix nigra</u>	<u>10</u>	☒	<u>OBL</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>9</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>9</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____	_____	_____	_____	
_____ <u>10</u> = Total Cover 50% of total cover: <u>5</u> 20% of total cover: <u>2</u>				Hydrophytic Vegetation Indicators: _____ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% _____ 3 - Prevalence Index is ≤3.0 ¹ _____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Sapling/Shrub Stratum (Plot size: <u>15'</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____				
_____ <u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>15'</u>) 1. <u>Carex frankii</u> <u>20</u> ☒ <u>OBL</u> 2. <u>Carex vulpinoidea</u> <u>15</u> ☒ <u>OBL</u> 3. <u>Scirpus atrovirens</u> <u>15</u> ☒ <u>OBL</u> 4. <u>Microstegium vimineum</u> <u>10</u> ☒ <u>FAC</u> 5. <u>Lysimachia nummularia</u> <u>10</u> ☒ <u>OBL</u> 6. <u>Phalaris arundinacea</u> <u>10</u> ☒ <u>FACW</u> 7. <u>Persicaria perfoliata</u> <u>10</u> ☒ <u>FAC</u> 8. <u>Cyperus esculatus</u> <u>5</u> _____ <u>FACW</u> 9. <u>Verbesina alternifolia</u> <u>5</u> _____ <u>FAC</u> 10. <u>Boehmeria cylindrica</u> <u>5</u> _____ <u>FACW</u> 11. <u>Impatiens capensis</u> <u>10</u> ☒ <u>FACW</u>				
_____ <u>115</u> = Total Cover 50% of total cover: <u>57.5</u> 20% of total cover: <u>23</u>				
Woody Vine Stratum (Plot size: <u>15'</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
_____ <u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
_____ <u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-ST16

[illegible]

Wetland Photograph Page

Wetland ID W-ST16 Date 07/19/2016



Photograph Direction NE

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 07/19/2016
 Applicant/Owner: MVP State: WV Sampling Point: W-ST16 UPL
 Investigator(s): J. McGuirk, S. Therkildson, C. Sorden Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Linear Slope (%): 0-3
 Subregion (LRR or MLRA): LRR N Lat: 38.892523 Long: -80.556683 Datum: NAD 83
 Soil Map Unit Name: Sensabaugh silt loam, 0 to 3 percent slopes, occasionally flooded NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	
Remarks: Cowardin Code: <u>Upland</u> HGM: <u></u> Water Type: <u></u>	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ☐ Surface Water (A1) ☐ True Aquatic Plants (B14) ☐ High Water Table (A2) ☐ Hydrogen Sulfide Odor (C1) ☐ Saturation (A3) ☐ Oxidized Rhizospheres on 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) ☒ Geomorphic Position (D2) ☐ Inundation Visible on Aerial Imagery (B7) ☐ Shallow Aquitard (D3) ☐ Water-Stained Leaves (B9) ☐ Microtopographic Relief (D4) ☐ Aquatic Fauna (B13) ☐ FAC-Neutral Test (D5)		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)
Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): <u></u> Water Table Present? Yes ☐ No ☒ Depth (inches): <u></u> Saturation Present? Yes ☐ No ☒ Depth (inches): <u></u> (includes capillary fringe)	Wetland Hydrology Present? Yes ☐ No ☒	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-ST16 UPL

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>4</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Woody Vine Stratum (Plot size: <u>15'</u>)
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Trifolium pratense</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>	
2. <u>Ipomoea cairica</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>	
3. <u>Dichanthelium clandestinum</u>	<u>20</u>	<u>✓</u>	<u>FAC</u>	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. <u>Phleum pratense</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>	
5. <u>Allium canadense</u>	<u>15</u>		<u>FACU</u>	
6. <u>Daucus carota</u>	<u>5</u>		<u>UPL</u>	
7. <u>Echinochloa muricata</u>	<u>5</u>		<u>FACW</u>	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
<u>105</u> = Total Cover 50% of total cover: <u>52.5</u> 20% of total cover: <u>21</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>

SOIL

Sampling Point: W-ST16 UPL

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 12/10/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-VV11
 Investigator(s): Jason McGuirk, Kevin Pulver Section, Township, Range: NAD 83
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Concave Slope (%): 2-4
 Subregion (LRR or MLRA): LRRN Lat: 38.890611 Long: -80.554976 Datum: NAD 83
 Soil Map Unit Name: Gilpin-Upshur silt loams, 35 to 70 percent slopes, severely eroded NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:

Cowardin Code: PEM

HGM: Depressional

WT: NRPWW

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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): 0
 Saturation Present? Yes ☒ No ☐ Depth (inches): 0
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-VV11

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Mimulus ringens</u>	<u>25</u>	☒	<u>OBL</u>	
2. <u>Dichanthelium clandestinum</u>	<u>15</u>	☒	<u>FAC</u>	
3. <u>Juncus effusus</u>	<u>15</u>	☒	<u>FACW</u>	
4. <u>Epilobium coloratum</u>	<u>15</u>	☒	<u>FACW</u>	
5. <u>Microstegium vimineum</u>	<u>10</u>		<u>FAC</u>	
6. <u>Carex lurida</u>	<u>20</u>	☒	<u>OBL</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
<u>100</u> = Total Cover 50% of total cover: <u>50</u> 20% of total cover: <u>20</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-VV11

[illegible]

Wetland Photograph Page

Wetland ID W-VV11 Date 12/10/2015



Photograph Direction SW

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 12/10/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-VV12
 Investigator(s): Jason McGuirk, Kevin Pulver Section, Township, Range: NAD 83
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Concave Slope (%): 2-4
 Subregion (LRR or MLRA): LRRN Lat: 38.89027 Long: -80.553782 Datum: NAD 83
 Soil Map Unit Name: Gilpin-Upshur silt loams, 35 to 70 percent slopes, severely eroded NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks:
 Cowardin Code: PEM
 HGM: Riverine
 WT: NRPWW

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☒ No ☐
Surface Water Present?	Yes ☐ No ☒ Depth (inches): <u>0</u>	
Water Table Present?	Yes ☒ No ☐ Depth (inches): <u>0</u>	
Saturation Present? (includes capillary fringe)	Yes ☒ No ☐ Depth (inches): <u>0</u>	

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-VV12

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Dichanthelium clandestinum</u>	<u>20</u>	☒	<u>FAC</u>	
2. <u>Juncus effusus</u>	<u>20</u>	☒	<u>FACW</u>	
3. <u>Epilobium coloratum</u>	<u>20</u>	☒	<u>FACW</u>	
4. <u>Microstegium vimineum</u>	<u>15</u>			
5. <u>Carex lurida</u>	<u>25</u>	☒	<u>OBL</u>	
6. _____	_____	_____	_____	
<u>100</u> = Total Cover 50% of total cover: <u>50</u> 20% of total cover: <u>20</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: W-VV12

[illegible]

Wetland Photograph Page

Wetland ID W-VV12 Date 12/10/2015



Photograph Direction NW

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 12/10/2015
Applicant/Owner: MVP State: WV Sampling Point: W-vv11, W-VV12-up
Investigator(s): JMM, KP Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Convex Slope (%): 2-4
Subregion (LRR or MLRA): LRRN Lat: 38.890651 Long: -80.554892 Datum: NAD 83
Soil Map Unit Name: Gilpin-Upshur silt loams, 35 to 70 percent slopes, severely eroded NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland

HYDROLOGY

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

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

Duplicate w-vv10 upland

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-w11, W-VV12-up

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Quercus alba</u>	40	✓	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
2. <u>Fagus grandifolia</u>	10		FACU	
3. <u>Quercus rubra</u>	20	✓	FACU	
4. <u>Populus grandidentata</u>	10		FACU	
5. _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
6. _____				
7. _____				
80 = Total Cover 50% of total cover: <u>40</u> 20% of total cover: <u>16</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Fagus grandifolia</u>	50	✓	FACU	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)
2. <u>Populus grandidentata</u>	10		FACU	
3. _____				
4. _____				
5. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6. _____				
7. _____				
8. _____				
9. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
10. _____				
11. _____				
60 = Total Cover 50% of total cover: <u>30</u> 20% of total cover: <u>12</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Polystichum acrostichoides</u>	10	✓	FACU	Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>
2. <u>Andropogon virginicus</u>	5	✓	FACU	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
15 = Total Cover 50% of total cover: <u>7.5</u> 20% of total cover: <u>3</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
0 = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-vv11, W-VV12-up

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 11/20/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-VV4 PEM
 Investigator(s): JM KP Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): valley bottom Local relief (concave, convex, none): Concave Slope (%): 1-2
 Subregion (LRR or MLRA): LRRN Lat: 38.863268 Long: -80.52571 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 15 to 25 percent slopes NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks:

Cowardin Code: PEM

HGM: Riverine

WT: RPWWD

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-VV4 PEM

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>Phalaris arundinacea</u>	<u>100</u>	☒	<u>FACW</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>100</u> = Total Cover 50% of total cover: <u>50</u> 20% of total cover: <u>20</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: W-VV4 PEM

[illegible]

Wetland Photograph Page

Wetland ID W-VV4 PEM Date 11/20/2015



Photograph Direction NW

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 11/20/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-VV4 PFO
 Investigator(s): JM KP Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): valley bottom Local relief (concave, convex, none): Concave Slope (%): 0-2
 Subregion (LRR or MLRA): LRRN Lat: 38.86318 Long: -80.525894 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 15 to 25 percent slopes NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks:
 Cowardin Code: PFO
 HGM: Riverine
 WT: RPWWD

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☒ No ☐
Surface Water Present?	Yes ☐ No ☒ Depth (inches): _____	
Water Table Present?	Yes ☐ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes ☐ No ☒ Depth (inches): _____	

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-VV4 PFO

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Platanus occidentalis</u>	<u>65</u>	☒	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>6</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____				
5. _____				
6. _____				
7. _____				
<u>65</u> = Total Cover 50% of total cover: <u>32.5</u> 20% of total cover: <u>13</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
<u>50</u> = Total Cover 50% of total cover: <u>25</u> 20% of total cover: <u>10</u>				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
<u>70</u> = Total Cover 50% of total cover: <u>35</u> 20% of total cover: <u>14</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
Herb Stratum (Plot size: <u>5'</u>) 1. <u>Elymus riparius</u> 15 ☒ <u>FACW</u> 2. <u>Scirpus atrovirens</u> 15 ☒ <u>OBL</u> 3. <u>Onoclea sensibilis</u> 10 <u>FACW</u> 4. <u>Microstegium vimineum</u> 5 <u>FAC</u> 5. <u>Allium cernuum</u> 5 <u>FACU</u> 6. <u>Verbesina alternifolia</u> 20 ☒ <u>FAC</u> 7. _____ 8. _____ 9. _____ 10. _____ 11. _____				
Sapling/Shrub Stratum (Plot size: <u>15'</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____				
Woody Vine Stratum (Plot size: <u>15'</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-VV4 PFO

[illegible]

Wetland Photograph Page

Wetland ID W-VV4 PFO Date 11/20/2015



Photograph Direction _____

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 11/20/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-VV3 PEM
 Investigator(s): JM KP Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): valley bottom Local relief (concave, convex, none): Concave Slope (%): 1-3
 Subregion (LRR or MLRA): LRRN Lat: 38.862832 Long: -80.525290 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 15 to 25 percent slopes NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks:
 Cowardin Code: PEM
 HGM: Riverine
 WT: RPWWD

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☒ No ☐
Surface Water Present?	Yes ☐ No ☒ Depth (inches): <u> </u>	
Water Table Present?	Yes ☐ No ☒ Depth (inches): <u> </u>	
Saturation Present? (includes capillary fringe)	Yes ☐ No ☒ Depth (inches): <u> </u>	

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-VV3 PEM

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Woody Vine Stratum (Plot size: <u>15'</u>)
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Scirpus atrovirens</u>	<u>25</u>	☒	<u>OBL</u>	
2. <u>Verbesina alternifolia</u>	<u>20</u>	☒	<u>FAC</u>	
3. <u>Cyperus esculentus</u>	<u>15</u>	☒	<u>FACW</u>	Hydrophytic Vegetation Present? Yes ☒ No _____
4. <u>Juncus effusus</u>	<u>10</u>		<u>FACW</u>	
5. <u>Juncus tenius</u>	<u>5</u>		<u>FAC</u>	
6. <u>Orchard grass</u>	<u>10</u>		<u>FACU</u>	
7. <u>Microstegium vimineum</u>	<u>10</u>		<u>FAC</u>	Hydrophytic Vegetation Present? Yes ☒ No _____
8. <u>Dichanthelium clandestinum</u>	<u>5</u>		<u>FAC</u>	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>50</u> 20% of total cover: <u>20</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: W-VV3 PEM

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	5yr 3/2	100					L	
8-12	5yr 3/2	95	7.5 yr 5/4	5	C	M/PL	CL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :	
☐ Histosol (A1)	☐ Dark Surface (S7)	☐ 2 cm Muck (A10) (MLRA 147)	
☐ Histic Epipedon (A2)	☐ Polyvalue Below Surface (S8) (MLRA 147, 148)	☐ Coast Prairie Redox (A16)	
☐ Black Histic (A3)	☐ Thin Dark Surface (S9) (MLRA 147, 148)	☐ (MLRA 147, 148)	
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	☐ Piedmont Floodplain Soils (F19)	
☐ Stratified Layers (A5)	☐ Depleted Matrix (F3)	☐ (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 Mucky 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)		
☐ 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 Photograph Page

Wetland ID W-VV3 PEM Date 11/20/2015



Photograph Direction South

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 11/20/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-VV3 PFO
 Investigator(s): JM KP Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Concave Slope (%): 0-2
 Subregion (LRR or MLRA): LRRN Lat: 38.862696 Long: -80.525102 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 15 to 25 percent slopes NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks:
 Cowardin Code: PFO
 HGM: Riverine Riverine
 WT: RPWWD RPWWD

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-VV3 PFO

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Platanus occidentalis</u>	<u>50</u>	☒	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>4*</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____				
6. _____				
7. _____				
8. _____				
50% of total cover: <u>25</u> 20% of total cover: <u>10</u> Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>Platanus occidentalis</u>	<u>30</u>	☒	<u>FACW</u>	
2. <u>Rosa multiflora</u>	<u>5</u>		<u>FACU</u>	
3. _____				
4. _____				
50% of total cover: <u>17.5</u> 20% of total cover: <u>7</u> Herb Stratum (Plot size: <u>5'</u>)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
1. <u>Elymus riparius</u>	<u>10</u>	☒	<u>FACW</u>	
2. <u>Scirpus atrovirens</u>	<u>10</u>	☒	<u>OBL</u>	
3. <u>Carex sp.</u>	<u>10</u>	☒	<u>ND</u>	
4. <u>Microstegium</u>	<u>5</u>		<u>FAC</u>	
50% of total cover: <u>25</u> 20% of total cover: <u>10</u> Woody Vine Stratum (Plot size: <u>15'</u>)				Hydrophytic Vegetation Present? Yes ☒ No _____
1. _____				
2. _____				
3. _____				
4. _____				
50% of total cover: <u>0</u> 20% of total cover: <u>0</u> Remarks: (Include photo numbers here or on a separate sheet.) ND- Not determined *Vegetation not ID'd down to the species level not included in dominance test.				

SOIL

Sampling Point: W-VV3 PFO

[illegible]

Wetland Photograph Page

Wetland ID W-VV3 PFO Date 11/20/2015



Photograph Direction East

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Lewis Sampling Date: 11/20/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-VV3&4-UP
 Investigator(s): JM KP Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): valley bottom Local relief (concave, convex, none): Concave Slope (%): 3-4
 Subregion (LRR or MLRA): LRRN Lat: 38.863088 Long: -80.525428 Datum: NAD 83
 Soil Map Unit Name: Vandalia silt loam, 15 to 25 percent slopes NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-VV3&4-UP

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Dactylis glomerata</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
2. <u>Phleum pratense</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>	
3. <u>Galium aparine</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>	
4. <u>Allium cernuum</u>	<u>5</u>	_____	<u>FACU</u>	
5. <u>Plantago lanceolata</u>	<u>5</u>	_____	<u>UPL</u>	Hydrophytic Vegetation Present? Yes <u> </u> No <u>✓</u>
6. <u>Poa sp.</u>	<u>15</u>	_____	<u>ND</u>	
7. <u>Trifolium pratense</u>	<u>5</u>	_____	<u>FACU</u>	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>90</u> = Total Cover 50% of total cover: <u>45</u> 20% of total cover: <u>18</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-VV3&4-UP

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Braxton Sampling Date: 05/13/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-H90
 Investigator(s): A.Stott, A.Grech, D. McCullough Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Side-slope Local relief (concave, convex, none): Concave Slope (%): 5-8%
 Subregion (LRR or MLRA): LRRN Lat: 38.760372 Long: -80.513651 Datum: NAD 83
 Soil Map Unit Name: Buchanan channery loam, 15 to 35 percent slopes, extremely stony NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:

Cowardin Code: PEM

HGM: slope

WT: RPWWD

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ 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 on 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): 0"
 Saturation Present? Yes ☒ No ☐ Depth (inches): 0"
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

Connects to S-H123

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-H90

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3*</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____	_____	_____	_____	
0 = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Rosa palustris</u>	<u>5</u>	☒	<u>OBL</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
5 = Total Cover 50% of total cover: <u>2.5</u> 20% of total cover: <u>1</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Dryopteris sp.</u>	<u>30</u>	☒	<u>ND</u>	
2. <u>Viola cucullata</u>	<u>15</u>	☒	<u>FACW</u>	
3. <u>Packera aurea</u>	<u>15</u>	☒	<u>FACW</u>	
4. <u>Juncus effusus</u>	<u>10</u>	_____	<u>FACW</u>	
5. <u>Scirpus atrovirens</u>	<u>5</u>	_____	<u>OBL</u>	
6. <u>Impatiens capensis</u>	<u>5</u>	_____	<u>FACW</u>	
7. <u>Osmundastrum cinnamomeum</u>	<u>5</u>	_____	<u>FACW</u>	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
85 = Total Cover 50% of total cover: <u>42.5</u> 20% of total cover: <u>17</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
0 = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				
ND- Not determined				
*Vegetation not ID'd down to species level not included in dominance test.				

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: W-H90

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR 4/1	95	10YR 5/6	5	C	M/PL	SC	
8-20	10YR 4/1	100					GrSC	
					C			
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.								
² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators:							Indicators for Problematic Hydric Soils ³ :	
☐ Histosol (A1)			☐ Dark Surface (S7)			☐ 2 cm Muck (A10) (MLRA 147)		
☐ Histic Epipedon (A2)			☐ Polyvalue Below Surface (S8) (MLRA 147, 148)			☐ Coast Prairie Redox (A16)		
☐ Black Histic (A3)			☐ Thin Dark Surface (S9) (MLRA 147, 148)			☒ (MLRA 147, 148)		
☐ Hydrogen Sulfide (A4)			☐ Loamy Gleyed Matrix (F2)			☐ Piedmont Floodplain Soils (F19)		
☐ Stratified Layers (A5)			☒ Depleted Matrix (F3)			☒ (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 Mucky Mineral (S1) (LRR N,			☐ Iron-Manganese Masses (F12) (LRR N,					
☐ MLRA 147, 148)			☐ MLRA 136)					
☐ Sandy Gleyed Matrix (S4)			☐ Umbric Surface (F13) (MLRA 136, 122)			³ Indicators of hydrophytic vegetation and		
☐ Sandy Redox (S5)			☐ Piedmont Floodplain Soils (F19) (MLRA 148)			wetland hydrology must be present,		
☐ Stripped Matrix (S6)			☐ Red Parent Material (F21) (MLRA 127, 147)			unless disturbed or problematic.		
Restrictive Layer (if observed):								
Type: _____								
Depth (inches): _____						Hydric Soil Present? Yes ☒ No _____		
Remarks: 								

Wetland Photograph Page

Wetland ID W-H90 Date 05/13/2015



Photograph Direction East

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Braxton Sampling Date: 05/13/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-H90 UPL
 Investigator(s): A.Stott, A.Grech, D. McCullough Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Side-slope Local relief (concave, convex, none): Convex Slope (%): 10-15%
 Subregion (LRR or MLRA): LRRN Lat: 38.760345 Long: -80.513652 Datum: NAD 83
 Soil Map Unit Name: Buchanan channery loam, 15 to 35 percent slopes, extremely stony NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-H90 UPL

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Carpinus caroliniana</u>	<u>5</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4*</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
2. <u>Fagus grandifolia</u>	<u>5</u>	☒	<u>FACU</u>	
3. <u>Acer saccharum</u>	<u>5</u>	☒	<u>FACU</u>	
4. _____				
5. _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
6. _____				
7. _____				
8. _____				
_____ <u>15</u> = Total Cover 50% of total cover: <u>7.5</u> 20% of total cover: <u>3</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Carpinus caroliniana</u>	<u>20</u>	☒	<u>FAC</u>	
2. <u>Fagus grandifolia</u>	<u>5</u>		<u>FACU</u>	
3. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. _____				
5. _____				
6. _____				
7. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
8. _____				
9. _____				
10. _____				
_____ <u>25</u> = Total Cover 50% of total cover: <u>12.5</u> 20% of total cover: <u>5</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Dryopteris sp.</u>	<u>30</u>	☒	<u>ND</u>	
2. <u>Polystichum acrostichoides</u>	<u>5</u>		<u>FACU</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
_____ <u>35</u> = Total Cover 50% of total cover: <u>17.5</u> 20% of total cover: <u>7</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
_____ <u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.) ND- Not determined *Vegetation not ID'd down to species level not included in dominance test.				

SOIL

Sampling Point: W-H90 UPL

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Braxton Sampling Date: 04/23/2016
 Applicant/Owner: MVP State: WV Sampling Point: W-QR11
 Investigator(s): D Hadersbeck, J McGuirk, C Sapusek Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR or MLRA): LRR N Lat: 38.74781 Long: -80.521635 Datum: NAD 83
 Soil Map Unit Name: Ch - Chavies fine sandy loam, rarely flooded NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks: Cowardin Code: PEM HGM: Depressional Water Type: RPWWN
 Adjacent to Little Kanawha River

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☒ No ☐
Surface Water Present? Yes ☐ No ☒	Depth (inches): <u> </u>	
Water Table Present? Yes ☐ No ☒	Depth (inches): <u> </u>	
Saturation Present? Yes ☐ No ☒ (includes capillary fringe)	Depth (inches): <u> </u>	

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-QR11

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% _____ 3 - Prevalence Index is ≤3.0 ¹ _____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Scirpus atrovirens</u>	<u>90</u>	☒	<u>OBL</u>	
2. <u>Phleum pratense</u>	<u>15</u>	_____	<u>FACU</u>	
3. <u>Dactylis glomerata</u>	<u>5</u>	_____	<u>FACU</u>	
4. <u>Dichanthelium clandestinum</u>	<u>5</u>	_____	<u>FAC</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
5. <u>Packera aurea</u>	<u>5</u>	_____	<u>FACW</u>	
6. <u>Carex vulpinoidea</u>	<u>5</u>	_____	<u>OBL</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>62.5</u> 20% of total cover: <u>25</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
_____ = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-QR11

[illegible]

Wetland Photograph Page

Wetland ID W-QR11 Date 04/23/2016



Photograph Direction SE

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Braxton Sampling Date: 04/23/2016
 Applicant/Owner: MVP State: WV Sampling Point: W-QR12
 Investigator(s): D Hadersbeck, J McGuirk, C Sapusek Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR or MLRA): LRR N Lat: 38.749301 Long: -80.522095 Datum: NAD 83
 Soil Map Unit Name: Ch - Chavies fine sandy loam, rarely flooded NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks: Cowardin Code: PEM HGM: Depressional Water Type: RPWWN

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-QR12

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Scirpus atrovirens</u>	<u>80</u>	☒	<u>OBL</u>	Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Phleum pratense</u>	<u>15</u>	☐	<u>FACU</u>	
3. <u>Dactylis glomerata</u>	<u>5</u>	☐	<u>FACU</u>	
4. <u>Dichanthelium clandestinum</u>	<u>5</u>	☐	<u>FAC</u>	
5. <u>Packera aurea</u>	<u>5</u>	☐	<u>FACW</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>110</u> = Total Cover 50% of total cover: <u>55</u> 20% of total cover: <u>22</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes ☒ No ☐

SOIL

Sampling Point: W-QR12

[illegible]

Wetland Photograph Page

Wetland ID W-QR12 Date 04/23/2016



Photograph Direction NE

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Braxton Sampling Date: 04/23/2016
Applicant/Owner: MVP State: WV Sampling Point: W-QR11/QR12-UP
Investigator(s): D Hadersbeck, J McGuirk, C Sapusek Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Swell Local relief (concave, convex, none): Convex Slope (%): 2
Subregion (LRR or MLRA): LRR N Lat: 38.747814 Long: -80.521796 Datum: NAD 83
Soil Map Unit Name: Ch - Chavies fine sandy loam, rarely flooded NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks: Cowardin Code: UPLAND HGM: Water Type:

HYDROLOGY

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

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):
Water Table Present? Yes ☐ No ☒ Depth (inches):
Saturation Present? Yes ☐ No ☒ Depth (inches):
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-QR11/QR12-UP

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Trifolium pratense</u>	<u>5</u>	_____	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Achillea millefolium</u>	<u>5</u>	_____	<u>FACU</u>	
3. <u>Phleum pratense</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>	
4. <u>Dactylis glomerata</u>	<u>25</u>	<u>✓</u>	<u>FACU</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>55</u> = Total Cover 50% of total cover: <u>27.5</u> 20% of total cover: <u>11</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>✓</u>

SOIL

Sampling Point: W-QR11/QR12-UP

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Braxton Sampling Date: 04/23/2016
Applicant/Owner: MVP State: WV Sampling Point: W-QR13
Investigator(s): D Hadersbeck, J McGuirk, C Sapusek Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR or MLRA): LRR N Lat: 38.751434 Long: -80.51688 Datum: NAD 83
Soil Map Unit Name: BuE - Buchanan channery loam, 15 to 35 percent slopes, extremely stony NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks: Cowardin Code: PEM HGM: Depressional Water Type: RPWWN
Adjacent to Little Kanawha River

HYDROLOGY

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

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):
Water Table Present? Yes ☐ No ☒ Depth (inches):
Saturation Present? Yes ☐ No ☒ Depth (inches):
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-QR13

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Scirpus atrovirens</u>	<u>50</u>	☒	<u>OBL</u>	Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Impatiens capensis</u>	<u>50</u>	☒	<u>FACW</u>	
3. <u>Viola sp.</u>	<u>10</u>	_____	<u>ND</u>	
4. <u>Packera aurea</u>	<u>10</u>	_____	<u>FACW</u>	
5. <u>Boehmeria cylindrica</u>	<u>10</u>	_____	<u>FACW</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>130</u> = Total Cover 50% of total cover: <u>65</u> 20% of total cover: <u>26</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes ☒ No <u> </u>
Remarks: (Include photo numbers here or on a separate sheet.) Indicator status not determined for Viola sp. Viola sp not used in dominance test				

SOIL

Sampling Point: W-QR13

[illegible]

Wetland Photograph Page

Wetland ID W-QR13 Date 04/23/2016



Photograph Direction West

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Braxton Sampling Date: 04/23/2016
 Applicant/Owner: MVP State: WV Sampling Point: W-QR13-UP
 Investigator(s): D Hadersbeck, J McGuirk, C Sapusek Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Swell Local relief (concave, convex, none): Convex Slope (%): 2
 Subregion (LRR or MLRA): LRR N Lat: _____ Long: _____ Datum: NAD 83
 Soil Map Unit Name: BuE - Buchanan channery loam, 15 to 35 percent slopes, extremely stony NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks: Cowardin Code: UPLAND HGM: _____ Water Type: _____

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present? Yes _____ No ☒	Depth (inches): _____	
Water Table Present? Yes _____ No ☒	Depth (inches): _____	
Saturation Present? Yes _____ No ☒ (includes capillary fringe)	Depth (inches): _____	

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-QR13-UP

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Trifolium pratense</u>	<u>5</u>	_____	<u>FACU</u>	
2. <u>Achillea millifolium</u>	<u>5</u>	_____	<u>FACU</u>	
3. <u>Phleum pratense</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>	
4. <u>Dactylis glomerata</u>	<u>25</u>	<u>✓</u>	<u>FACU</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>55</u> = Total Cover 50% of total cover: <u>27.5</u> 20% of total cover: <u>11</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>✓</u>

SOIL

Sampling Point: W-QR13-UP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 4/4	100					SiL	
						¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.		
							² Location: PL=Pore Lining, M=Matrix.	
Hydric Soil Indicators:			Indicators for Problematic Hydric Soils³:					
☐ Histosol (A1)			☐ Dark Surface (S7)			☐ 2 cm Muck (A10) (MLRA 147)		
☐ Histic Epipedon (A2)			☐ Polyvalue Below Surface (S8) (MLRA 147, 148)			☐ Coast Prairie Redox (A16)		
☐ Black Histic (A3)			☐ Thin Dark Surface (S9) (MLRA 147, 148)			☒ (MLRA 147, 148)		
☐ Hydrogen Sulfide (A4)			☐ Loamy Gleyed Matrix (F2)			☐ Piedmont Floodplain Soils (F19)		
☐ Stratified Layers (A5)			☐ Depleted Matrix (F3)			☒ (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 Mucky Mineral (S1) (LRR N,			☐ Iron-Manganese Masses (F12) (LRR N,					
☒ MLRA 147, 148)			☒ MLRA 136)					
☐ Sandy Gleyed Matrix (S4)			☐ Umbric Surface (F13) (MLRA 136, 122)			³ Indicators of hydrophytic vegetation and		
☐ Sandy Redox (S5)			☐ Piedmont Floodplain Soils (F19) (MLRA 148)			wetland hydrology must be present,		
☐ Stripped Matrix (S6)			☐ Red Parent Material (F21) (MLRA 127, 147)			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: MVP City/County: Braxton Sampling Date: 05/13/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-111B
 Investigator(s): SET, SJC, GS Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 3-5%
 Subregion (LRR or MLRA): LRRN Lat: 38.708854 Long: -80.489359 Datum: NAD 83
 Soil Map Unit Name: Gilpin-Lily complex, 15 to 25 percent slopes NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks:

Cowardin Code: PEM; HGM: depressional; WT: NRPWW

The wetland was revisited on 10/3/2019. The presence of wetland hydrology, hydrophytic vegetation, and hydric soils was unable to be confirmed because of construction activity within the LOD. The wetland was cleared of woody vegetation within LOD as part of Project construction in 2018. Vegetation listed on this form represents the vegetative community present in the wetland prior to the start of construction.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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): <u> </u>	Wetland Hydrology Present? Yes ☒ No ☐
Water Table Present?	Yes ☐ No ☒	Depth (inches): <u> </u>	
Saturation Present? (includes capillary fringe)	Yes ☐ No ☒	Depth (inches): <u> </u>	

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-111B

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Microstegium vimineum</u>	<u>75</u>	☒	<u>FAC</u>	
2. <u>Mentha spicata</u>	<u>15</u>	_____	<u>FACW</u>	
3. <u>Juncus effusus</u>	<u>15</u>	_____	<u>FACW</u>	
4. <u>Dichanthelium clandestinum</u>	<u>10</u>	_____	<u>FAC</u>	
5. <u>Epilobium coloratum</u>	<u>5</u>	_____	<u>FACW</u>	Hydrophytic Vegetation Present? Yes ☒ No _____
6. <u>Carex vulpinoidea</u>	<u>5</u>	_____	<u>OBL</u>	
7. <u>Glechoma hederacea</u>	<u>5</u>	_____	<u>FACU</u>	
8. <u>Fragaria vesca</u>	<u>5</u>	_____	<u>FACU</u>	
9. _____	_____	_____	_____	
<u>135</u> = Total Cover 50% of total cover: <u>67.5</u> 20% of total cover: <u>27</u>				Woody Vine Stratum (Plot size: <u>15'</u>)
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes ☒ No _____
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-I11B

[illegible]

Wetland Photograph Page

Wetland ID W-I11B



Photograph Direction NE

Date: 05/13/2015

Comments: 2015 wetland delineation.



Photograph Direction NE

Date: 10/03/19

Comments: 2019 wetland delineation confirmation.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Braxton Sampling Date: 05/13/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-111B UPL
 Investigator(s): SET, SJC, GS Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope (%): 8-15
 Subregion (LRR or MLRA): LRRN Lat: 38.708809 Long: -80.489406 Datum: NAD 83
 Soil Map Unit Name: Gilpin-Lily complex, 15 to 25 percent slopes NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:
Upland

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☐ No ☒
Surface Water Present? Yes ☐ No ☒	Depth (inches): _____	
Water Table Present? Yes ☐ No ☒	Depth (inches): _____	
Saturation Present? Yes ☐ No ☒ (includes capillary fringe)	Depth (inches): _____	

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: W-I11B UPL

Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status
1.	Acer saccharum	60	✓	FACU
2.				
3.				
4.				
5.				
6.				
7.				
		60 = Total Cover		
		50% of total cover: 30	20% of total cover: 12	
Sapling/Shrub Stratum (Plot size: 15')				
1.	Rubus allegheniensis	25	✓	FACU
2.	Rosa multiflora	10	✓	FACU
3.				
4.				
5.				
6.				
7.				
8.				
9.				
		35 = Total Cover		
		50% of total cover: 17.5	20% of total cover: 7	
Herb Stratum (Plot size: 5')				
1.	Microstegium vimineum	90	✓	FAC
2.	Packera aurea	5		FACW
3.	Dichanthelium clandestinum	5		FAC
4.	Epilobium spp.	5		ND
5.	Smilax rotundifolia	5		FAC
6.	Carya ovata	5		FACU
7.	Boehmeria cylindrica	5		FACW
8.				
9.				
10.				
11.				
		120 = Total Cover		
		50% of total cover: 60	20% of total cover: 24	
Woody Vine Stratum (Plot size: 15')				
1.				
2.				
3.				
4.				
5.				
		0 = Total Cover		
		50% of total cover: 0	20% of total cover: 0	

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

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 (A/B)
Prevalence Index worksheet:	
Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals:	(A) (B)
Prevalence Index = B/A =	
Hydrophytic Vegetation Indicators:	
☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)	
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Definitions of Four Vegetation Strata:	
Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.	
Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.	
Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.	
Woody vine – All woody vines greater than 3.28 ft in height.	
Hydrophytic Vegetation Present? Yes _____ No ☒	

SOIL

Sampling Point: W-I11B UPL

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Webster Sampling Date: 06/12/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-R2
 Investigator(s): DH EF NV JC Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Valley Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR or MLRA): LRRN Lat: 38.667262 Long: -80.480122 Datum: NAD 83
 Soil Map Unit Name: Pope loam NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks:

Cowardin Code: PEM

HGM: SLOPE

WT: RPWWD

Soils are massive and this area appears to be an abandoned road.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-R2

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____	_____	_____	_____	
0 = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Platanus occidentalis</u>	<u>7</u>	☒	<u>FACW</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
7 = Total Cover 50% of total cover: <u>3.5</u> 20% of total cover: <u>1.4</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Packera aurea</u>	<u>18</u>	☒	<u>FACW</u>	
2. <u>Impatiens capensis</u>	<u>8</u>	_____	<u>FACW</u>	
3. <u>Carex lurida</u>	<u>12</u>	_____	<u>OBL</u>	
4. <u>Boehmeria cylindrica</u>	<u>10</u>	_____	<u>FACW</u>	
5. <u>Microstegium vimineum</u>	<u>30</u>	☒	<u>FAC</u>	
6. <u>Onoclea sensibilis</u>	<u>2</u>	_____	<u>FACW</u>	
7. <u>Thelypteris noveboracensis</u>	<u>5</u>	_____	<u>FAC</u>	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
85 = Total Cover 50% of total cover: <u>42.5</u> 20% of total cover: <u>17</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
0 = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: W-R2

[illegible]

Wetland Photograph Page

Wetland ID W-R2 Date 06/12/2015



Photograph Direction SW

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Webster Sampling Date: 06/12/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-R2 UPL
 Investigator(s): DH JC EF NV CC KL Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Meadow Local relief (concave, convex, none): Convex Slope (%): 3
 Subregion (LRR or MLRA): LRRN Lat: 38.667366 Long: -80.480118 Datum: NAD 83
 Soil Map Unit Name: Pope loam NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland

Located on slight berm along abandoned road. Along a powerline easement.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-R2 UPL

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Acer rubrum</u>	<u>10</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80</u> (A/B)
2. <u>Cornus florida</u>	<u>5</u>	☒	<u>FACU</u>	
3. <u>Carpinus caroliniana</u>	<u>5</u>	☒	<u>FAC</u>	
4. <u>Oxydendrum arboreum</u>	<u>2</u>		<u>UPL</u>	
5. _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
6. _____				
7. _____				
	<u>22</u> = Total Cover			
50% of total cover: <u>11</u> 20% of total cover: <u>4.4</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Asimina triloba</u>	<u>4</u>		<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
2. _____				
3. _____				
4. _____				
5. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6. _____				
7. _____				
8. _____				
9. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
10. _____				
11. _____				
	<u>4</u> = Total Cover			
50% of total cover: <u>2</u> 20% of total cover: <u>0.8</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Anthoxanthum odoratum</u>	<u>7</u>		<u>FACU</u>	Hydrophytic Vegetation Present? Yes ☒ No _____
2. <u>Thelypteris noveboracensis</u>	<u>60</u>	☒	<u>FAC</u>	
3. <u>Polystichum acrostichoides</u>	<u>5</u>		<u>FACU</u>	
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
	<u>72</u> = Total Cover			
50% of total cover: <u>36</u> 20% of total cover: <u>14.4</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
	<u>0</u> = Total Cover			
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-R2 UPL

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Webster Sampling Date: 08/10/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-KK03
 Investigator(s): D. Hadersbeck A. Hatfield C. Carver Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR or MLRA): LRRN Lat: 38.667018 Long: -80.478508 Datum: NAD 83
 Soil Map Unit Name: Pope loam NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:
 Cowardin Code: PEM
 HGM: Riverine
 WT: RPWWD

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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:		Wetland Hydrology Present? Yes ☒ No ☐
Surface Water Present? Yes ☐ No ☒	Depth (inches): _____	
Water Table Present? Yes ☐ No ☒	Depth (inches): _____	
Saturation Present? Yes ☐ No ☒ (includes capillary fringe)	Depth (inches): _____	

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-KK03

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Carpinus caroliniana</u>	<u>15</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>83</u> (A/B)
2. <u>Tsuga canadensis</u>	<u>10</u>	☒	<u>FACU</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
25 = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
50% of total cover: <u>12.5</u> 20% of total cover: <u>5</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Acer rubrum</u>	<u>4</u>	☒	<u>FAC</u>	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
4 = Total Cover				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
50% of total cover: <u>2</u> 20% of total cover: <u>0.8</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Carex stipata</u>	<u>30</u>	☒	<u>OBL</u>	
2. <u>Packara aurea</u>	<u>20</u>	☒	<u>FACW</u>	
3. <u>Thelypteris noveboracensis</u>	<u>15</u>	☒	<u>FAC</u>	
4. <u>Boehmeria cylindrica</u>	<u>4</u>		<u>FACW</u>	
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
69 = Total Cover				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
50% of total cover: <u>34.5</u> 20% of total cover: <u>13.8</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
0 = Total Cover				Hydrophytic Vegetation Present? Yes ☒ No _____
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-KK03

[illegible]

Wetland Photograph Page

Wetland ID W-KK03 Date 08/10/2015



Photograph Direction SE

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Webster Sampling Date: 08/10/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-KK03 UP
 Investigator(s): D. Hadersbeck A. Hatfield C. Carver Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR or MLRA): LRRN Lat: 38.666962 Long: -80.478492 Datum: NAD 83
 Soil Map Unit Name: Pope loam NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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? Yes ☐ No ☒ Depth (inches):
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-KK03 UP

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Carpinus caroliniana</u>	<u>15</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67</u> (A/B)
2. <u>Tsuga canadensis</u>	<u>10</u>	☒	<u>FACU</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
25 = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
50% of total cover: <u>12.5</u> 20% of total cover: <u>5</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Carpinus caroliniana</u>	<u>10</u>	☒	<u>FAC</u>	
2. <u>Asimina triloba</u>	<u>5</u>	☒	<u>FAC</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
15 = Total Cover				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: <u>7.5</u> 20% of total cover: <u>3</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Dryopteris intermedia</u>	<u>25</u>	☒	<u>FAC</u>	
2. <u>Thelypteris noveboracensis</u>	<u>12</u>	☒	<u>FACU</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
37 = Total Cover				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
50% of total cover: <u>18.5</u> 20% of total cover: <u>7.4</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
0 = Total Cover				Hydrophytic Vegetation Present? Yes ☒ No _____
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				

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

SOIL

Sampling Point: W-KK03 UP

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Webster Sampling Date: 06/12/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-R03
 Investigator(s): DH EF NV JC Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Valley Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR or MLRA): LRRN Lat: 38.666869 Long: -80.480889 Datum: NAD 83
 Soil Map Unit Name: Laidig channery silt loam, 15 to 35 percent slopes, extremely stony NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:
 Cowardin Code: PEM
 HGM: DEPRESSION
 WT: NRPWW

Soils are disturbed and this area appears to be an abandoned road.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☒ 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 on 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:		Wetland Hydrology Present? Yes ☒ No ☐
Surface Water Present? Yes ☒ No ☐ Depth (inches): <u>1</u>		
Water Table Present? Yes ☐ No ☒ Depth (inches): <u> </u>		
Saturation Present? Yes ☐ No ☒ Depth (inches): <u> </u> (includes capillary fringe)		

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-R03

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
1. <u>Rosa multiflora</u>	<u>1</u>	☒	<u>FACU</u>	
2. <u>Fraxinus pennsylvanica</u>	<u>4</u>	☒	<u>FACW</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>5</u> = Total Cover 50% of total cover: <u>2.5</u> 20% of total cover: <u>1</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Packera aurea</u>	<u>10</u>		<u>FACW</u>	
2. <u>Impatiens capensis</u>	<u>3</u>		<u>FACW</u>	
3. <u>Thelypteris noveboracensis</u>	<u>8</u>		<u>FAC</u>	
4. <u>Boehmeria cylindrica</u>	<u>5</u>		<u>FACW</u>	
5. <u>Microstigeum vimineum</u>	<u>60</u>	☒	<u>FAC</u>	
6. <u>Carex lurida</u>	<u>10</u>		<u>OBL</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>96</u> = Total Cover 50% of total cover: <u>48</u> 20% of total cover: <u>19.2</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>

SOIL

Sampling Point: W-R03

[illegible]

Wetland Photograph Page

Wetland ID W-R03 Date 06/12/2015



Photograph Direction SE

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Webster Sampling Date: 06/12/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-R03-up
 Investigator(s): DH JC EF NV CC KL Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Meadow Local relief (concave, convex, none): Convex Slope (%): 3
 Subregion (LRR or MLRA): LRRN Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: None

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 _____	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:

Cowardin Code:

HGM:

WT:

Located adjacent to berm along abandoned road.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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): _____	Wetland Hydrology Present? Yes _____ No ☒
Water Table Present? Yes _____ No ☒	Depth (inches): _____	
Saturation Present? Yes _____ No ☒ (includes capillary fringe)	Depth (inches): _____	

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-R03-up

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Acer rubrum</u>	<u>25</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)
2. <u>Nyssa sylvaticum</u>	<u>20</u>	☒	<u>FAC</u>	Total Number of Dominant Species Across All Strata: <u>4</u> (B)
3. <u>Liriodendron tulipifera</u>	<u>5</u>		<u>FACU</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____	_____	_____	_____	
<u>50</u> = Total Cover 50% of total cover: <u>25</u> 20% of total cover: <u>10</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Boehmeria cylindrica</u>	<u>10</u>		<u>FACW</u>	Hydrophytic Vegetation Present? Yes ☒ No _____
2. <u>Thelypteris noveboracensis</u>	<u>70</u>	☒	<u>FAC</u>	
3. <u>Polystichum acrostichoides</u>	<u>2</u>		<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>82</u> = Total Cover 50% of total cover: <u>41</u> 20% of total cover: <u>16.4</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. <u>Toxicodendron radicans</u>	<u>5</u>	☒	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>5</u> = Total Cover 50% of total cover: <u>2.5</u> 20% of total cover: <u>1</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-R03-up

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Webster Sampling Date: 05/06/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-F46
 Investigator(s): A. Flake, D. McCullough, E. Strohmaier Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Hillside Local relief (concave, convex, none): Convex Slope (%): 10-20
 Subregion (LRR or MLRA): LRRN Lat: 38.664121 Long: -80.479002 Datum: NAD83
 Soil Map Unit Name: Pineville-Gilpin-Guyandotte association, very steep, extremely stony NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:

Cowardin Code: PEM; HGM: SLOPE; WT: RPWWN

Information listed on this form represents the data collected in 2015. The wetland was revisited on 10/5/2019. The presence of wetland hydrology, hydrophytic vegetation, and hydric soils was unable to be confirmed because of construction activity within the LOD.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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? Yes ☒ No ☐ Depth (inches): 0
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

Same upland plot at w-F44

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-F46

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Packera aurea</u>	<u>50</u>	☒	<u>FACW</u>	
2. <u>Microstigium vimineum</u>	<u>30</u>	☒	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>80</u> = Total Cover 50% of total cover: <u>40</u> 20% of total cover: <u>16</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes ☒ No _____
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-F46

[illegible]

Wetland Photograph Page

Wetland ID W-F46



Photograph Direction South

Date: 05/06/2015

Comments: 2015 wetland delineation.



Photograph Direction West

Date: 10/05/19

Comments: 2019 wetland delineation confirmation.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Webster Sampling Date: 05/06/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-F44, F45, F46, & F47 UPL
 Investigator(s): A. Flake, D. McCullough, E. Strohmaier Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope (%): 8
 Subregion (LRR or MLRA): LRRN Lat: 38.664722 Long: -80.478715 Datum: NAD83
 Soil Map Unit Name: Pineville-Gilpin-Guyandotte association, very steep, extremely stony NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	
Remarks: Upland	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
<u>Primary Indicators (minimum of one is required; check all that apply)</u>			
☐ 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 on 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): _____	Wetland Hydrology Present? Yes ☐ No ☒	
Water Table Present? Yes ☐ No ☒	Depth (inches): _____		
Saturation Present? Yes ☐ No ☒ (includes capillary fringe)	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: W-F44, F45, F46, & F47 UPL

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Acer rubrum</u>	<u>50</u>	☒	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
2. <u>Fagus grandifolia</u>	<u>30</u>	☒	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
50% of total cover: <u>40</u> 20% of total cover: <u>16</u> <u>80</u> = Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Carpinus caroliniana</u>	<u>25</u>	☒	<u>FAC</u>	
2. <u>Viburnum acerifolium</u>	<u>30</u>	☒	<u>UPL</u>	
3. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
50% of total cover: <u>27.5</u> 20% of total cover: <u>11</u> <u>55</u> = Total Cover				Hydrophytic Vegetation Present? Yes _____ No ☒
Herb Stratum (Plot size: <u>5'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Woody Vine Stratum (Plot size: <u>15'</u>)
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u> <u>0</u> = Total Cover
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u> <u>0</u> = Total Cover
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes _____ No ☒
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	50% of total cover: <u>0</u> 20% of total cover: <u>0</u>
4. _____	_____	_____	_____	
5. _____	_____			

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

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: 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 Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)

Indicators for Problematic Hydric Soils³:

- ___ 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)**

☐ 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)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Roots

Depth (inches): 10

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Webster Sampling Date: 06/12/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-R4
 Investigator(s): DH EF NV JC Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 5
 Subregion (LRR or MLRA): LRRN Lat: 38.664037 Long: -80.483427 Datum: NAD 83
 Soil Map Unit Name: Pineville-Gilpin-Guyandotte association, very steep, extremely stor NWI classification: None

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 ☐	Is the Sampled Area within a Wetland?	Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐		
Wetland Hydrology Present?	Yes ☒ No ☐		

Remarks:

Cowardin Code: PEM

HGM: Slope

WT: NRPWW

Wetland occurring within abandoned road. Rocky/fill restrictive soil perching water. Disturbed soils/hydrology.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
☐ 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 on 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? Yes ☒ No ☐ Depth (inches): 0
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-R4

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Platanus occidentalis</u>	<u>10</u>	☒	<u>FACW</u>	
2. <u>Lindera benzoin</u>	<u>3</u>	☒	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>13</u> = Total Cover 50% of total cover: <u>6.5</u> 20% of total cover: <u>2.6</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Adiantum pedatum</u>	<u>4</u>	_____	<u>FAC</u>	
2. <u>Impatiens capensis</u>	<u>3</u>	_____	<u>FACW</u>	
3. <u>Osmundastrum cinnamomeum</u>	<u>3</u>	_____	<u>FACW</u>	
4. <u>Boehmeria cylindrica</u>	<u>12</u>	_____	<u>FACW</u>	
5. <u>Microstegium vimineum</u>	<u>60</u>	☒	<u>FAC</u>	
6. <u>Carex vulpinoidea</u>	<u>8</u>	_____	<u>OBL</u>	
7. <u>Onoclea sensibilis</u>	<u>4</u>	_____	<u>FACW</u>	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>94</u> = Total Cover 50% of total cover: <u>47</u> 20% of total cover: <u>18.8</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes ☒ No <u> </u>

SOIL

Sampling Point: W-R4

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-1	10YR 3/3	100					O	
1-6	10YR 4/1	70	10YR 4/4	30	C	PL	SC	
6-10	7.5YR 4/6	100					SC	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: 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 Mucky 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 Soils³:

- ☐ 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)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock
 Depth (inches): 10

Hydric Soil Present? Yes ☒ No ☐

Remarks:

Wetland Photograph Page

Wetland ID W-R4 Date 06/12/2015



Photograph Direction East

Comments:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Webster Sampling Date: 06/12/2015
Applicant/Owner: MVP State: WV Sampling Point: W-R4 UPL
Investigator(s): DH JC EF NV CC KL Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex Slope (%): 10
Subregion (LRR or MLRA): LRRN Lat: 38.663944 Long: -80.483477 Datum: NAD 83
Soil Map Unit Name: Pineville-Gilpin-Guyandotte association, very steep, extremely stony NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland

Sloped hillside

HYDROLOGY

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

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-R4 UPL

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Acer saccharum</u>	<u>40</u>	☒	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>20%</u> (A/B)
2. <u>Nyssa sylvatica</u>	<u>5</u>		<u>FAC</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
<u>45</u> = Total Cover 50% of total cover: <u>22.5</u> 20% of total cover: <u>9</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Asimina triloba</u>	<u>6</u>	☒	<u>FAC</u>	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
<u>6</u> = Total Cover 50% of total cover: <u>3</u> 20% of total cover: <u>1.2</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Rubus phoenicolasius</u>	<u>10</u>	☒	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
2. <u>Parathelypteris noveboracensis</u>	<u>6</u>		<u>FAC</u>	
3. <u>Polystichum acrostichoides</u>	<u>9</u>		<u>FACU</u>	
4. <u>Lindera benzoin</u>	<u>7</u>		<u>FAC</u>	
5. <u>Boehmeria cylindrica</u>	<u>1</u>		<u>FACW</u>	
6. <u>Aralia racemosa</u>	<u>15</u>	☒	<u>FACU</u>	
7. <u>Caulophyllum thalictroides</u>	<u>10</u>	☒	<u>UPL</u>	
8. _____				
9. _____				
10. _____				
11. _____				
<u>58</u> = Total Cover 50% of total cover: <u>29</u> 20% of total cover: <u>11.6</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Hydrophytic Vegetation Present? Yes <u> </u> No ☒				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W-R4 UPL

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Webster Sampling Date: 05/04/2015
 Applicant/Owner: MVP State: WV Sampling Point: W-H75
 Investigator(s): A. Grech, S. Kelly, M. Whitten Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 0-3
 Subregion (LRR or MLRA): LRRN Lat: 38.607454 Long: -80.504813 Datum: NAD 83
 Soil Map Unit Name: Pineville-Gilpin-Guyandotte association, very steep, extremely stor NWI classification: None

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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks:

Cowardin Code: PEM; HGM: Slope; WT: RPWWN

Information listed on this form represents the data collected in 2015. The wetland was revisited on 10/10/2019. The presence of wetland hydrology, hydrophytic vegetation, and hydric soils was unable to be confirmed because the wetland was obstructed by timber matting.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ 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 on 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): 10
 Saturation Present? Yes ☒ No ☐ Depth (inches): 0
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-H75

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Juncus effusus</u>	<u>40</u>	☒	<u>FACW</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Scirpus cyperinus</u>	<u>40</u>	☒	<u>OBL</u>	
3. <u>Dichanthelium clandestinum</u>	<u>20</u>	☒	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>100</u> = Total Cover 50% of total cover: <u>50</u> 20% of total cover: <u>20</u>				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: W-H75

[illegible]

Wetland Photograph Page

Wetland ID W-H75



Photograph Direction SE

Date: 05/04/2015

Comments: 2015 wetland delineation.



Photograph Direction SE

Date: 10/10/19

Comments: 2019 wetland delineation confirmation.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP City/County: Webster Sampling Date: 05/04/2015
Applicant/Owner: MVP State: WV Sampling Point: W-H75-UP
Investigator(s): A. Grech, S.Kelly, M. Whitten Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 0-20
Subregion (LRR or MLRA): LRRN Lat: 38.607361 Long: -80.504626 Datum: NAD 83
Soil Map Unit Name: Pineville-Gilpin-Guyandotte association, very steep, extremely stor NWI classification: None

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 ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

Upland, mountain top hardwoods

HYDROLOGY

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

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: W-H75-UP

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Acer rubrum</u>	<u>40</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
<u>40</u> = Total Cover 50% of total cover: <u>20</u> 20% of total cover: <u>8</u>				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
<u>40</u> = Total Cover 50% of total cover: <u>20</u> 20% of total cover: <u>8</u>				
<u>40</u> = Total Cover 50% of total cover: <u>20</u> 20% of total cover: <u>8</u>				
<u>40</u> = Total Cover 50% of total cover: <u>20</u> 20% of total cover: <u>8</u>				
<u>40</u> = Total Cover 50% of total cover: <u>20</u> 20% of total cover: <u>8</u>				
<u>40</u> = Total Cover 50% of total cover: <u>20</u> 20% of total cover: <u>8</u>				
<u>40</u> = Total Cover 50% of total cover: <u>20</u> 20% of total cover: <u>8</u>				
<u>40</u> = Total Cover 50% of total cover: <u>20</u> 20% of total cover: <u>8</u>				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
<u>15</u> = Total Cover 50% of total cover: <u>7.5</u> 20% of total cover: <u>3</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
<u>15</u> = Total Cover 50% of total cover: <u>7.5</u> 20% of total cover: <u>3</u>				Hydrophytic Vegetation Present? Yes <u> </u> No ☒
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes <u> </u> No ☒
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes <u> </u> No ☒
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes <u> </u> No ☒
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes <u> </u> No ☒
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes <u> </u> No ☒
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes <u> </u> No ☒
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes <u> </u> No ☒
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes <u> </u> No ☒
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<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes <u> </u> No ☒
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<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes <u> </u> No ☒
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes <u> </u> No ☒
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes <u> </u> No ☒
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<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Hydrophytic Vegetation Present? Yes <u> </u> No ☒
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SOIL

Sampling Point: W-H75-UP**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-7	10YR 5/4	96	7.5YR4/6	4	C	M	SC	
7-14	10YR 6/4	98	7.5YR5/6	2	C	M	C	
14-21	10YR 5/6	100					C	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: 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 Mucky 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 Soils³:

- ☐ 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)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks: