

August 4, 2025

Mr. Steven VanderPloeg U.S. Army Corps of Engineers, Norfolk District Western Virginia Regulatory Section 9100 Arboretum Parkway, Suite 235 Richmond, VA 23236

Re: Preliminary Jurisdictional Determination Request Mountain Valley Pipeline, LLC Snow Creek Permittee Responsible Mitigation Project Franklin County, Virginia Burns & McDonnell Project No.: 186472

Dear Mr. VanderPloeg:

Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) was retained by Mountain Valley Pipeline, LLC (client) to provide wetland delineation services for the Snow Creek Wetland Mitigation Project (Project). The following sections provide information on the proposed Project and summarize the completed wetland delineation.

INTRODUCTION

The client proposes implementing a Permittee Responsible Mitigation (PRM) site in Franklin County, Virginia (VA) to satisfy mitigation requirements related to proposed impacts in Virginia from the MVP Southgate Amendment Project. Activities associated with the Project will consist of excavating, filling, grading, and the enhancement, restoration, and creation of wetland resources. The Project is located 7.15 miles southeast of Snydorsville, VA, 1.75 miles northeast of the intersection at Sontag Road (VA Route 619) and Snow Creek Road (VA Route 890) and is accessed via Airport Road. A General Location Map illustrating the Project location has been included in Attachment A (Figure A-1).

The proposed Project has the potential to impact wetlands and other waterbodies in Virginia that may be under the jurisdiction of the U.S. Army Corps of Engineers (USACE) as designated by Section 404 of the Clean Water Act. In an effort to avoid and minimize potential impacts to regulated waterbodies, Burns & McDonnell conducted a wetland delineation within a 25-acre area encompassing the proposed PRM project (Survey Area). This report documents the findings of the delineation which determined the boundaries and extent of wetlands and other waterbodies within the Survey Area.

METHODS

The following discussions summarize the methods used to review existing data and conduct the wetland delineation.



Existing Data Review

Burns & McDonnell reviewed publicly available background information for the Survey Area prior to conducting a site visit. This background information included U.S. Geological Survey (USGS) 7.5-minute topographic maps, U.S. Fish & Wildlife Service (USFWS) National Wetland Inventory (NWI) maps, the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL), National Agricultural Imagery Program (NAIP) aerial photography (2023), USGS National Hydrography Dataset (NHD), and U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soil Survey Geographic (SSURGO) digital data for Franklin County, Virginia. Maps generated from this publicly available data are included as Figures A-2 and A-3 in Attachment A. The USACE Antecedent Precipitation Tool (APT) was reviewed to evaluate climatic conditions.

Wetland presence based only on background information, including NWI maps, cannot be assumed to be an accurate assessment of jurisdictional wetlands. Wetland identification criteria differ between the USFWS and the USACE. As a result, wetlands shown on an NWI map may not be under the jurisdiction of the USACE, and USACE-jurisdictional wetlands are not always included on the NWI maps. Therefore, a field visit is necessary to identify any wetlands, streams, or other waterbodies that may be present within the proposed Project area.

Wetland Delineation Field Survey

An onsite wetland delineation of the Survey Area was completed in accordance with the 1987 Corps of Engineers Wetlands Delineation Manual and the 2012 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Regional Supplement). Sample plots were established at multiple locations, and Wetland Determination Data Forms from the Regional Supplement were completed to characterize the Survey Area (Attachment B). Vegetation, soil conditions, and hydrology indicators were recorded at each of these sample plots. Locations of sample plots and other identified features were surveyed using a sub-meter accurate global positioning system (GPS) unit. Natural color photographs were taken onsite and are included in Attachment C.

RESULTS

The following sections describe the results of the existing data review and the completed wetland delineation.

Existing Data Review

The existing USGS topographic map for Mountain Valley, Virginia (2022 Revision) was reviewed to familiarize Burns & McDonnell wetland personnel with the topography of the Survey Area and potential locations of wetlands and other waterbodies (Figure A-2). The USGS topographic map indicates the Survey Area is comprised of an open landscape with moderately sloping terrain to the east that gradually transitions to a floodplain area along the western bank of Snow Creek. The maps indicate that the Survey Area has approximately 30 feet of elevation change.



The 2008 NFHL provided by FEMA indicates that a regulated floodplain associated with Snow Creek is present along the eastern edge of the Survey Area (Figure A-2).

The USFWS NWI map indicates that one riverine wetland (R3UBH) intersects the eastern edge of the Survey Area (Figure A-2).

The NRCS SSURGO digital data indicates the Survey Area is underlain by Comus-Maggodee-Elsinboro complex, 0 to 4 percent slopes, Colescreek-Dalanco complex, 2 to 8 percent slopes, Minnieville loam, 8 to 15 percent slopes, Minnieville loam, 15 to 25 percent slopes, and Wintergreen loam, 8 to 15 percent slopes (Figure A-3). Neither of these soil units are considered hydric in Franklin County, Virginia.

The USACE APT was reviewed to evaluate whether normal climatic conditions were present for the region on the specified survey dates. The APT analysis showed that the Survey Area had experienced wetter than normal precipitation conditions from July 21 to 22, 2025. The results of the USACE Antecedent Precipitation Tool (APT) query are included in Attachment D.

Wetland Delineation Field Survey

On July 21 and 22, 2025, wetland scientists with Burns & McDonnell conducted a wetland delineation of the Survey Area to identify the presence of wetlands, streams, and other waterbodies. The Survey Area consisted of an existing maintained cattle pasture along an east facing slope that transitioned into a floodplain along the western bank of Snow Creek.

Vegetation: Woody species were generally absent from the Survey Area except for a narrow riparian strip along the western bank of Snow Creek. Typical woody species included American sycamore (*Platanus occidentalis*), tuliptree (*Liriodendron tulipifera*), and green ash (*Fraxinus pennsylvanica*) Typical herbaceous species within the Survey Area included beaked panic grass (*Coleataenia anceps*), tall fescue (*Schedonorus arundinaceus*), Virginia buttonweed (*Diodia virginiana*), dallisgrass (*Paspalum dilatatum*), Japanese stiltgrass (*Microstegium vimineum*), and hairy crabgrass (*Digitaria sanguinalis*).

Soils: Typical soils within the Survey Area ranged from yellowish red (2.5YR 4/6) to grayish brown (2.5Y 5/2) with a loam and/or sandy clay textures. Redoximorphic features were typically present occurring as concentrations within the matrix and pore lining.

Hydrology: The primary sources of hydrology within the Survey Area include surface runoff from precipitation and ground water. Indicators of hydrology included surface water, high water table, saturated soils, oxidized rhizospheres on living roots, geomorphic position, and a positive FAC Neutral Test.



Delineated Areas: Wetlands

Two potentially jurisdictional wetland features were identified within the Survey Area. The wetlands are described by type below, and their locations are shown on Figure A-4 in Attachment A. Sample plots were recorded in wetlands and adjacent uplands. Data forms and photographs of these sample plots are included in Attachment B and Attachment C, respectively.

Table 1 provides the type and size of each wetland delineated within the Survey Area.

Feature Wetland Type^a Size (acres) **Identification**

Table 1: Type and Size of Wetlands Delineated within Survey Area

W-01 **PEM** 3.38 W-02 < 0.01 **PEM Total:** 3.38

Wetland 01 (W-01) – Palustrine Emergent (PEM) – 3.38 acres: W-01 consisted of a 3.38-acre PEM wetland located within the center and eastern portions of the Survey Area. Dominant herbaceous species within the W-01 included, beaked panic grass, Virginia buttonweed, swamp smartweed (Persicaria hydropiperoides), small carpetgrass (Arthraxon hispudus), white clover (Trifolium repens), and Japanese stiltgrass. Observed indicators of wetland hydrology included surface water, high-water table, saturated soils, oxidized rhizospheres on living roots, geomorphic position, and a positive FAC neutral test. Soil colors typically ranged brown (7.5YR 5/2) to grayish brown (2.5Y 5/2) and contained redoximorphic features. Hydric soil was indicated by Indicator F3 (Depleted Matrix).

Wetland 02 (W-02) – PEM - < 0.01-acre: W-02 consisted of a small pocket fringe wetland less than 0.01-acre along the western bank of Snow Creek (S-02). The feature was void of vegetation and received jurisdictional flow from S-02 during periods of high flows. Soils consisted of an unconsolidated sandy gravel mix.

a.) Palustrine Emergent Wetland = PEM



Delineated Areas: Streams

One perennial stream was located within the Survey Area. Table 2 provides the classification and length of the stream delineated within the Survey Area.

Table 2: Classification and Length of Streams within Survey Area

Feature Identification	Classification	Length (linear feet)
S-01 (Snow Creek)	Perennial	1,115
	Total:	1,115

Stream 01 (S-01; Snow Creek) – Perennial – 1,115 linear feet: S-01 is a perennial segment of Snow Creek that flows from south to north along the eastern edge of the Survey Area. The average bank height observed was approximately 5 feet. The stream averaged 50 feet wide and 1 foot deep at the Ordinary High-Water Mark (OHWM). The stream was low gradient with moderate flow and maintained indicators of relatively permanent flow. The area abutting the western bank of S-01 was heavily impacted by cattle grazing and vegetation maintenance. Common tree species along the western bank riparian areas included American sycamore, tuliptree, and green ash.

SUMMARY

Burns & McDonnell conducted a wetland delineation of the Survey Area from July 21 to 22, 2025 to determine the presence of wetlands, stream channels, and other waterbodies. A total of 3.38 acres of PEM wetlands and 1,115 linear feet of perennial stream channel, were identified within the Survey Area. On behalf of Mountain Valley Pipeline, LLC, Burns & McDonnell respectfully requests a preliminary jurisdictional determination of the resources identified within the Survey Area from the USACE Norfolk District. We would appreciate the opportunity to meet onsite to present the findings of our fieldwork. A signed Preliminary Jurisdictional Determination Request Form has been provided in Attachment E. Please contact Patrick Meier with Burns & McDonnell at (804)-223-1470 or by email at pkmeier@burnsmcd.com to set up a confirmation visit or to discuss any questions regarding this delineation.

Sincerely,

Patrick K. Meier, PWS Senior Wetland Scientist

14:17 Hi



Attachments:

Attachment A: Figures

Attachment B: Routine Wetland Determination Data Forms, Eastern Mountains & Piedmont

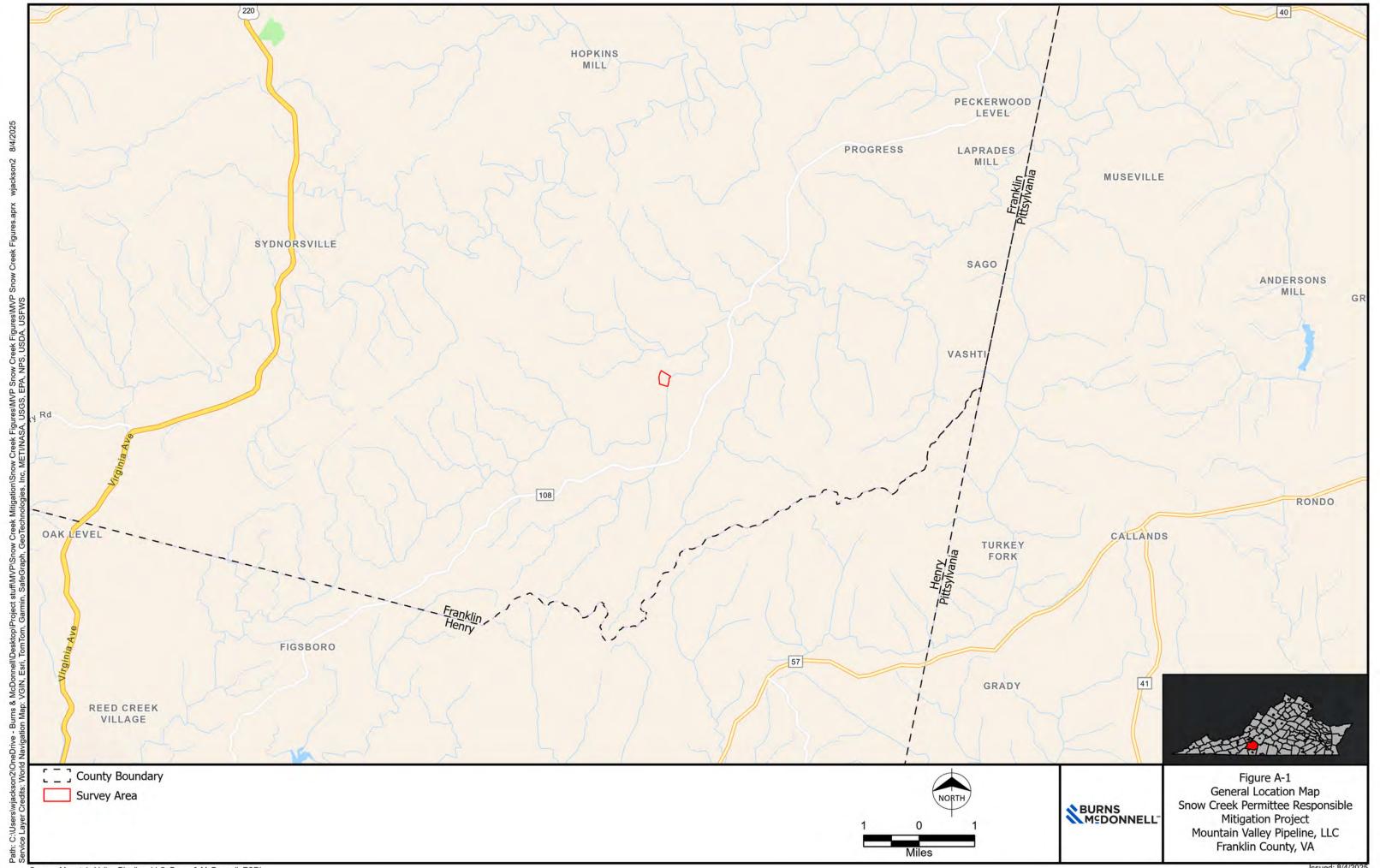
Region

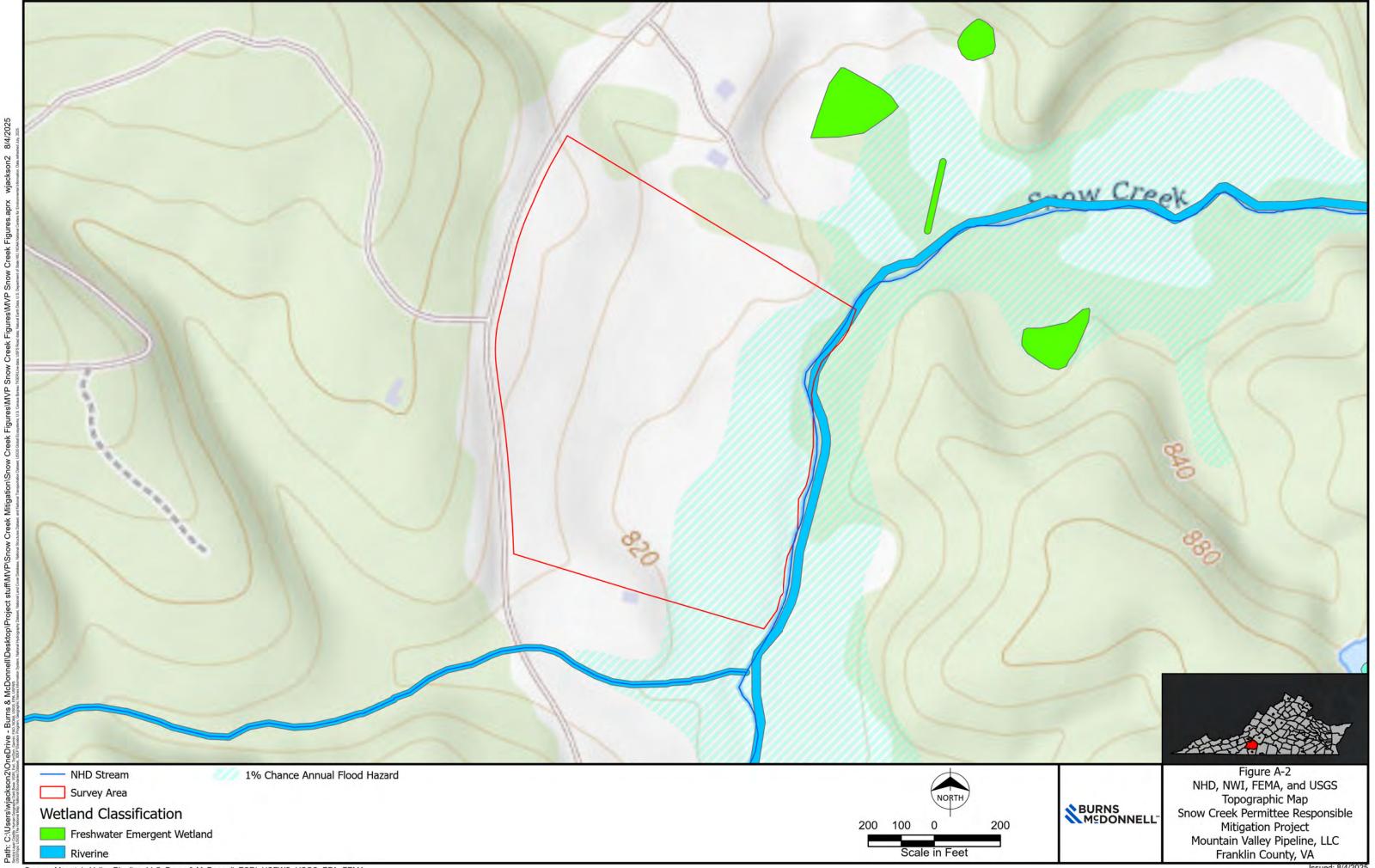
Attachment C: Site Photographs

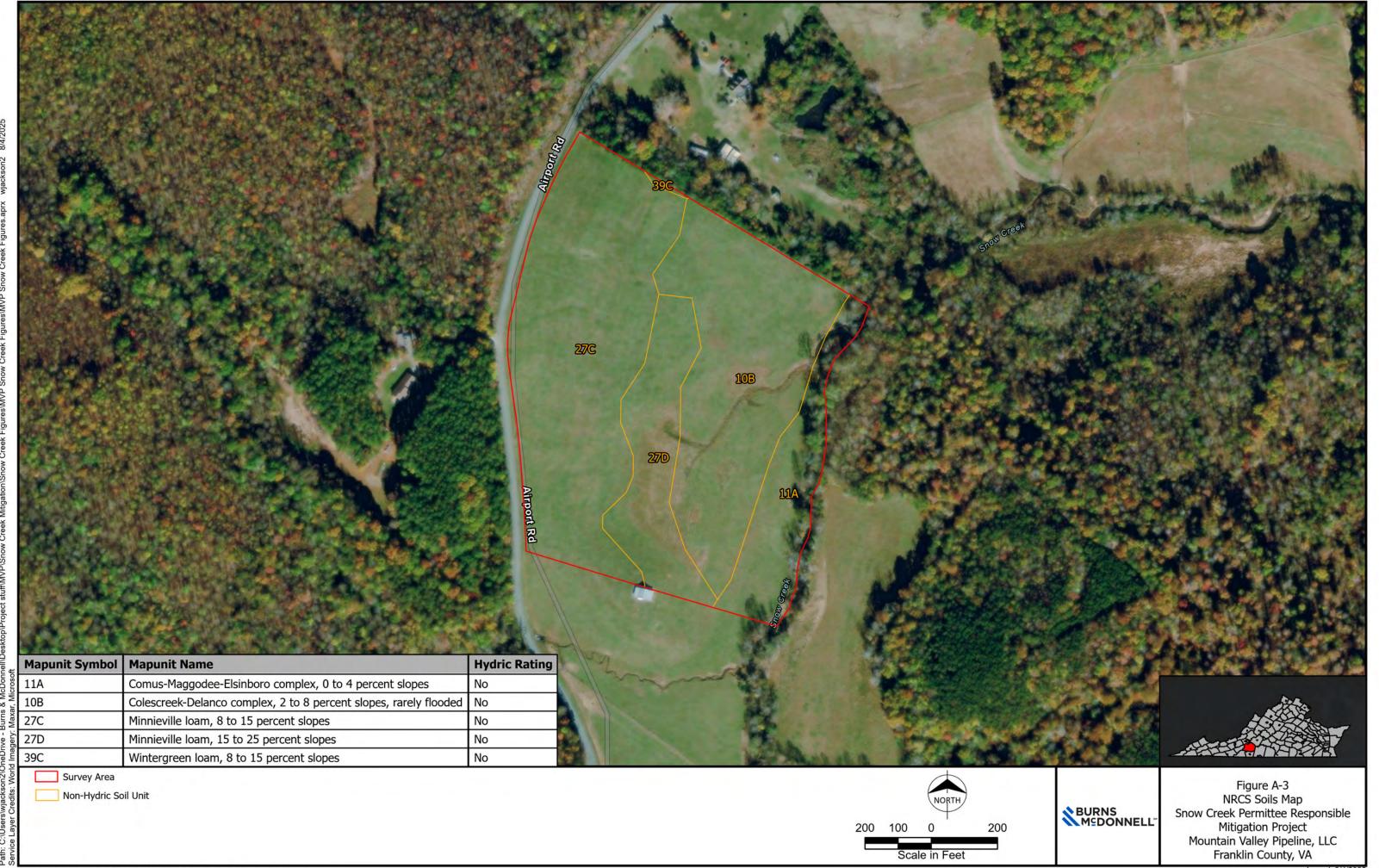
Attachment D: USACE Antecedent Precipitation Tool Results

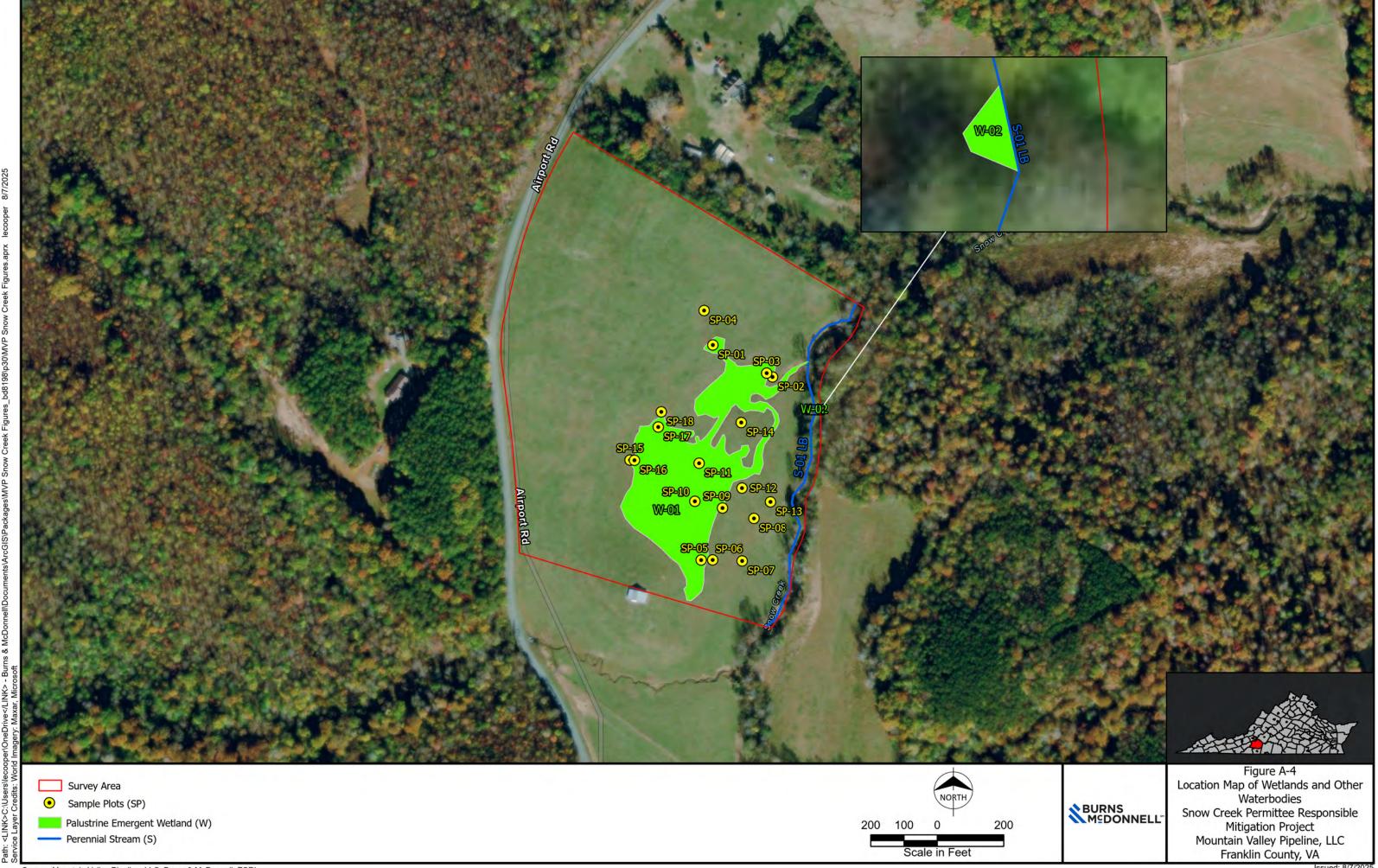
Attachment E: Preliminary Jurisdictional Determination Request Form (ENG Form 6247)











ATTACHMENT R DOI	ITINE WETI AND DET	ERMINATION DATA FORMS:
ATTACHWENT B - RUC		ERMINATION DATA FORMS: INS AND PIEDMONT REGION

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: Snow Creek Wetland M	litigation Project	City/County: Frankl	in County	Sampling Date: 2025-07-22
Applicant/Owner: Mountain Valley	Pipeline, LLC		State: Virginia	Sampling Point: SP-01
Investigator(s): Patrick Meier, Wyatt	Jackson, Lily Cooper	Section, Township, Rang	e:	
Landform (hillside, terrace, etc.): Draina	igeway Lo	- ocal relief (concave, conve	x, none): Concave	Slope (%): 1
Subregion (LRR or MLRA): P 136	Lat: 36.857644		-79.743507	Datum: NAD83_2011
Soil Map Unit Name: 10B - Colescreek-I				ion:
Are climatic / hydrologic conditions on the si	ite typical for this time of ye	ar? Yes	No 🗸 (If no, e	explain in Remarks.)
Are Vegetation 🗸 , Soil 🗸 , or Hydi			Circumstances" present?	
Are Vegetation , Soil , or Hydi			xplain any answers in Re	
SUMMARY OF FINDINGS – Attac				
Hydrophytic Vegetation Present?	Yes 🗸 No	Is the Sampled Area		
Hydric Soil Present?	Yes No	within a Wetland?	Yes 🗸	No
Wetland Hydrology Present?	Yes V No			
Remarks:		I		
Wetland sample plot within	n PEM W-01. Veg	etation and soils	significantly dis	sturbed by cattle
grazing. Hydrology signific	antly disturbed b	y ditching. The l	JSACE Anteced	ent Precipitation
Tool indicates wetter than	-			=
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicators	(minimum of two required)
Primary Indicators (minimum of one is requ	uired; check all that apply)		Surface Soil Crac	ks (B6)
Surface Water (A1)	True Aquatic Plants	(B14)	Sparsely Vegetate	ed Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide O		Drainage Patterns	
Saturation (A3)		eres on Living Roots (C3)	Moss Trim Lines (•
Water Marks (B1)	Presence of Reduce		Dry-Season Wate	
Sediment Deposits (B2)		ion in Tilled Soils (C6)	Crayfish Burrows	
Drift Deposits (B3)	Thin Muck Surface (on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Re	emarks)	Stunted or Stress	` ,
Iron Deposits (B5)			✓ Geomorphic Posit	
Inundation Visible on Aerial Imagery (E	37)		Shallow Aquitard	
Water-Stained Leaves (B9)			Microtopographic	` '
Aquatic Fauna (B13)			FAC-Neutral Test	(D5)
Field Observations:				
Surface Water Present? Yes	No Depth (inch			
		· ——		v v v
Saturation Present? Yes Viscolar and Viscolar (Viscolar August 2014)	No Depth (inch	nes): 0 Wetland	d Hydrology Present?	Yes No No
(includes capillary fringe) Describe Recorded Data (stream gauge, m	onitoring well perial photo	s previous inspections) if	available:	
Describe Necolded Data (Stream gauge, II	ionitoning well, aerial prioto-	s, previous irispections), ir	avaliable.	
Remarks:				
Indicators D2 and D5 are p	resent Saturatio	n present but no	t continuous the	roughout the soil
column. Hydrology disturb		ii procont but no		oughout the con
Column. Hydrology distarb	ed by ditching.			

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

Sampling Point: SP-01

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
3. 4.				Total Number of Dominant Species Across All Strata: 1 (B)
5. 6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)
7				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
50% of total cover:	20%	of total cover:		OBL species <u>5</u> x 1 = <u>5</u>
Sapling/Shrub Stratum (Plot size: 15 ft r)			FACW species $\frac{5}{}$ $x = 2$
1.				FAC species 80 $x 3 = 240$
2				FACU species 15 $x 4 = 60$
3.				UPL species 0 $x = 0$
4.				Column Totals: 105 (A) 315 (B)
5.				Prevalence Index = B/A = 3.00
				Hydrophytic Vegetation Indicators:
6.				
7				1 - Rapid Test for Hydrophytic Vegetation
8				<u>✓</u> 2 - Dominance Test is >50%
9.				✓ 3 - Prevalence Index is ≤3.0 ¹
		=Total Cover		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20%	of total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft r)				Problematic Hydrophytic Vegetation ¹ (Explain)
1. Coleataenia anceps	65	✓	FAC	¹ Indicators of hydric soil and wetland hydrology must be
2. Schedonorus arundinaceus	15		FACU	present, unless disturbed or problematic.
3. Juncus tenuis	10		FAC	Definitions of Four Vegetation Strata:
Persicaria hydropiperoides	5		OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5. Arthraxon hispidus	5		FAC	more in diameter at breast height (DBH), regardless of
6. Diodia virginiana	5		FACW	height.
7.				
· ·				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft
8.				(1 m) tall.
9.				
10				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				
	105	=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 52.50	20%	of total cover:	21.00	height.
Woody Vine Stratum (Plot size: 30 ft r)				
1				
2				
3.				
4.		_		
5.				l.,
		=Total Cover		Hydrophytic
50% of total cover:		of total cover:		Vegetation Present? Yes No
		or total cover.		11000111: 100
Remarks: (Include photo numbers here or on a sepa	arate sheet.)			

Dominance test and prevalence index are passed. Vegetation disturbed by cattle grazing.

Profile Desc	ription: (Describe	to the de	pth needed to docu	ument t	he indica	ator or o	onfirm the abs	ence of indica	tors.)	
Depth	Matrix			x Featu		2				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remark	S
0 - 2	10YR 4/2	97	7.5YR 5/8	3	С	M	Sandy Clay L	oam		
2 - 20	7.5YR 4/4	90	7.5YR 5/6	10	С	М	Clay Loam			
	-									
	·									
_										
¹ Type: C=Co	oncentration, D=Dep	letion, RN	∕I=Reduced Matrix, N	/IS=Mas	ked San	d Grains	. ² Lo	ocation: PL=Po	re Lining, M=M	atrix.
Hydric Soil I	ndicators:							Indicators for	r Problematic	Hydric Soils³:
Histosol			Polyvalue Be				-		k (A10) (MLR	-
	ipedon (A2)		Thin Dark Su						irie Redox (A1	6)
Black His			Loamy Muck			/ILRA 13	36)	-	147, 148)	
	n Sulfide (A4)		Loamy Gleye						Floodplain Soi	ls (F19)
	Layers (A5)		✓ Depleted Ma					-	136, 147)	
	ck (A10) (LRR N)		Redox Dark		` '				nt Material (F2	-
	Below Dark Surface	e (A11)	Depleted Da		` '			-	e MLRA 127, 1	-
	rk Surface (A12)		Redox Depre			s) // ===			low Dark Surfa	, ,
	osulfide (A18)		Iron-Mangar		sses (F1	2) (LRR	N,	Other (Ex	plain in Remar	KS)
	ucky Mineral (S1)		MLRA 136	-) /BAL D A	400 40) (C)			
	leyed Matrix (S4)		Umbric Surfa				-	³ Indicators of I	hydrophytic ve	netation and
	edox (S5)		Piedmont Flo				-		ydrology must	_
	Matrix (S6)		Red Parent I	viateriai	(F21) (IV	ILKA 12	7, 147, 148)		sturbed or prob	-
	face (S7) -ayer (if observed):							4000 4		
Type:	,									
Depth (in	nches):						Hydric Soil	Present?	Yes 🗸	No
Remarks:	<u> </u>						•			
	- 0:									
indicator	F3 is preser	nt. Soi	is disturbed	by ca	ittie g	razın	g.			

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: Snow Creek Wetland Mitigation	າ Project	City/Count	_{y:}	nty	Sampling Date:	2025-07-22
Applicant/Owner: Mountain Valley Pipeline	, LLC			State: Virginia	Sampling Point:	SP-02
Investigator(s): Patrick Meier, Wyatt Jackson	, Lily Cooper	Section, Towns	ship, Range:		<u></u>	
Landform (hillside, terrace, etc.): Terrace	L(- ocal relief (conca	ave, convex, none)	Convex	Slope (%):	1
· · · · · · · · · · · · · · · · · · ·	at: 36.857384		Long: -79.7			NAD83_2011
Soil Map Unit Name: 10B - Colescreek-Delanco					on:	
Are climatic / hydrologic conditions on the site typical				-	xplain in Remark	s)
Are Vegetation ✓ , Soil ✓ , or Hydrology ✓	-		re "Normal Circum			
Are Vegetation, Soil, or Hydrology			needed, explain a			110 -
SUMMARY OF FINDINGS – Attach site m				-		res etc
SUMMANT OF FRANKOS AMOUNTED			IIIt iocations,	lianseots, mi	JUITAIN ICATA	ts, c.c.
Hydrophytic Vegetation Present? Yes	No 🗸	Is the Sampl			4	
Hydric Soil Present? Yes		within a Wet	land?	Yes	No 🔽	
Wetland Hydrology Present? Yes Remarks:	No					
	IM 01 Mag	etation and	l saila signifi	santly diatur	had by oatt	اء ا
Upland sample plot adjacent to PEM	_		_	-	-	
grazing. Hydrology significantly dist	-	_			cipitation i	001
indicates wetter than normal conditi	ons were p	resent 3 m	onths prior to	o survey.		
HYDROLOGY						
Wetland Hydrology Indicators:			Seco	ondary Indicators (minimum of two	equired)
Primary Indicators (minimum of one is required; chec	k all that apply)			Surface Soil Crack		
	e Aquatic Plants			Sparsely Vegetate		ce (B8)
	drogen Sulfide O			Orainage Patterns		
	idized Rhizosphe	_		Moss Trim Lines (F		
	esence of Reduce cent Iron Reducti			Ory-Season Water Crayfish Burrows (
	n Muck Surface (Saturation Visible		, (C9)
	ner (Explain in Re			Stunted or Stresse		<i>(</i> (33)
Iron Deposits (B5)	(=/ -	omane,		Geomorphic Positi		
Inundation Visible on Aerial Imagery (B7)				Shallow Aquitard (. ,	
Water-Stained Leaves (B9)				Microtopographic I		
Aquatic Fauna (B13)				FAC-Neutral Test		
Field Observations:	,					
Surface Water Present? Yes No						
Water Table Present? Yes No						
Saturation Present? Yes No	Depth (inch	nes):	Wetland Hydro	logy Present?	Yes_	No
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring	well, aeriai pnoto	s, previous inspe	ections), if availabl	e:		
Remarks:						
Indicator C3 is present. Hydrolog	ıv disturbe	d by ditch	ing.			
,	,,,	•	J			

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator	Dominance Test worksheet:
1.	% Cover	Species?	Status	
2.				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
3				Total Number of Dominant Species Across All Strata: 3 (B)
5. 6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 33.33 (A/B)
7.				Prevalence Index worksheet:
		Total Cover		Total % Cover of: Multiply by:
50% of total cover:	20%	of total cover:		OBL species 0 x 1 = 0
Sapling/Shrub Stratum (Plot size: 15 ft r)				FACW species $\frac{5}{}$ $x 2 = \frac{10}{}$
1.				FAC species 50 x 3 = 150
2.				FACU species 45 $x 4 = 180$
3.				UPL species 0 $x = 5$
4.				Column Totals: 100 (A) 340 (B)
5.				Prevalence Index = B/A = 3.40
6.				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8.				2 - Dominance Test is >50%
9.				3 - Prevalence Index is ≤3.0 ¹
<u> </u>	=	Total Cover		4 - Morphological Adaptations (Provide supporting
50% of total cover:	20%	of total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft r)				Problematic Hydrophytic Vegetation ¹ (Explain)
Paspalum dilatatum	30		FAC	¹ Indicators of hydric soil and wetland hydrology must be
2. Schedonorus arundinaceus	20		FACU	present, unless disturbed or problematic.
3. Kummerowia striata	20		FACU	Definitions of Four Vegetation Strata:
4. Coleataenia anceps	15		FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5. Juncus effusus	5		FACW	more in diameter at breast height (DBH), regardless of
6. Arthraxon hispidus	5		FAC	height.
7. Solanum carolinense	5		FACU	Sapling/Shrub – Woody plants, excluding vines, less
8.				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				` ′
10 11.				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	100 =	Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 50.00	20%	of total cover:	20.00	height.
Woody Vine Stratum (Plot size: 30 ft r)				
1.				
2.				
3.				
4.				
5.				
		Total Cover		Hydrophytic
E00/ of total cover				Vegetation
50% of total cover:		of total cover:		Present? Yes No No
Remarks: (Include photo numbers here or on a separ	rate sheet.)			
No indicators are present. Vegeta	ation dis	turbed b	y cattle	grazing.

Sampling Point: SP-02

Profile Desc	cription: (Describe	to the de				ator or c	onfirm the absence	of indic	cators.)	
Depth	Matrix			x Featu						
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	-	Remarks	—
0 - 2	10YR 5/2	85	10YR 5/8	<u>15</u>	<u>C</u>	PL / M	Sandy Clay Loam			
2 - 20	7.5YR 4/4	100					Sandy Loam			
-										
	•						-			
	-						-			
⁻ Type: C=Ce	oncentration, D=Dep	letion, RN		MS=Mas	sked San	 d Grains		n: PL=P	Pore Lining, M=Matrix.	_
		,	,						or Problematic Hydric Soils	_3_
Hydric Soil Histosol			Polyvalue B	alow Su	rface (S8) (MI PA			uck (A10) (MLRA 147)	٥.
	pipedon (A2)		Thin Dark S						rairie Redox (A16)	
Black Hi			Loamy Much	,	, ,		· ·	•	A 147, 148)	
	n Sulfide (A4)		Loamy Gley	•	, , ,	IILIKA 13	•		nt Floodplain Soils (F19)	
	l Layers (A5)		✓ Depleted Ma						A 136, 147)	
	ick (A10) (LRR N)		Redox Dark					-	rent Material (F21)	
	d Below Dark Surfac	ο (Δ11)	Depleted Da					•	ide MLRA 127, 147, 148)	
	ark Surface (A12)	e (ATT)	Redox Depr					•	allow Dark Surface (F22)	
	nosulfide (A18)		Iron-Mangar		. ,	2) /I DD			Explain in Remarks)	
	lucky Mineral (S1)		MLRA 13		13363 (1-1)	2) (L IXIX		Other (L	-Apiain in Nemarks)	
	Bleyed Matrix (S4)		Umbric Surf	-	3) /MI D /	122 13	6)			
	edox (S5)		Piedmont FI				3	licators o	of hydrophytic vegetation and	
	Matrix (S6)		Red Parent				,		hydrology must be present,	
	rface (S7)		Red Falelit	Materiai	(1 2 1) (1V	ILNA 12	· , · · · , · · · · ,		disturbed or problematic.	
	Layer (if observed):	•							, , , , , , , , , , , , , , , , , , , ,	
Type:										
Depth (ii	nches):						Hydric Soil Pres	ent?	Yes 🗸 No	
Remarks:							1 -			
	r F3 is presei	nt. Soi	ls disturbed	by ca	attle g	razin	g.			
ı										
İ										
İ										
1										
İ										

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: Snow Creek Wetland Mitig	gation Project	City/County: Frank	din County	Sampling Date: 2025-07-22
Applicant/Owner: Mountain Valley Pip	eline, LLC	_	State: Virginia	a Sampling Point: SP-03
Investigator(s): Patrick Meier, Wyatt Jac		Section, Township, Ran		
Landform (hillside, terrace, etc.): Floodplai		cal relief (concave, conve	-	Slope (%): 1
Subregion (LRR or MLRA): P 136 Soil Map Unit Name: 10B - Colescreek-Dela	Lat: 36.857415 anco complex, 2 to 8 p		g: -79.742948 flooded NWI classifica	
Are climatic / hydrologic conditions on the site t	voical for this time of year	ır? Yes	No ✔ (If no,	explain in Remarks.)
Are Vegetation ✓ , Soil ✓ , or Hydrolo			al Circumstances" present	
Are Vegetation, Soil, or Hydrologous SUMMARY OF FINDINGS – Attach s			explain any answers in Roations, transects, im	
				,
, , , ,	es No No	Is the Sampled Area	V 1/	Na
<i>'</i>	es / No No	within a Wetland?	Yes	No
Wetland Hydrology Present? Y Remarks:	es V NO			
	M W_01 Vogotai	tion and soils sig	nificantly disturb	ad by cattle
Wetland sample point within PE grazing. Hydrology significantly	•		-	•
	-	•		scipitation rooi
indicates wetter than normal co	nditions were pr	esent 3 months	prior to survey.	
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicators	(minimum of two required)
Primary Indicators (minimum of one is required	d; check all that apply)		Surface Soil Crac	, ,
Surface Water (A1)	True Aquatic Plants (Sparsely Vegetat	ted Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Ode		Drainage Pattern	
Saturation (A3)	Oxidized Rhizosphere	es on Living Roots (C3)	Moss Trim Lines	(B16)
Water Marks (B1)	Presence of Reduced	d Iron (C4)	Dry-Season Wate	er Table (C2)
Sediment Deposits (B2)	Recent Iron Reductio		Crayfish Burrows	
Drift Deposits (B3)	Thin Muck Surface (C			e on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Ren	marks)	Stunted or Stress	
Iron Deposits (B5)			✓ Geomorphic Position	
Inundation Visible on Aerial Imagery (B7)			Shallow Aquitard	
Water-Stained Leaves (B9)			Microtopographic	
Aquatic Fauna (B13)			FAC-Neutral Tes	t (D5)
Field Observations:				
	No Depth (inche			
	No Depth (inche	· 		
	No Depth (inche	es): 16 Wetlar	nd Hydrology Present?	Yes No No
(includes capillary fringe)				
Describe Recorded Data (stream gauge, moni	toring well, aerial photos	, previous inspections), i	if available:	
Remarks:	-			
Indicators C3, D2 and D5 are	present Hydro	ology disturbed	by ditching	
	procent riyare	nogy alotalboa	by antoning.	

EGETATION (Four Strata) – Use scier				
ree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
<u></u>	_			Number of Dominant Species
				That Are OBL, FACW, or FAC: ² (A)
				Total Number of Dominant
				Species Across All Strata: 2 (B)
				···
	_			Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)
	_			Prevalence Index worksheet:
-		=Total Cover		Total % Cover of: Multiply by:
50% of total cover:		of total covers		OBL species 15
apling/Shrub Stratum (Plot size: 15 ft r		or total oover.		FACW species 30 $x = 60$
aping/Snrub Stratum (Flot size. 131t)	_ ′			FAC species $\frac{55}{5}$ $x = \frac{35}{165}$
	_			
· .				UPL species X 5 =
·				Column Totals. (A)
·	_			Prevalence Index = B/A = 2.40
·				Hydrophytic Vegetation Indicators:
	_			1 - Rapid Test for Hydrophytic Vegetation
	_			∠ 2 - Dominance Test is >50%
				✓ 3 - Prevalence Index is ≤3.0 ¹
		=Total Cover		4 - Morphological Adaptations ¹ (Provide supportin
		- I Olai Oovei		
50% of total cover:		of total cover		data in Remarks or on a separate sheet)
				data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
			FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
erb Stratum (Plot size: 5 ft r) Coleataenia anceps	20%	of total cover		Problematic Hydrophytic Vegetation ¹ (Explain)
erb Stratum (Plot size: 5 ft r) Coleataenia anceps Diodia virginiana	20%	of total cover:	FAC	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must l present, unless disturbed or problematic.
erb Stratum (Plot size: 5 ft r) Coleataenia anceps Diodia virginiana	20% 40 20	of total cover:	FAC FACW	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must l present, unless disturbed or problematic. Definitions of Four Vegetation Strata:
erb Stratum (Plot size: 5 ft r) Coleataenia anceps Diodia virginiana Arthraxon hispidus	20% 40 20 15	of total cover:	FAC FACW	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must legetent, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of
erb Stratum (Plot size: 5 ft r) Coleataenia anceps Diodia virginiana Arthraxon hispidus Persicaria hydropiperoides Juncus effusus	20% 40 20 15 10	of total cover:	FAC FAC OBL FACW	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) of
erb Stratum (Plot size: 5 ft r) Coleataenia anceps Diodia virginiana Arthraxon hispidus Persicaria hydropiperoides Juncus effusus Carex aureolensis	20% 40 20 15 10	of total cover:	FAC FACW OBL	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must legetent, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height.
erb Stratum (Plot size: 5 ft r) Coleataenia anceps Diodia virginiana Arthraxon hispidus Persicaria hydropiperoides Juncus effusus Carex aureolensis	20% 40 20 15 10	of total cover:	FAC FAC OBL FACW	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) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
erb Stratum (Plot size: 5 ft r) Coleataenia anceps Diodia virginiana Arthraxon hispidus Persicaria hydropiperoides Juncus effusus Carex aureolensis	20% 40 20 15 10	of total cover:	FAC FAC OBL FACW	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) of 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
erb Stratum (Plot size: 5 ft r) Coleataenia anceps Diodia virginiana Arthraxon hispidus Persicaria hydropiperoides Juncus effusus Carex aureolensis	20% 40 20 15 10	of total cover:	FAC FAC OBL FACW	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) of 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.
erb Stratum (Plot size: 5 ft r) Coleataenia anceps Diodia virginiana Arthraxon hispidus Persicaria hydropiperoides Juncus effusus Carex aureolensis	20% 40 20 15 10	of total cover:	FAC FAC OBL FACW	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) of 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
erb Stratum (Plot size: 5 ft r) Coleataenia anceps Diodia virginiana Arthraxon hispidus Persicaria hydropiperoides Juncus effusus Carex aureolensis	20% 40 20 15 10 10 5	of total cover:	FAC FAC OBL FACW	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) of 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.
erb Stratum (Plot size: 5 ft r) Coleataenia anceps Diodia virginiana Arthraxon hispidus Persicaria hydropiperoides Juncus effusus Carex aureolensis	20% 40 20 15 10 10 5	of total cover:	FAC FACW FAC OBL FACW OBL	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) of 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
erb Stratum (Plot size: 5 ft r) Coleataenia anceps Diodia virginiana Arthraxon hispidus Persicaria hydropiperoides Juncus effusus Carex aureolensis	20% 40 20 15 10 10 5	of total cover:	FAC FACW FAC OBL FACW OBL	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) of 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
erb Stratum (Plot size: 5 ft r) Coleataenia anceps Diodia virginiana Arthraxon hispidus Persicaria hydropiperoides Juncus effusus Carex aureolensis 0. 1. 50% of total cover: 50	20% 40 20 15 10 10 5	of total cover	FAC FACW FAC OBL FACW OBL	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) of 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
erb Stratum (Plot size: 5 ft r) Coleataenia anceps Diodia virginiana Arthraxon hispidus Persicaria hydropiperoides Juncus effusus Carex aureolensis 0. 1. 50% of total cover: 50	20% 40 20 15 10 10 5	of total cover	FAC FACW FAC OBL FACW OBL	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) of 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
erb Stratum (Plot size: 5 ft r) Coleataenia anceps Diodia virginiana Arthraxon hispidus Persicaria hydropiperoides Juncus effusus Carex aureolensis 0. 1. 50% of total cover: 50	20% 40 20 15 10 10 5	of total cover	FAC FACW FAC OBL FACW OBL	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) of 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
erb Stratum (Plot size: 5 ft r) Coleataenia anceps Diodia virginiana Arthraxon hispidus Persicaria hydropiperoides Juncus effusus Carex aureolensis 0. 1. 50% of total cover: 50 //oody Vine Stratum (Plot size: 30 ft r)	20% 40 20 15 10 10 5	of total cover	FAC FACW FAC OBL FACW OBL	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) of 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
erb Stratum (Plot size: 5 ft r) Coleataenia anceps Diodia virginiana Arthraxon hispidus Persicaria hydropiperoides Juncus effusus Carex aureolensis 0. 1. 50% of total cover: 50	20% 40 20 15 10 10 5	of total cover	FAC FACW FAC OBL FACW OBL	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) of 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
erb Stratum (Plot size: 5 ft r) Coleataenia anceps Diodia virginiana Arthraxon hispidus Persicaria hydropiperoides Juncus effusus Carex aureolensis 0. 1. 50% of total cover: 50	20% 40 20 15 10 10 5	of total cover	FAC FACW FAC OBL FACW OBL	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) of 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.
erb Stratum (Plot size: 5 ft r) Coleataenia anceps Diodia virginiana Arthraxon hispidus Persicaria hydropiperoides Juncus effusus Carex aureolensis 00. 11. 50% of total cover: 50	20% 40 20 15 10 10 5 100 20%	=Total Cover	FAC FACW FAC OBL FACW OBL	Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators 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) of 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.
lerb Stratum (Plot size: 5 ft r) Coleataenia anceps Diodia virginiana Arthraxon hispidus Persicaria hydropiperoides Juncus effusus Carex aureolensis	20% 40 20 15 10 10 5 100 .000 20%	of total cover	FAC FACW FAC OBL FACW OBL 20.00	Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators 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) of 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.

ion: (Describe t	o the de	pth needed to doc	ument tl	ne indica	tor or c	onfirm the absence	of indicators.)
Matrix		Redo	x Featur	es			
Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
OYR 5/1	70	7.5YR 3/4	20	С	M	Clay Loam	
		7.5YR 3/4	<u>10</u>	<u>C</u>	<u>PL</u>		
.5Y 5/2	70	7.5YR 4/6	20	<u>C</u>	<u>M</u>	Sandy Clay	
		7.5YR 4/6	10	<u>C</u>	PL		
YR 5/4	90	7.5YR 5/3	<u>10</u>	<u>D</u>	M	Sandy Clay	
entration D-Dank	otion D	M-Roduced Metrix		kod San			PL - Para Lining M-Matrix
	etion, Ri	vi=Reduced Matrix,	IVIS=IVIAS	ked Sand	Grains		PL=Pore Lining, M=Matrix.
don (A2) (A3) Ilfide (A4) (A7) (A7) (A7) (A7) (A7) (A7) (A7) (A7	e (A11)	Thin Dark S Loamy Muc Loamy Gley Depleted M Redox Dark Depleted Da Redox Depi Iron-Manga MLRA 13 Umbric Surf	urface (Sky Mineraced Matrix (F3): Surface ark Surface ark Surface ark Surface ark Surfaces Matrix (F1): Surface ((F6) (F7) (F8) (F8) (MLRA Soils (F1)	A 147, 1 ILRA 13 2) (LRR . 122, 13	147, 148)2 48)6 6)1 N,6 RA 148)3 India 7, 147, 148)	cators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Red Parent Material (F21) (outside MLRA 127, 147, 148) Very Shallow Dark Surface (F22) Other (Explain in Remarks) cators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
							anios dictarson of problematic.
(0200. 104).							
es):						Hydric Soil Prese	ent? Yes 🔽 No
3 is presen	t. Soi	ls disturbed	by ca	ttle g	razin	g.	
	Matrix Color (moist) DYR 5/1 5Y 5/2 YR 5/4 Partration, D=Depl Cators: Idon (A2) (A3) Ulfide (A4) Vers (A5) A10) (LRR N) How Dark Surface Surface (A12) Ulfide (A18) Vy Mineral (S1) Vy Mine	Matrix Color (moist) % DYR 5/1 70 Syr 5/2 70 YR 5/4 90 Pentration, D=Depletion, RN Cators: Idon (A2) (A3) Ilfide (A4) Vers (A5) A10) (LRR N) Ilow Dark Surface (A11) Surface (A12) Ilfide (A18) Vy Mineral (S1) Vy Mineral (S1) Vy Mineral (S1) Vy (S5) Vy (S5) Vy (S7) Vy (If observed): Vy (If observed	Matrix Redo Color (moist) % Color (moist) DYR 5/1 70 7.5YR 3/4 7.5YR 3/4 7.5YR 4/6 7.5YR 4/6 7.5YR 4/6 YR 5/4 90 7.5YR 5/3 Intration, D=Depletion, RM=Reduced Matrix, Polyvalue Barrian Dark Strict — Polyvalue Barrian Dark Strip Dark Strip Depleted Matrix, Polyvalue Barrian Dark Strip Depleted Matrix Strip Depleted Matrix Strip Depleted Dark Strip Dark Strip Da	Matrix	Matrix Redox Features	Matrix Redox Features	Color (moist) % Color (moist) % Type Loc Texture

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: Snow Creek Wetland Mi	tigation Project	City/County: Franklir	n County Sa	ampling Date:	2025-07-22
Applicant/Owner: Mountain Valley P		·	State: Virginia Sa		
Investigator(s): Patrick Meier, Wyatt Ja	•	Section, Township, Range			
Landform (hillside, terrace, etc.): Slope		ocal relief (concave, convex,		Slope (%):	2
Subregion (LRR or MLRA): P 136	Lat: 36.857927		-79.743601		NAD83_2011
Soil Map Unit Name: 10B - Colescreek-De					
·					
Are climatic / hydrologic conditions on the site			 ` · · ·	ain in Remarks	
Are Vegetation, Soil, or Hydro			Circumstances" present?	Yes	No V
Are Vegetation, Soil, or Hydro	logynaturally probl	lematic? (If needed, ex	plain any answers in Remai	rks.)	
SUMMARY OF FINDINGS – Attach	site map showing	sampling point locati	ons, transects, impo	rtant featur	es, etc.
Hydrophytic Vegetation Present?	Yes No 🗸	Is the Sampled Area			
Hydric Soil Present?	Yes No 🗸	within a Wetland?	YesN	o_ -/ _	
Wetland Hydrology Present?	Yes No 🗸				
Remarks:					
Upland sample plot adjacent to	o DEM W-O1 Veg	otation and soils si	anificantly disturbe	d by cattl	2
			•	-	
grazing. Hydrology significant	-	_	-	oltation i c	001
indicates wetter than normal o	onditions were pr	resent 3 months pr	ior to survey.		
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicators (mir		equired)
Primary Indicators (minimum of one is requir			Surface Soil Cracks (I		(20)
Surface Water (A1)	True Aquatic Plants		Sparsely Vegetated C		ce (B8)
High Water Table (A2)	Hydrogen Sulfide Oc		Drainage Patterns (B		
Saturation (A3) Water Marks (B1)	Presence of Reduce	res on Living Roots (C3)	Moss Trim Lines (B16 Dry-Season Water Ta		
Sediment Deposits (B2)		on in Tilled Soils (C6)	Crayfish Burrows (C8		
Drift Deposits (B3)	Thin Muck Surface (Saturation Visible on		(C9)
Algal Mat or Crust (B4)	Other (Explain in Re		Stunted or Stressed F	• .	(,
Iron Deposits (B5)		,	Geomorphic Position		
Inundation Visible on Aerial Imagery (B7	')		Shallow Aquitard (D3)		
Water-Stained Leaves (B9)			Microtopographic Rel	ief (D4)	
Aquatic Fauna (B13)			FAC-Neutral Test (D5	5)	
Field Observations:					
Surface Water Present? Yes	No _ Depth (inch				
Water Table Present? Yes					
Saturation Present? Yes	No _ Depth (inch	es): Wetland	Hydrology Present?	Yes	No
(includes capillary fringe)					
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos	s, previous inspections), іт а	vailable:		
Remarks:					
No indicators are present. H	lvdrology distur	bed by ditching.			
μ	·, · · · · · · ·				

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1.	70 OOVC1	Орсскоз	Otatus	Number of Dominant Species
2.				That Are OBL, FACW, or FAC: 1 (A)
3				Total Number of Dominant Species Across All Strata: 3 (B)
5 6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 33.33 (A/B)
7.				Prevalence Index worksheet:
		Total Cover		Total % Cover of: Multiply by:
50% of total cover:	20%	of total cover:		OBL species 10
Sapling/Shrub Stratum (Plot size: 15 ft r)				FACW species 15 $\times 2 = 30$
1				FAC species 20 x 3 = 60
2.				FACU species 55 $x 4 = 220$
3.				UPL species 0 $x = 5$
4.				Column Totals: 100 (A) 320 (B)
5.				Prevalence Index = B/A = 3.20
6.				Hydrophytic Vegetation Indicators:
·				
7.				1 - Rapid Test for Hydrophytic Vegetation
8.				2 - Dominance Test is >50%
9.				3 - Prevalence Index is ≤3.0¹
50% of total cover:		:Total Cover of total cover:		4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft r)				Problematic Hydrophytic Vegetation ¹ (Explain)
1. Digitaria sanguinalis	30	✓	FACU	
Schedonorus arundinaceus	20		FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. Diodia virginiana	15		FACW	Definitions of Four Vegetation Strata:
4. Arthraxon hispidus	10		FAC	
5. Juncus tenuis	10		FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
6. Persicaria hydropiperoides	10		OBL	height.
7. Solanum carolinense	5		FACU	
				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft
8.				(1 m) tall.
9.				` '
10 11.				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	100 =	Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 50.00	20%	of total cover:	20.00	height.
Woody Vine Stratum (Plot size: 30 ft r)				
1.				
2.				
3.				
1				
5.				
J		Total Cover		Hydrophytic
EOO/ of total cover-		:Total Cover		Vegetation
50% of total cover:	20%	of total cover:		Present? Yes No No
Remarks: (Include photo numbers here or on a separate	rate sheet.)			
No indicators are present. Vegeta	ation dis	turbed b	y cattle	grazing.

Sampling Point: SP-04

Profile Desc	ription: (Describe	to the dep	th needed to docu	ument tl	ne indica	tor or c	onfirm the ab	sence of indica	ators.)	
Depth	Matrix			x Featur						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	<u> </u>	Rem	narks
0 - 20	5YR 4/6	100					Loam			
-										
¹ Type: C=Co	oncentration, D=Dep	letion, RM=	Reduced Matrix, N	/IS=Mas	ked Sand	d Grains.	²L	_ocation: PL=Po	ore Lining, N	∕l=Matrix.
Hydric Soil I	ndicators:									atic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Be				-	2 cm Mu	ck (A10) (M	LRA 147)
	ipedon (A2)		Thin Dark Su				-		airie Redox	(A16)
Black His			Loamy Muck			ILRA 13	6)		147, 148)	
	n Sulfide (A4)		Loamy Gleye						t Floodplain	Soils (F19)
	Layers (A5)		Depleted Ma						136, 147)	
	ck (A10) (LRR N)	(0.4.4)	Redox Dark						ent Material	` '
	Below Dark Surface	e (A11)	Depleted Da					•		27, 147, 148)
	rk Surface (A12)		Redox Depre		. ,	o) /I DD				furface (F22)
	osulfide (A18) ucky Mineral (S1)		Iron-Mangar		sses (F12	2) (LKK I	N,	Other (E.	xplain in Re	marks)
	leyed Matrix (S4)		Umbric Surfa	-	MI RA	122 13	6)			
	edox (S5)		Piedmont Flo				-	³ Indicators of	hydrophytic	vegetation and
	Matrix (S6)		Red Parent I				-			ust be present,
	face (S7)				(· = · / (···		,, .,	unless di	sturbed or p	problematic.
	ayer (if observed):									
Type:										
Depth (in	iches):						Hydric So	il Present?	Yes	No <u> </u>
Remarks:										
No indica	atore are pro	cont S	oile dieturb	ad by	cattle	ara:	zina			
NO IIIUIC	ators are pre	sent. S	ons disturbe	eu by	Cattle	e graz	zirig.			

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: Snow Creek Wetland Mitigation	n Project	City/Count	_{y:} Franklin Co	ounty	Sampling Date:	2025-07-22
Applicant/Owner: Mountain Valley Pipeline	e, LLC			State: Virginia	Sampling Point:	SP-05
Investigator(s): Patrick Meier, Wyatt Jacksor	, Lily Cooper	Section, Towns	ship, Range:		_	
Landform (hillside, terrace, etc.): Floodplain	-	- ocal relief (conca		e): Concave	Slope (%):	1
	at: 36.855862	•	Long: -79.	· 	Datum:	NAD83_2011
Soil Map Unit Name: 10B - Colescreek-Delanco						
				_ .	-	
Are climatic / hydrologic conditions on the site typical					explain in Remark	· .
Are Vegetation, Soil, or Hydrology			e "Normal Circu	mstances" present?	Yes	No V
Are Vegetation, Soil, or Hydrology	naturally prob	elematic? (If	needed, explair	any answers in Re	emarks.)	
SUMMARY OF FINDINGS – Attach site n	nap showing	sampling po	int locations	s, transects, im	portant featu	res, etc.
Hydrophytic Vegetation Present? Yes	No	Is the Sampl	ed Area			
Hydric Soil Present? Yes	_	within a Wet		Yes 🗸	No	
Wetland Hydrology Present? Yes	/ No					
Remarks:	<u> </u>	<u> </u>				
Wetland sample plot within PEM	W-01. Veg	etation an	d soils sig	nificantly dis	sturbed by	cattle
grazing. Hydrology significantly	disturbed b	y ditching	. The USA	CE Anteced	ent Precipi	tation
Tool indicates wetter than norma	al condition	is were pre	esent 3 mo	onths prior to	o survey.	
HYDROLOGY						
Wetland Hydrology Indicators:			<u>Se</u>	condary Indicators	(minimum of two I	required)
Primary Indicators (minimum of one is required; che	ck all that apply)			Surface Soil Crac	ks (B6)	
	ue Aquatic Plants		_	_Sparsely Vegetate		ce (B8)
	drogen Sulfide O			_Drainage Patterns		
	kidized Rhizosphe	_	oots (C3)	_ Moss Trim Lines (
	esence of Reduce			_Dry-Season Wate		
	ecent Iron Reducti		(C6)	_Crayfish Burrows		. =
	nin Muck Surface (_Saturation Visible		/ (C9)
	her (Explain in Re	emarks)		_Stunted or Stress		
Iron Deposits (B5)				_Geomorphic Posit	. ,	
Inundation Visible on Aerial Imagery (B7)				Shallow Aquitard		
Water-Stained Leaves (B9)				_ Microtopographic		
Aquatic Fauna (B13)				FAC-Neutral Test	(D5)	
Field Observations:	5	, E				
Surface Water Present? Yes No	Depth (inch					
Water Table Present? Yes ✓ No	Depth (inch		Madan dilbad		V V	NI -
Saturation Present? Yes V No	Depth (inch	nes): <u>0</u>	wetiand Hyd	rology Present?	Yes	No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring	well aerial photo	s previous inspe	ections) if availa	hle.		
Describe Recorded Data (stream gauge, memoring	well, dellal prioto	o, provious mope	solions), ii avalie			
Remarks:						
Indicators A1, A2, A3, D2, and D	5 are prese	nt Hydrol	oav dietur	had by ditch	nina	
	Jaic piese	iic. Hydror	ogy distai	bea by arter	iiig.	

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

Sampling Point: SP-05

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 ft r)	% Cover	Species?	Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
3. 4.				Total Number of Dominant Species Across All Strata: 3 (B)
5. 6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)
7.				Prevalence Index worksheet:
		Total Cover		Total % Cover of: Multiply by:
50% of total cover:		of total cover:		$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
Sapling/Shrub Stratum (Plot size: 15 ft r)		or total oover.		FACW species 10 $x = 20$
1				FAC species 55 $x 3 = 165$
2				FACU species $\frac{5}{5}$ $x = 4$
3.				UPL species $\frac{1}{0}$ $x = \frac{1}{0}$
4.				Column Totals: 100 (A) 235 (B)
5.				Prevalence Index = B/A = 2.35
6.				Hydrophytic Vegetation Indicators:
7.				1 - Rapid Test for Hydrophytic Vegetation
8.				✓ 2 - Dominance Test is >50%
9.				✓ 3 - Prevalence Index is ≤3.0 ¹
·		Total Cover		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:		of total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft r)		or total oover.		Problematic Hydrophytic Vegetation ¹ (Explain)
Persicaria hydropiperoides	20	✓	OBL	
2. Arthraxon hispidus	20		FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. Coleataenia anceps	15		FAC	Definitions of Four Vegetation Strata:
4. Juncus tenuis	10		FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5. Diodia virginiana	10		FACW	more in diameter at breast height (DBH), regardless of
6. Paspalum dilatatum	10		FAC	height.
7. Carex aureolensis	10		OBL	Sapling/Shrub – Woody plants, excluding vines, less
8. Solanum carolinense	5		FACU	than 3 in. DBH and greater than or equal to 3.28 ft
9.				(1 m) tall.
10.				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11.	100 _	Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
F09/ of total power: 50.00		of total cover:	20.00	height.
50% of total cover: 50.00 Woody Vine Stratum (Plot size: 30 ft r)	20 /6 (oi total cover.		
1				
2.				
3.				
4				
5		Tatal Cour		Hydrophytic
F00/ - ()		:Total Cover		Vegetation
50% of total cover:	20% (of total cover:		Present? Yes No No
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			

Dominance test and prevalence index are met. Vegetation disturbed by cattle grazing.

Profile Desc	ription: (Describe	to the de	pth needed to doc	ıment t	he indica	ator or c	onfirm the abs	ence of indi	cators.)
Depth	Matrix			x Featu					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks
0 - 4	7.5YR 5/2	90	7.5YR 4/6	10	С	PL / M	Sandy Clay L	oam	
4 - 20	10YR 4/4	80	7.5YR 4/6	20	С	М	Clay Loam		
									_
			4.5.1.144:				21		
	oncentration, D=Dep	letion, RN	/I=Reduced Matrix, N	/IS=Mas	sked San	d Grains	. 'Lo		Pore Lining, M=Matrix.
Hydric Soil									for Problematic Hydric Soils ³ :
Histosol			Polyvalue Be				-		uck (A10) (MLRA 147)
	pipedon (A2)		Thin Dark Su						Prairie Redox (A16)
Black His			Loamy Muck			/ILRA 13	6)	-	A 147, 148)
	n Sulfide (A4)		Loamy Gley						nt Floodplain Soils (F19)
	Layers (A5)		<u>✓</u> Depleted Ma					-	A 136, 147)
	ck (A10) (LRR N)	(* 4 4)	Redox Dark		` '				rent Material (F21)
	Below Dark Surface	e (A11)	Depleted Da		` '			-	ide MLRA 127, 147, 148)
	ark Surface (A12)		Redox Depre			a) // ==			nallow Dark Surface (F22)
	nosulfide (A18)		Iron-Mangar		sses (F1)	2) (LRR	N,	Other (I	Explain in Remarks)
	lucky Mineral (S1)		MLRA 136	-) /A/I D A	400 40	C)		
	eleyed Matrix (S4)		Umbric Surfa				-	3Indicators	of hydrophytic vegetation and
	edox (S5)		Piedmont Flo				-		hydrology must be present,
	Matrix (S6) rface (S7)		Red Parent	viateriai	(F21) (IVI	ILRA 12	7, 147, 148)		disturbed or problematic.
	_ayer (if observed):	<u> </u>						4	alotal or problemation
Type:	, , , , , , , , , , , , , , , , , , , ,								
Depth (ir	nches):						Hydric Soil	Present?	Yes V No
Remarks:	'								
11	. 50 :			1					
indicatoi	r F3 is preser	nt. Soi	is disturbed	by ca	ittie g	razın	g.		
i e									

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: Snow Creek Wetland Mi	tigation Project	City/County: Franklir	n County s	sampling Date: 2	2025-07-22		
Applicant/Owner: Mountain Valley P		<u> </u>	State: Virginia S				
Investigator(s): Patrick Meier, Wyatt Ja	ackson, Lily Cooper	Section, Township, Range		_			
Landform (hillside, terrace, etc.): Floodpl		cal relief (concave, convex,		Slope (%):	1		
Subregion (LRR or MLRA): P 136	Lat: 36.855865		-79.743481		NAD83_2011		
Soil Map Unit Name: 10B - Colescreek-Do							
<u></u>							
Are climatic / hydrologic conditions on the site				olain in Remarks.			
Are Vegetation, Soil, or Hydro			Circumstances" present?	Yes	No V		
Are Vegetation, Soil, or Hydro	logy naturally probl	ematic? (If needed, ex	plain any answers in Rema	arks.)			
SUMMARY OF FINDINGS – Attach	site map showing	sampling point locati	ons, transects, impo	ortant feature	es, etc.		
Hydrophytic Vegetation Present?	Yes 🗸 No	Is the Sampled Area					
Hydric Soil Present?	Yes No 🗸	within a Wetland?	Yes N	No 🗸			
Wetland Hydrology Present?	Yes / No						
Remarks:							
Upland sample plot adjacent to	o DEM W-01 Voq	otation and soils si	anificantly disturb	ad by cattle	_		
• • •	_		•	-			
grazing. Hydrology significant	-			ipitation To	OI		
indicates wetter than normal o	onditions were pr	resent 3 months pr	ior to survey.				
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicators (mi		equired)		
Primary Indicators (minimum of one is required)			Surface Soil Cracks				
Surface Water (A1)	True Aquatic Plants		Sparsely Vegetated		e (B8)		
High Water Table (A2)	Hydrogen Sulfide Oc		Drainage Patterns (E				
Saturation (A3)		res on Living Roots (C3)	Moss Trim Lines (B1				
Water Marks (B1)	Presence of Reduce		Dry-Season Water T				
Sediment Deposits (B2)		on in Tilled Soils (C6)	Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3) Algal Mat or Crust (B4)	Thin Muck Surface (Other (Explain in Re	,	Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)				
Iron Deposits (B5)	Other (Explain in Re	iliaiks)	Geomorphic Position				
Inundation Visible on Aerial Imagery (B7	7)		Shallow Aquitard (D3				
Water-Stained Leaves (B9)	,		Microtopographic Re	•			
Aquatic Fauna (B13)			FAC-Neutral Test (D	, ,			
Field Observations:				<i>,</i>			
Surface Water Present? Yes	No Pepth (inch	es):					
Water Table Present? Yes							
Saturation Present? Yes	No V Depth (inch		Hydrology Present?	Yes 🗸	No		
(includes capillary fringe)							
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos	s, previous inspections), if a	vailable:				
Remarks:							
Indicator C3 is present. Hyd	trology disturbe	d by ditching					
maioator oo io procenti riyo	noiogy alotal bo	a by antonning.					

	Absolute	Dominant	Indicator	
ree Stratum (Plot size: 30 ft r)	% Cover	Species?	Status	Dominance Test worksheet:
,				
				Number of Dominant Species That Are OBL FACW or FAC: 2 (A)
· .				That Are OBL, FACW, or FAC: 2 (A)
-				Total Number of Dominant
				Species Across All Strata: 2 (B)
				Percent of Dominant Species
				That Are OBL, FACW, or FAC: 100.00 (A/B)
				Prevalence Index worksheet:
•		Tatal Cause		
		=Total Cover		Total % Cover of: Multiply by:
50% of total cover:	20%	of total cover:		OBL species $0 x 1 = 0$
apling/Shrub Stratum (Plot size: 15 ft r)			FACW species $\frac{5}{}$ $x = 2$
				FAC species 85 $x 3 = 255$
				FACU species $\frac{5}{}$ $x 4 = \frac{20}{}$
·	_			UPL species $\frac{1}{0}$ $x = \frac{1}{0}$
·				Column Totals. (A)
· .				Prevalence Index = B/A = 3.00
·	<u> </u>			Hydrophytic Vegetation Indicators:
	<u></u> _			1 - Rapid Test for Hydrophytic Vegetation
				✓ 2 - Dominance Test is >50%
				3 - Prevalence Index is ≤3.0 ¹
•				
		=Total Cover		4 - Morphological Adaptations¹ (Provide supportin
50% of total cover:	20%	of total cover:		data in Remarks or on a separate sheet)
lerb Stratum (Plot size: 5 ft r)				Problematic Hydrophytic Vegetation ¹ (Explain)
Coleataenia anceps	35	~	FAC	¹ Indicators of hydric soil and wetland hydrology must l
Paspalum dilatatum	35	~	FAC	present, unless disturbed or problematic.
Arthraxon hispidus	10		FAC	Definitions of Four Vegetation Strata:
· · · · · · · · · · · · · · · · · · ·	5			
Juncus tenuis			FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of
Diodia virginiana	5		FACW	more in diameter at breast height (DBH), regardless of
Solanum carolinense	5		FACU	height.
				Sapling/Shrub – Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft
				(1 m) tall.
				Harb All bank assess (a sa superb All barta as a sadden
). 				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				or size, and woody plants less than 3.20 it tall.
	95	=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 43	7.50 20%	of total cover:	19.00	height.
/oody Vine Stratum (Plot size: 30 ft r)			
· · · · · · · · · · · · · · · · · · ·	,			
·				
·				
				l.,
	 .	=Total Cover		Hydrophytic
		- i Stai Sovel		Vegetation
50% of total cover:	2004	of total cover:		Present? Yes No

Profile Desc	ription: (Describe	to the de	pth needed to doc	ument t	ne indica	ator or c	onfirm the ab	sence of indic	ators.)	
Depth	Matrix			x Featur		2				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	<u> </u>	Rem	narks
0 - 4	7.5YR 4/3	90	5YR 4/6	10	С	PL / M	Loam			
4 - 20	7.5YR 4/4	95	5YR 4/6	5	С	М	Sandy Clay	Loam		
										-
¹ Type: C=Co	oncentration, D=Dep	letion, RN	/I=Reduced Matrix, I	√S=Mas	ked San	d Grains	. ² L	ocation: PL=P	ore Lining, N	∕I=Matrix.
Hydric Soil I	ndicators:							Indicators f	or Problema	atic Hydric Soils ³ :
Histosol			Polyvalue B				-		ick (A10) (M	-
Histic Ep	ipedon (A2)		Thin Dark S	urface (S	89) (MLR	A 147, 1	48)	Coast P	rairie Redox	(A16)
Black His	stic (A3)		Loamy Mucl	ky Miner	al (F1) (N	ILRA 13	6)	(MLR	A 147, 148)	
Hydroge	n Sulfide (A4)		Loamy Gley	ed Matri	x (F2)			Piedmor	nt Floodplain	Soils (F19)
Stratified	Layers (A5)		Depleted Ma	atrix (F3)				(MLR	A 136, 147)	
2 cm Mu	ck (A10) (LRR N)		Redox Dark	Surface	(F6)			Red Par	ent Material	(F21)
Depleted	Below Dark Surface	e (A11)	Depleted Da	rk Surfa	ce (F7)			(outsi	de MLRA 12	27, 147, 148)
	rk Surface (A12)		Redox Depr	essions	(F8)			Very Sh	allow Dark S	urface (F22)
	osulfide (A18)		Iron-Mangar		sses (F1	2) (LRR	N,	Other (E	xplain in Re	marks)
	ucky Mineral (S1)		MLRA 13	6)						
Sandy G	leyed Matrix (S4)		Umbric Surf		-		-	3		
Sandy R	edox (S5)		Piedmont FI				-			vegetation and
Stripped	Matrix (S6)		Red Parent	Material	(F21) (M	LRA 127	7, 147, 148)			ust be present,
Dark Sur	face (S7)							unless d	isturbed or p	oroblematic.
Restrictive I	_ayer (if observed):									
Type:										
Depth (ir	nches):						Hydric So	il Present?	Yes	No
Remarks:										
No indica	ators are pre	sant '	Soile dieturh	ad hy	cattl	o ara	zina			
NO IIIGIC	ators are pre	SCIIL.	Solis distuib	eu by	Catti	e gra	zirig.			

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: Snow Creek Wetland Mi	tigation Project	City/County: Frankl	lin County s	Sampling Date: 2025-07	-22		
Applicant/Owner: Mountain Valley P		<u> </u>		Sampling Point: SP-07			
Investigator(s): Patrick Meier, Wyatt Ja	•	Section, Township, Rang		· · ·			
Landform (hillside, terrace, etc.): Floodpl		ocal relief (concave, conve		Slope (%): 1			
Subregion (LRR or MLRA): P 136	Lat: 36.855859		_{1:} -79.743176	Datum: NAD83_	2011		
Soil Map Unit Name: 11A - Comus-Mag			·				
					—		
Are climatic / hydrologic conditions on the site			_ ` ` '				
Are Vegetation, Soil, or Hydro			l Circumstances" present?	Yes No V	_		
Are Vegetation, Soil, or Hydro	logynaturally probl	lematic? (If needed, e	explain any answers in Rem	arks.)			
SUMMARY OF FINDINGS – Attach	site map showing	sampling point loca	tions, transects, impo	ortant features, etc	C.		
Hydrophytic Vegetation Present?	Yes No 🗸	Is the Sampled Area					
Hydric Soil Present?	Yes No No	within a Wetland?	Yes	No <u> </u>			
Wetland Hydrology Present?	Yes 🗸 No						
Remarks:							
Upland sample plot in floodpla	in east of PFM W	-∩1 Vegetation ar	nd soils significantl	v dieturhed hv			
		•		-			
cattle grazing. Hydrology sign	-			•			
Tool indicates wetter than nor	mal conditions we	ere present 3 mon	iths prior to survey	•			
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicators (m		<u>)</u>		
Primary Indicators (minimum of one is required)	red; check all that apply) True Aquatic Plants		Surface Soil Cracks				
Surface Water (A1)	Concave Surface (B8)						
High Water Table (A2)	Hydrogen Sulfide Od		Drainage Patterns (I				
Saturation (A3) Water Marks (B1)	Presence of Reduce	eres on Living Roots (C3)	Moss Trim Lines (B ² Dry-Season Water 1				
Sediment Deposits (B2)		ion in Tilled Soils (C6)	Crayfish Burrows (C				
Drift Deposits (B3)	Thin Muck Surface (Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Other (Explain in Re			ited or Stressed Plants (D1)			
Iron Deposits (B5)			Geomorphic Position				
Inundation Visible on Aerial Imagery (B7	7)		Shallow Aquitard (D		ļ		
Water-Stained Leaves (B9)	•		Microtopographic Re				
Aquatic Fauna (B13)			FAC-Neutral Test (D) 5)			
Field Observations:							
Surface Water Present? Yes	No _ C Depth (inch						
Water Table Present? Yes				_			
Saturation Present? Yes	No _ Depth (inch	nes): Wetlan	d Hydrology Present?	Yes V No			
(includes capillary fringe)							
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos	s, previous inspections), it	available:				
Remarks:	_	_	_	_			
Indicator C3 is present. Hyd	drology disturbe	d by ditching.					
,							

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 ft r)	% Cover	Species?	Status	Dominance Test worksheet:
1. 2.				Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
3. 4.				Total Number of Dominant Species Across All Strata: 2 (B)
5.				Percent of Dominant Species That Are OBL, FACW, or FAC: 50.00 (A/B)
7.				Prevalence Index worksheet:
··· ———		Total Cover		Total % Cover of: Multiply by:
50% of total cover:		of total cover:		OBL species 0
Sapling/Shrub Stratum (Plot size: 15 ft r)				FACW species 0 $x = 0$
1				FAC species 35 $x 3 = 105$
2.				FACU species 65 $x 4 = 260$
3.				UPL species $\overline{0}$ $x = \overline{0}$
4.				Column Totals: 100 (A) 365 (B)
···				Prevalence Index = B/A = 3.65
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
9.				3 - Prevalence Index is ≤3.0¹
9		Total Cover		4 - Morphological Adaptations¹ (Provide supporting
50% of total cover:		=Total Cover of total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft r)			_	Problematic Hydrophytic Vegetation ¹ (Explain)
Schedonorus arundinaceus	45		FACU	¹ Indicators of hydric soil and wetland hydrology must be
2. Coleataenia anceps	15	~	FAC	present, unless disturbed or problematic.
3. Setaria parviflora	10		FAC	Definitions of Four Vegetation Strata:
4. Elephantopus carolinianus	10		FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5. Paspalum dilatatum	10		FAC	more in diameter at breast height (DBH), regardless of
6. Ligustrum sinense	5		FACU	height.
7. Solanum carolinense	5		FACU	Sapling/Shrub – Woody plants, excluding vines, less
8.				than 3 in. DBH and greater than or equal to 3.28 ft
9.				(1 m) tall.
10.				Herb – All herbaceous (non-woody) plants, regardless
11.				of size, and woody plants less than 3.28 ft tall.
	100	Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 50.00		of total cover:	20.00	height.
Woody Vine Stratum (Plot size: 30 ft r)	2070	UI lulai covoi.		
1				
2.				
3.				
4.				
5				Hydrophytic
		=Total Cover		Vegetation
50% of total cover:	20%	of total cover:		Present? Yes No No
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			
		turbad b	w cottle	ara-in a
No indicators are present. Veget	ation dis	iturbea k	by Cattle	grazing.

Sampling Point: SP-07

Profile Desc	cription: (Describe	to the de	-			ator or c	onfirm the absence	of indic	cators.)
Depth	Matrix			x Featu		. 2	_		
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks
0 - 2	10YR 5/2	95	5YR 3/4	5	<u>C</u>	PL	Loam		
2 - 20	2.5YR 4/4	100					Sandy Loam		
-									
	•								_
	-	-							
¹ Type: C=Co	oncentration, D=Dep	letion, RN		//S=Mas	ked San	d Grains	. ² Locatio	n: PL=F	Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Ind	icators f	for Problematic Hydric Soils ³ :
Histosol			Polyvalue Be	elow Su	rface (S8) (MLRA			uck (A10) (MLRA 147)
	pipedon (A2)		Thin Dark Su					-	Prairie Redox (A16)
Black Hi			Loamy Muck	,			· ·	-	A 147, 148)
	n Sulfide (A4)		Loamy Gley	•	, , ,		-,	-	nt Floodplain Soils (F19)
	Layers (A5)		✓ Depleted Ma					-	A 136, 147)
	ick (A10) (LRR N)		Redox Dark	, ,				-	rent Material (F21)
	d Below Dark Surfac	e (A11)	Depleted Da					-	ide MLRA 127, 147, 148)
	ark Surface (A12)	- ()	Redox Depre		, ,			•	nallow Dark Surface (F22)
	nosulfide (A18)		Iron-Mangar		. ,	2) (LRR	N	-	Explain in Remarks)
	lucky Mineral (S1)		MLRA 136		(, ,	<u> </u>	- ' '	, ,
	sleyed Matrix (S4)		Umbric Surfa	-	3) (MLRA	122. 13	6)		
	edox (S5)		Piedmont Flo				3.	dicators o	of hydrophytic vegetation and
	Matrix (S6)		Red Parent					wetland	hydrology must be present,
	rface (S7)				(· _ · / (···		., , . ,	unless o	disturbed or problematic.
	Layer (if observed):								
Type:									
Depth (ir	nches):						Hydric Soil Pres	sent?	Yes V No
Remarks:	·								
Indicato	r F3 is preser	nt. Soi	ls disturbed	by ca	attle g	razin	g.		
ı									
İ									
ı									

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: Snow Creek Wetland Mi	tigation Project	City/County: Franklin	n County	Sampling Date:	2025-07-22		
Applicant/Owner: Mountain Valley F	ipeline, LLC			Sampling Point:			
Investigator(s): Patrick Meier, Wyatt Ja		Section. Township, Range					
Landform (hillside, terrace, etc.): Floodpl		ocal relief (concave, convex		Slope (%):	1		
Subregion (LRR or MLRA): P 136	Lat: 36.856212		-79.74306		NAD83_2011		
Soil Map Unit Name: 11A - Comus-Mag					111.200		
Are climatic / hydrologic conditions on the site				explain in Remarks			
Are Vegetation, Soil, or Hydro			Circumstances" present?		No 🔽		
Are Vegetation, Soil, or Hydro	logynaturally probl	lematic? (If needed, ex	plain any answers in Re	marks.)			
SUMMARY OF FINDINGS – Attach	site map showing	sampling point locati	ons, transects, im	portant featur	res, etc.		
Hydrophytic Vegetation Present?	Yes No 🗸	Is the Sampled Area			_		
Hydric Soil Present?	Yes No 🗸	within a Wetland?	Yes	No 🗸			
Wetland Hydrology Present?	Yes No 🗸						
Remarks:				-			
Upland sample plot in floodpla	in east of PFM W	-01 Vegetation and	d soils significan	tlv disturbed	d hv		
cattle grazing. Hydrology sign		•	•	•	-		
• • • • • •	-			•	lion		
Tool indicates wetter than nor	mai conditions we	ere present 3 mont	hs prior to surve	·y.			
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicators (equired)		
Primary Indicators (minimum of one is requi			Surface Soil Crack	, ,			
Surface Water (A1)	True Aquatic Plants		Sparsely Vegetate		ce (B8)		
High Water Table (A2)	Hydrogen Sulfide Od		Drainage Patterns (B10)				
Saturation (A3)		res on Living Roots (C3)	Moss Trim Lines (B16)				
Water Marks (B1)	Presence of Reduce		Dry-Season Water Table (C2)				
Sediment Deposits (B2) Drift Deposits (B3)	Thin Muck Surface (on in Tilled Soils (C6)	Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Other (Explain in Re	,	Stunted or Stressed Plants (D1)				
Iron Deposits (B5)	Oulor (Explain in 1.0	illaino <i>j</i>	Geomorphic Posit	, ,			
Inundation Visible on Aerial Imagery (B	7)		Shallow Aquitard (D3)				
Water-Stained Leaves (B9)	,		Microtopographic Relief (D4)				
Aquatic Fauna (B13)			FAC-Neutral Test				
Field Observations:			_				
Surface Water Present? Yes	No Popth (inch	ies):					
Water Table Present? Yes	No Pepth (inch						
Saturation Present? Yes	No Pepth (inch		Hydrology Present?	Yes	No 🗸		
(includes capillary fringe)	<u> </u>				'		
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos	s, previous inspections), if a	vailable:		_		
Remarks:							
No indicators are present. I	- - - - - - - - - - - - - - - - - - -	bed by ditching.					
The maleuters are present.	Tyarology alotar	bea by alterning.					

<u>Tree Stratum</u> (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1.	70 OOVCI	Орссісз	Otatus	Number of Dominant Species			
2.				That Are OBL, FACW, or FAC: 1 (A)			
3. 4.				Total Number of Dominant Species Across All Strata: 2 (B)			
5 ·				Percent of Dominant Species That Are OBL, FACW, or FAC: 50.00 (A/B)			
7.				Prevalence Index worksheet:			
	Total % Cover of: Multiply by:						
50% of total cover:	OBL species 0						
Sapling/Shrub Stratum (Plot size: 15 ft r)				FACW species $0 x 2 = 0$			
1.				FAC species 60 $x 3 = 180$			
2.				FACU species 40 $x 4 = 160$			
3.				UPL species $0 \times 5 = 0$			
4.				Column Totals: 100 (A) 340 (B)			
5.				Prevalence Index = B/A = 3.40			
6.				Hydrophytic Vegetation Indicators:			
7.				1 - Rapid Test for Hydrophytic Vegetation			
8.				2 - Dominance Test is >50%			
9.				3 - Prevalence Index is ≤3.0¹			
50% of total cover:		Total Cover of total cover:		4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
Herb Stratum (Plot size: 5 ft r)				Problematic Hydrophytic Vegetation ¹ (Explain)			
1. Schedonorus arundinaceus	35	✓	FACU				
Coleataenia anceps	25		FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
Paspalum dilatatum	15		FAC	Definitions of Four Vegetation Strata:			
4. Arthraxon hispidus	10		FAC				
5. Juncus tenuis	10		FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.			
·	5		FACU				
•			1 400				
7.				Sapling/Shrub – Woody plants, excluding vines, less			
8.				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.			
9.							
10 11.				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.			
	100	Total Cover		Woody Vine – All woody vines greater than 3.28 ft in			
50% of total cover: 50.00		of total cover:	20.00	height.			
Woody Vine Stratum (Plot size: 30 ft r)		o. 101a. 00101.					
1.							
2							
3.							
4.							
5				Hydrophytic			
		Total Cover		Vegetation			
50% of total cover:	20% of total cover:			Present? Yes No No			
Remarks: (Include photo numbers here or on a sepa	rate sheet.)						
No indicators are present Veret	otion di-	turbad b	V 00++1-	arazina			
No indicators are present. Vegeta	ation dis	turbea b	y carrie	graziriy.			

Sampling Point: SP-08

Profile Desc	ription: (Describe	to the de	pth needed to doc	ument t	he indica	ator or o	confirm the ab	sence of indic	cators.)	
Depth	Matrix			x Featu						
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	<u> </u>	Ren	narks
0 - 6	10YR 4/3	95	7.5YR 4/4	5	С	M	Loam			
6 - 20	7.5YR 4/4	97	7.5YR 5/6	3	С	М	Sandy Loa	m		
-										
¹ Type: C=Co	oncentration, D=Dep	letion, RN	/≡Reduced Matrix, I	MS=Mas	sked San	d Grains	2L	ocation: PL=F	Pore Lining, N	Л=Matrix.
Hydric Soil I	ndicators:							Indicators 1	or Problem	atic Hydric Soils³:
Histosol	(A1)		Polyvalue B				-	2 cm M	uck (A10) (M	LRA 147)
Histic Ep	ipedon (A2)		Thin Dark S	urface (S9) (MLR	A 147,	148)	Coast F	rairie Redox	(A16)
Black His			Loamy Muc			ILRA 1	36)	-	A 147, 148)	
	n Sulfide (A4)		Loamy Gley	ed Matri	ix (F2)				nt Floodplair	Soils (F19)
Stratified	Layers (A5)		Depleted Ma	atrix (F3)			-	A 136, 147)	
2 cm Mu	ck (A10) (LRR N)		Redox Dark	Surface	e (F6)			Red Pa	rent Material	(F21)
Depleted	Below Dark Surface	e (A11)	Depleted Da	ark Surfa	ace (F7)			(outs	ide MLRA 1	27, 147, 148)
Thick Da	rk Surface (A12)		Redox Depr	essions	(F8)			Very Sh	allow Dark S	Surface (F22)
Iron Mon	osulfide (A18)		Iron-Mangai	nese Ma	sses (F1	2) (LRR	N,	Other (E	Explain in Re	marks)
Sandy M	lucky Mineral (S1)		MLRA 13	6)						
Sandy G	leyed Matrix (S4)		Umbric Surf	ace (F1	3) (MLRA	122, 13	36)	3		
Sandy R	edox (S5)		Piedmont FI	oodplair	n Soils (F	19) (ML	RA 148)			c vegetation and
Stripped	Matrix (S6)		Red Parent	Material	(F21) (M	ILRA 12	7, 147, 148)			nust be present,
Dark Sur	face (S7)							unless o	disturbed or p	problematic.
Restrictive I	_ayer (if observed):	:								
Type:										
Depth (ir	nches):						Hydric Soi	I Present?	Yes	No <u> </u>
Remarks:										
No indica	ators are pre	cont	Soile dieturb	ad by	, cattl	o ara	zina			
NO IIIGIC	ators are pre	Sent.	Solis distuib	eu by	Catti	e gra	zirig.			
1										

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: Snow Creek Wetland Mitigation Project	City/County: Frai	nklin County	Sampling Date: 2025-07-22
Applicant/Owner: Mountain Valley Pipeline, LLC		State: Virgin	ia Sampling Point: SP-09
Investigator(s): Patrick Meier, Wyatt Jackson, Lily Coope	r Section, Township, Ra		
	Local relief (concave, cor	=	Slope (%): 1
Subregion (LRR or MLRA): P 136 Lat: 36.85629		ong: -79.743385	Datum: NAD83_2011
Soil Map Unit Name: 10B - Colescreek-Delanco complex, 2 to	_		
Are climatic / hydrologic conditions on the site typical for this time of			, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly		mal Circumstances" preser	nt? Yes No V
Are Vegetation, Soil, or Hydrology naturally pro	oblematic? (If neede	d, explain any answers in F	Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point lo	cations, transects, i	mportant features, etc.
Hydrophytic Vegetation Present? Yes No ✔	Is the Sampled Are	ea	
Hydric Soil Present? Yes No	within a Wetland?	Yes	No 🗸
Wetland Hydrology Present? Yes V No		-	<u> </u>
Remarks:			
Upland sample plot in floodplain east of PEM V	N-01 Vegetation	and soils significa	ntly disturbed by
• •	_	•	•
cattle grazing. Hydrology significantly disturbed			
Tool indicates wetter than normal conditions v	were present 3 m	onths prior to surv	rey.
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicator	s (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cra	acks (B6)
Surface Water (A1)True Aquatic Plan	ts (B14)	Sparsely Vegeta	ated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide		Drainage Patter	
	heres on Living Roots (C		
Water Marks (B1) Presence of Redu		Dry-Season Wa	
	ction in Tilled Soils (C6)	Crayfish Burrow	
Drift Deposits (B3)Thin Muck Surface			le on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in I	Remarks)		ssed Plants (D1)
Iron Deposits (B5)		Geomorphic Po	` '
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitar	` '
Water-Stained Leaves (B9)		Microtopograph	
Aquatic Fauna (B13)		FAC-Neutral Te	st (D5)
Field Observations:	1		
Surface Water Present? Yes No Depth (in Water Table Present? Yes Depth (in			
Water Table Present? Yes No No Depth (in Depth (in Saturation Present? Yes No Depth (in Depth		land Hydrology Present?	Yes ✔ No
(includes capillary fringe)	Weti	iana nyarology Fresent:	162 NO
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if available:	
2000,20 1.000,400 24.4 (coa gaage,og ve, aoa. po	too, providuo inopodiudito,	,, avaab.o.	
Remarks:			
Indicator C3 is present. Hydrology disturb	ed by ditching		
maleuter de la present. Frydrology distarb	ca by alterning.		

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

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1.	70 OOVC1	Орсскоз	Otatus	Number of Dominant Species
2.				That Are OBL, FACW, or FAC: 1 (A)
3				Total Number of Dominant Species Across All Strata: 2 (B)
5 6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 50.00 (A/B)
7.				Prevalence Index worksheet:
· -		Total Cover		Total % Cover of: Multiply by:
50% of total cover:		of total cover:		OBL species 0
Sapling/Shrub Stratum (Plot size: 15 ft r)				FACW species 10 $x = 20$
1				FAC species 45 x 3 = 135
2.				FACU species 45 $x 4 = 180$
3.				UPL species $\frac{0}{0}$ $x = \frac{0}{0}$
4.				Column Totals: 100 (A) 335 (B)
5.				Prevalence Index = B/A = 3.35
6.				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8.				2 - Dominance Test is >50%
				3 - Prevalence Index is ≤3.0 ¹
9.		Total Cover		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:		of total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft r)				Problematic Hydrophytic Vegetation ¹ (Explain)
1. Schedonorus arundinaceus	40	✓	FACU	
Coleataenia anceps	20		FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. Paspalum dilatatum	15		FAC	Definitions of Four Vegetation Strata:
4. Diodia virginiana	10		FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5. Juncus tenuis	10		FAC	more in diameter at breast height (DBH), regardless of
6. Solanum carolinense	5		FACU	height.
7.				Sapling/Shrub – Woody plants, excluding vines, less
8.				than 3 in. DBH and greater than or equal to 3.28 ft
9.				(1 m) tall.
10.				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
	100 =	Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 50.00	20%	of total cover:	20.00	height.
Woody Vine Stratum (Plot size: 30 ft r)				
1.				
2.				
3.				
4.				
5.				l
		Total Cover		Hydrophytic
50% of total cover:		of total cover:		Vegetation Present? Yes No
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			
No indicators are present. Vegeta	ation dis	turbed b	y cattle	grazing.

Sampling Point: SP-09

Profile Desc	ription: (Describe	to the de	pth needed to doc	ument t	he indica	ator or c	onfirm the ab	sence of indic	ators.)	
Depth	Matrix			x Featur		2				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	<u> </u>	Rem	narks
0 - 4	10YR 4/3	90	10YR 3/6	10	С	PL / M	Loam			
4 - 20	7.5YR 4/4	90	7.5YR 5/6	10	С	М	Sandy Clay	Loam		
	-									
							-			
-							2.			
	oncentration, D=Dep	letion, RN	/I=Reduced Matrix, I	MS=Mas	ked San	d Grains	. 'L	ocation: PL=P		
Hydric Soil										atic Hydric Soils ³ :
Histosol			Polyvalue B				-		uck (A10) (M	-
	pipedon (A2)		Thin Dark S	•	, ,		•		rairie Redox	(A16)
Black His			Loamy Muc	-		ILRA 13	6)	-	A 147, 148)	0 " (540)
	n Sulfide (A4)		Loamy Gley						nt Floodplain	Soils (F19)
	Layers (A5)		Depleted Ma					-	A 136, 147)	(504)
	ck (A10) (LRR N)	- (0.4.4)	Redox Dark						ent Material	` '
	Below Dark Surface	e (A11)	Depleted Da					-		27, 147, 148)
	rk Surface (A12)		Redox Depr		. ,	o) // DD	N.I			Surface (F22)
	losulfide (A18) lucky Mineral (S1)		Iron-Mangaı MLRA 13		sses (Fi.	2) (LKK	IN,	Other (E	xplain in Re	marks)
	leyed Matrix (S4)			-) /MI D A	122 12	6)			
			Umbric Surf Piedmont Fl				-	³ Indicators o	f hydrophytic	c vegetation and
	edox (S5)									nust be present,
	Matrix (S6) face (S7)		Red Parent	iviateriai	(FZI) (IVI	LKA 12	7, 147, 140)		listurbed or p	•
	_ayer (if observed):	<u> </u>						4000		
Type:	, ,									
Depth (ir	nches):						Hydric Soi	I Present?	Yes	No 🗸
Remarks:	<u> </u>						•		·	
			o							
No indica	ators are pre	sent.	Soils disturb	ed by	catti	e gra:	zıng.			

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: Snow Creek Wetland Mitigation I	Project	City/County	_{y:} Franklin C	ounty	Sampling Date:	2025-07-22
Applicant/Owner: Mountain Valley Pipeline, I	·	<u> </u>			Sampling Point:	
Investigator(s): Patrick Meier, Wyatt Jackson, L		Section, Towns	shin. Range:			
Landform (hillside, terrace, etc.): Floodplain		•	_	_{ne):} Concave	Slope (%):	1
	36.856348			9.743671	Datum:	NAD83_2011
Soil Map Unit Name: 10B - Colescreek-Delanco col						TADOO_LU
Are climatic / hydrologic conditions on the site typical for	-		Yes		explain in Remark	
Are Vegetation, Soil, or Hydrology	•		re "Normal Circ	umstances" present?	? Yes	No V
Are Vegetation, Soil, or Hydrology	naturally probl	lematic? (If	needed, expla	in any answers in Re	emarks.)	
SUMMARY OF FINDINGS – Attach site ma	p showing s	sampling po	int location	s, transects, im	portant featu	res, etc.
Hydrophytic Vegetation Present? Yes	No	Is the Sampl	ed Area			
Hydric Soil Present? Yes ✓	No	within a Wet		Yes 🗸	No	
Wetland Hydrology Present? Yes	No					
Remarks:	<u> </u>	1				
Wetland sample plot within PEM W	/-01. Veg	etation an	d soils sig	gnificantly dis	sturbed by	cattle
grazing. Hydrology significantly di	sturbed b	y ditching	J. The US	ACE Anteced	ent Precipi	tation
Tool indicates wetter than normal	condition	s were pre	esent 3 m	onths prior t	o survey.	
HYDROLOGY						
Wetland Hydrology Indicators:			<u></u>	Secondary Indicators	(minimum of two	required)
Primary Indicators (minimum of one is required; check				Surface Soil Crac	` ,	
	Aquatic Plants		_	Sparsely Vegetate		ice (B8)
	ogen Sulfide Od		_	Drainage Patterns		
		res on Living Ro	oots (C3)	Moss Trim Lines		
	ence of Reduce			Dry-Season Wate		
		on in Tilled Soils	s (C6)	Crayfish Burrows		(0.0)
	Muck Surface (_	Saturation Visible		y (C9)
	r (Explain in Re	emarks)	_	Stunted or Stress	, ,	
Iron Deposits (B5)				Geomorphic Posi	` '	
Inundation Visible on Aerial Imagery (B7)			_	Shallow Aquitard		
Water-Stained Leaves (B9)			_	Microtopographic		
Aquatic Fauna (B13)				FAC-Neutral Test	(D5)	
Field Observations:	Danth (inch	1.				
Surface Water Present? Yes No V Water Table Present? Yes No V	Depth (inch Depth (inch					
	Depth (inch		Watland Hy	drology Present?	Yes 🗸	No
Saturation Present? Yes No 🗸	Deptil (ilich	les)	vvelianu ny	arology Fresent?	162	NO
Describe Recorded Data (stream gauge, monitoring we	ell, aerial photo:	s. previous inspe	ections), if avai	lable:		
	,	-, p	,,			
Remarks:						
Indicators C3, D2 and D5 are pres	ent. Hvdr	ology dist	urbed by	ditchina.		
		g,				

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

EGETATION (Four Strata) – Use scienti	iic riairies (oi piarits.		Sampling Point: SP-10
Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
·				Number of Dominant Species
<u> </u>				That Are OBL, FACW, or FAC: 1 (A)
i				Total Number of Dominant Species Across All Strata: 1 (B)
·				Species Across All Strata: 1 (B)
i i.				Percent of Dominant Species That Are OBL FACW, or FAC: 100.00 (A/B)
				That Are OBL, FACW, or FAC: 100.00 (A/B) Prevalence Index worksheet:
·		=Total Cover		Total % Cover of: Multiply by:
50% of total cover:		of total cover:		OBL species 0 $x = 0$
apling/Shrub Stratum (Plot size: 15 ft r		or total cover.		FACW species $\frac{20}{}$ x 2 = $\frac{40}{}$
				FAC species 70 $x = 210$
				FACU species 10 $x = 40$
·				UPL species $\frac{1}{0}$ $x = \frac{1}{0}$
				Column Totals: 100 (A) 290 (B
				Prevalence Index = B/A = 2.90
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				✓ 2 - Dominance Test is >50%
).				✓ 3 - Prevalence Index is ≤3.0 ¹
		=Total Cover		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20%	of total cover:		data in Remarks or on a separate sheet)
lerb Stratum (Plot size: 5 ft r)		V		Problematic Hydrophytic Vegetation ¹ (Explain)
Coleataenia anceps	55		FAC	¹ Indicators of hydric soil and wetland hydrology must b
Diodia virginiana	15 15		FACW	present, unless disturbed or problematic.
Juncus tenuis Cabadanarya aryadinasaya	10		FACU	Definitions of Four Vegetation Strata:
Schedonorus arundinaceus Juncus effusus	5		FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of
Junicus errusus			FACW	height.
·				
				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft
·				(1 m) tall.
0				Herb – All herbaceous (non-woody) plants, regardless
0. 1.				of size, and woody plants less than 3.28 ft tall.
	100	=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 50.00		of total cover:	20.00	height.
Voody Vine Stratum (Plot size: 30 ft r)		0. 1010.		
·				
·				
·				
		=Total Cover		Hydrophytic
50% of total cover:		of total cover:		Vegetation Present? Yes No

Dominance test and prevalence index are met. Vegetation disturbed by cattle grazing.

Profile Desc	ription: (Describe	to the de	-			ator or c	onfirm the abs	sence of indi	cators.)	
Depth	Matrix			x Featu						
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0 - 8	10YR 5/2	90	10YR 4/6	10	С	PL / M	Sandy Clay L	.oam		
8 - 20	7.5YR 4/4	80	10YR 3/2	20	D	М	Sandy Loar	m		
-	_									
¹ Type: C=Co	oncentration, D=Dep	letion, RN	/=Reduced Matrix, N	/IS=Mas	ked San	d Grains	. ² Lo	ocation: PL=F	Pore Lining, M=Ma	trix.
Hydric Soil I	Indicators:							Indicators	for Problematic H	lydric Soils³:
Histosol	(A1)		Polyvalue Be				-	2 cm M	uck (A10) (MLRA	147)
Histic Ep	pipedon (A2)		Thin Dark Su					Coast F	Prairie Redox (A16)
Black His			Loamy Muck			/ILRA 13	36)	-	A 147, 148)	
	n Sulfide (A4)		Loamy Gley						nt Floodplain Soils	s (F19)
	Layers (A5)		<u>✓</u> Depleted Ma					-	A 136, 147)	
	ck (A10) (LRR N)	(*)	Redox Dark		` '				rent Material (F21)	
	Below Dark Surface	e (A11)	Depleted Da		` '			-	ide MLRA 127, 14	-
	ark Surface (A12)		Redox Depre			o) // DD			nallow Dark Surfac	, ,
	nosulfide (A18)		Iron-Mangar		sses (F1	2) (LRR	N,	Other (I	Explain in Remark	5)
	lucky Mineral (S1)		MLRA 136	-) /BAL D A	400 40) (C)			
	eleyed Matrix (S4)		Umbric Surfa				-	³ Indicators of	of hydrophytic veg	etation and
	edox (S5)		Piedmont Flo				-		hydrology must b	
	Matrix (S6)		Red Parent	viateriai	(F21) (IV	ILRA 12	7, 147, 148)		disturbed or proble	-
	face (S7) _ayer (if observed):	ı						4111000	alotarboa or proble	maio.
Type:	-uyo. (0200.10u).									
Depth (ir	nches):						Hydric Soil	Present?	Yes ✔ I	No
Remarks:	· ·						<u> </u>			
Indicator	r F3 is preser	nt. Soi	ls disturbed	by ca	ittle g	razin	g.			

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: Snow Creek Wetland Mitigation Project	ect City/County: Frank	lin County	Sampling Date: 2025-07-22
Applicant/Owner: Mountain Valley Pipeline, LLC		State: Virginia	Sampling Point: SP-11
Investigator(s): Patrick Meier, Wyatt Jackson, Lily C	Cooper Section, Township, Ran	ge:	· _
Landform (hillside, terrace, etc.): Floodplain	Local relief (concave, conve	ex, none): Concave	Slope (%): 1
Subregion (LRR or MLRA): P 136 Lat: 36.8		g: -79.74 <mark>3632</mark>	Datum: NAD83_2011
Soil Map Unit Name: 10B - Colescreek-Delanco complex			ion:
Are climatic / hydrologic conditions on the site typical for this t			xplain in Remarks.)
Are Vegetation ✓ , Soil ✓ , or Hydrology ✓ signi		al Circumstances" present?	· .
Are Vegetation, Soil, or Hydrology natur		explain any answers in Rei	
SUMMARY OF FINDINGS – Attach site map sh			•
,			
Hydrophytic Vegetation Present? Yes ✓ No Hydric Soil Present? Yes ✓ No		Yes 🗸	No
Wetland Hydrology Present? Yes V No		1 €3 <u> </u>	NO
Remarks:	<u>' I</u>		
Wetland sample plot within PEM W-01	1. Vegetation and soils	s significantly dis	turbed by cattle
grazing. Hydrology significantly distur		•	-
Tool indicates wetter than normal con	iditions were present	3 months prior to	survey.
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that		Surface Soil Crack	
	itic Plants (B14)		d Concave Surface (B8)
	Sulfide Odor (C1)	Drainage Patterns	
	Rhizospheres on Living Roots (C3)	Moss Trim Lines (I	
	of Reduced Iron (C4)	Dry-Season Water	
	n Reduction in Tilled Soils (C6)	Crayfish Burrows (
	Surface (C7)		on Aerial Imagery (C9)
	plain in Remarks)	Stunted or Stresse	
Iron Deposits (B5)		Geomorphic Positi	, ,
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (
Water-Stained Leaves (B9)		Microtopographic I	
Aquatic Fauna (B13)		FAC-Neutral Test	(D5)
Field Observations:			
Surface Water Present? Yes No De	epth (inches):		
	epth (inches):		N.
	epth (inches): Wetlar	nd Hydrology Present?	Yes No No
(includes capillary fringe)	=== = botos provious inspections) i	£ilabla.	
Describe Recorded Data (stream gauge, monitoring well, ae	riai photos, previous irispections), i	f available:	
Remarks:			
Indicators C3 and D2 are present. Hyd	drology disturbed by	ditchina.	
		.	

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

	Absolute	Dominant	Indicator	
ree Stratum (Plot size: 30 ft r)	% Cover	Species?	Status	Dominance Test worksheet:
,				
-				Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)
				Total Number of Dominant Species Across All Strata: 6 (B)
-				Species Across All Strata: 6 (B)
-				Percent of Dominant Species
				That Are OBL, FACW, or FAC: 83.33 (A/B
				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
50% of total cover:	20%	of total cover:		OBL species 0 x 1 = 0
pling/Shrub Stratum (Plot size: 15 ft r)			FACW species 10 $\times 2 = 20$
				FAC species 70 x 3 = 210
				FACU species 15 $x 4 = 60$
				UPL species $0 x 5 = 0$
				Column Totals: 95 (A) 290 (I
				Prevalence Index = B/A = 3.05
-				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				✓ 2 - Dominance Test is >50%
				3 - Prevalence Index is ≤3.0 ¹
		T-1-1 O		1
		=Total Cover		4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
50% of total cover:	20%	of total cover:		
erb Stratum (Plot size: 5 ft r)				Problematic Hydrophytic Vegetation ¹ (Explain)
Coleataenia anceps	30		FAC	¹ Indicators of hydric soil and wetland hydrology must
Juncus tenuis	15		FAC	present, unless disturbed or problematic.
Diodia virginiana	10		FACW	Definitions of Four Vegetation Strata:
Paspalum dilatatum	10		FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm)
Trifolium repens	10		FACU	more in diameter at breast height (DBH), regardless
Microstegium vimineum	10	~	FAC	height.
Arthraxon hispidus	5	· <u> </u>	FAC	Sapling/Shrub – Woody plants, excluding vines, les
Solanum carolinense	5		FACU	than 3 in. DBH and greater than or equal to 3.28 ft
				(1 m) tall.
J.				Herb – All herbaceous (non-woody) plants, regardles
				of size, and woody plants less than 3.28 ft tall.
	95	=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 47.5		of total cover	19.00	height.
oody Vine Stratum (Plot size: 30 ft r	20%	or total cover.		
· · · · · · · · · · · · · · · · · · ·				
-				
				Hydrophytic
		=Total Cover		Vegetation
50% of total cover:	20%	of total cover:		Present? Yes No No
-				<u> </u>
emarks: (Include photo numbers here or on a seg	arata abaat \			

	-	to the de	pth needed to doc			ator or c	onfirm the abs	sence of indic	cators.)	
Depth (inches)	Matrix	0/		x Featu		Loc ²	Toveturo		Domorko	
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹		Texture		Remarks	
0 - 6	10YR 5/2	80	10YR 4/6	20	<u>C</u>	PL / M	Clay Loam			
6 - 20	10YR 5/2	70	10YR 4/6	30	С	PL / M	Sandy Clay L	oam		
-										
_										
<u> </u>	-									
⁻ Type: C=Co	ncentration, D=Dep	letion, RN		MS=Mas	ked San	d Grains		ocation: PL=F	Pore Lining, M=Matrix.	
Hydric Soil I									for Problematic Hydric Se	oils ^{3.}
Histosol			Polyvalue B	elow Su	rface (S8) (MLRA	147, 148)		uck (A10) (MLRA 147)	
	ipedon (A2)		Thin Dark S				-		Prairie Redox (A16)	
Black His			Loamy Muck				-		A 147, 148)	
	n Sulfide (A4)		Loamy Gley	•			-,	•	nt Floodplain Soils (F19)	
	Layers (A5)		✓ Depleted Ma						A 136, 147)	
	ck (A10) (LRR N)		Redox Dark					-	rent Material (F21)	
	Below Dark Surface	e (A11)	Depleted Da		. ,				ide MLRA 127, 147, 148)	
	rk Surface (A12)	(,,,,	Redox Depr		, ,			-	nallow Dark Surface (F22)	
	osulfide (A18)		Iron-Mangar			2) (I RR	N.		Explain in Remarks)	
	ucky Mineral (S1)		MLRA 13			_, (_	,			
	leyed Matrix (S4)		Umbric Surfa		3) (MLRA	122, 13	6)			
	edox (S5)		Piedmont FI		-		-	³ Indicators of	of hydrophytic vegetation a	nd
	Matrix (S6)		Red Parent				-		hydrology must be preser	
Dark Sur				Materia	(. 2 ·) (., , ,		disturbed or problematic.	
	.ayer (if observed):									
Type:										
Depth (in	ches):						Hydric Soi	I Present?	Yes ✔ No	
Remarks:	<u>'</u>						•			_
	50 :									
Indicator	F3 is preser	nt. Soi	ls disturbed	by ca	ittle g	razın	g.			
Ī										

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: Snow Creek Wetland M	litigation Project	City/County: Frank	in County	Sampling Date: 2025-07-22
Applicant/Owner: Mountain Valley			State: Virgini	ia Sampling Point: SP-12
Investigator(s): Patrick Meier, Wyatt J		Section, Township, Rand		_
Landform (hillside, terrace, etc.): Floodp		ocal relief (concave, conve		Slope (%): 1
Subregion (LRR or MLRA): P 136	Lat: 36.856462		:-79.743188	Datum: NAD83_201
Soil Map Unit Name: 10B - Colescreek-D	elanco complex, 2 to 8	percent slopes, rarely t	looded NWI classific	ation:
Are climatic / hydrologic conditions on the si	te typical for this time of ye	ar? Yes	No 🗸 (If no,	, explain in Remarks.)
Are Vegetation, Soil, or Hydr	ology _ <pre> significantly di</pre>	isturbed? Are "Norma	l Circumstances" presen	it? Yes No 🗸
Are Vegetation, Soil, or Hydr	ology naturally prob	lematic? (If needed, e	explain any answers in R	Remarks.)
SUMMARY OF FINDINGS – Attacl			tions, transects, ir	nportant features, etc.
Hydrophytic Vegetation Present?	Yes No	Is the Sampled Area		
Hydric Soil Present?	Yes 🗸 No	within a Wetland?	Yes	No <u> </u>
Wetland Hydrology Present?	Yes No 🗸			
Remarks:				
Upland sample plot in floodpla	ain east of PFM W	-01 Vegetation a	nd soils significa	ntly disturbed by
		•		•
cattle grazing. Hydrology sign	•	•		<u>-</u>
Tool indicates wetter than no	rmal conditions we	ere present 3 mor	iths prior to surv	ey.
HYDROLOGY	_			
Wetland Hydrology Indicators:			-	s (minimum of two required)
Primary Indicators (minimum of one is requ			Surface Soil Cra	, ,
Surface Water (A1)	True Aquatic Plants	` '		ated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Od		Drainage Patterr	, ,
Saturation (A3)		res on Living Roots (C3)	Moss Trim Lines	
Water Marks (B1)	Presence of Reduce		Dry-Season Wat	
Sediment Deposits (B2) Drift Deposits (B3)	Thin Muck Surface (on in Tilled Soils (C6)	Crayfish Burrows	le on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Re		Stunted or Stres	
Iron Deposits (B5)	Other (Explain in re	markoj	Geomorphic Pos	
Inundation Visible on Aerial Imagery (E	37)		Shallow Aquitare	
Water-Stained Leaves (B9)	,		Microtopographi	` '
Aquatic Fauna (B13)			FAC-Neutral Tes	` '
Field Observations:				
Surface Water Present? Yes	No Popth (inch	nes):		
Water Table Present? Yes	No V Depth (inch	nes):		
Saturation Present? Yes	No V Depth (inch		d Hydrology Present?	Yes No 🗸
(includes capillary fringe)				
Describe Recorded Data (stream gauge, m	onitoring well, aerial photo	s, previous inspections), if	available:	
Remarks:	-		-	-
No indicators are present	Uvdrology distur	had by ditabing		
No indicators are present.	nyarology alstar	bed by ditching.		

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

ree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
·				Number of Dominant Species
				That Are OBL, FACW, or FAC: 1 (A)
				Total Number of Dominant
				Species Across All Strata: 2 (B)
				Percent of Dominant Species That Are OBL, FACW, or FAC: 50.00 (A/B)
				Prevalence Index worksheet:
		T-1-1-0		
		=Total Cover		Total % Cover of: Multiply by:
50% of total cover:	20%	of total cover:	·	OBL species $0 x 1 = 0$
apling/Shrub Stratum (Plot size: 15 ft r	_)			FACW species $\frac{0}{x^2}$ $x^2 = \frac{0}{x^2}$
				FAC species 55 $\times 3 = 165$
				FACU species 45
				UPL species $0 x 5 = 0$
				Column Totals: 100 (A) 345 (B
				Prevalence Index = B/A = 3.45
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
-				2 - Dominance Test is >50%
				3 - Prevalence Index is ≤3.0¹
		Tatal Causes		4 - Morphological Adaptations ¹ (Provide supportin
		=Total Cover		data in Remarks or on a separate sheet)
50% of total cover:	20%	of total cover:	·	
erb Stratum (Plot size: 5 ft r)			·	Problematic Hydrophytic Vegetation ¹ (Explain)
	30		FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
erb Stratum (Plot size: 5 ft r) Schedonorus arundinaceus				Problematic Hydrophytic Vegetation ¹ (Explain)
erb Stratum (Plot size: 5 ft r) Schedonorus arundinaceus Coleataenia anceps	30		FACU	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must l
erb Stratum (Plot size: 5 ft r) Schedonorus arundinaceus Coleataenia anceps	30 25		FACU FAC	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must l present, unless disturbed or problematic. Definitions of Four Vegetation Strata:
erb Stratum (Plot size: 5 ft r) Schedonorus arundinaceus Coleataenia anceps Paspalum dilatatum	30 25 15		FACU FAC	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must lydresent, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of
erb Stratum (Plot size: 5 ft r) Schedonorus arundinaceus Coleataenia anceps Paspalum dilatatum Solanum carolinense	30 25 15 15		FACU FAC FACU	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) of
erb Stratum (Plot size: 5 ft r) Schedonorus arundinaceus Coleataenia anceps Paspalum dilatatum Solanum carolinense Setaria parviflora Arthraxon hispidus	30 25 15 15 10		FACU FAC FAC FACU FACU	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must legetent, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height.
erb Stratum (Plot size: 5 ft r) Schedonorus arundinaceus Coleataenia anceps Paspalum dilatatum Solanum carolinense Setaria parviflora Arthraxon hispidus	30 25 15 15 10		FACU FAC FAC FACU FACU	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must legresent, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
erb Stratum (Plot size: 5 ft r) Schedonorus arundinaceus Coleataenia anceps Paspalum dilatatum Solanum carolinense Setaria parviflora Arthraxon hispidus	30 25 15 15 10		FACU FAC FAC FACU FACU	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must legetent, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height.
erb Stratum (Plot size: 5 ft r Schedonorus arundinaceus Coleataenia anceps Paspalum dilatatum Solanum carolinense Setaria parviflora Arthraxon hispidus	30 25 15 15 10		FACU FAC FAC FACU FACU	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of 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.
erb Stratum (Plot size: 5 ft r) Schedonorus arundinaceus Coleataenia anceps Paspalum dilatatum Solanum carolinense Setaria parviflora Arthraxon hispidus	30 25 15 15 10		FACU FAC FAC FACU FACU	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) of 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
erb Stratum (Plot size: 5 ft r) Schedonorus arundinaceus Coleataenia anceps Paspalum dilatatum Solanum carolinense Setaria parviflora Arthraxon hispidus	30 25 15 15 10 5		FACU FAC FAC FACU FACU	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) of 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.
erb Stratum (Plot size: 5 ft r Schedonorus arundinaceus Coleataenia anceps Paspalum dilatatum Solanum carolinense Setaria parviflora Arthraxon hispidus	30 25 15 15 10 5	Total Cover	FACU FAC FACU FAC FACU	Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators 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) of 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
erb Stratum (Plot size: 5 ft r) Schedonorus arundinaceus Coleataenia anceps Paspalum dilatatum Solanum carolinense Setaria parviflora Arthraxon hispidus 0. 1. 50% of total cover: 50	30 25 15 15 10 5		FACU FAC FACU FAC FACU	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) of 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.
erb Stratum (Plot size: 5 ft r) Schedonorus arundinaceus Coleataenia anceps Paspalum dilatatum Solanum carolinense Setaria parviflora Arthraxon hispidus 0. 1. 50% of total cover: 50	30 25 15 15 10 5	Total Cover	FACU FAC FACU FAC FACU	Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators 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) of 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
erb Stratum (Plot size: 5 ft r) Schedonorus arundinaceus Coleataenia anceps Paspalum dilatatum Solanum carolinense Setaria parviflora Arthraxon hispidus 0. 1. 50% of total cover: 50/200dy Vine Stratum (Plot size: 30 ft r	30 25 15 15 10 5	Total Cover	FACU FAC FACU FAC FACU	Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators 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) of 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
erb Stratum (Plot size: 5 ft r) Schedonorus arundinaceus Coleataenia anceps Paspalum dilatatum Solanum carolinense Setaria parviflora Arthraxon hispidus 0. 1. 50% of total cover: 50/200dy Vine Stratum (Plot size: 30 ft r	30 25 15 15 10 5	Total Cover	FACU FAC FACU FAC FACU	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) of 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
erb Stratum (Plot size: 5 ft r) Schedonorus arundinaceus Coleataenia anceps Paspalum dilatatum Solanum carolinense Setaria parviflora Arthraxon hispidus 0. 1. 50% of total cover: 50% oddy Vine Stratum (Plot size: 30 ft r	30 25 15 15 10 5	Total Cover	FACU FAC FACU FAC FACU	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) of 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
erb Stratum (Plot size: 5 ft r) Schedonorus arundinaceus Coleataenia anceps Paspalum dilatatum Solanum carolinense Setaria parviflora Arthraxon hispidus 0. 1. 50% of total cover: 50/200dy Vine Stratum (Plot size: 30 ft r	30 25 15 15 10 5	Total Cover	FACU FAC FACU FAC FACU	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) of 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
erb Stratum (Plot size: 5 ft r) Schedonorus arundinaceus Coleataenia anceps Paspalum dilatatum Solanum carolinense Setaria parviflora Arthraxon hispidus 1. 50% of total cover: 50/200dy Vine Stratum (Plot size: 30 ft r	30 25 15 15 10 5	Total Cover	FACU FAC FACU FAC FACU	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of 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.
erb Stratum (Plot size: 5 ft r) Schedonorus arundinaceus Coleataenia anceps Paspalum dilatatum Solanum carolinense Setaria parviflora Arthraxon hispidus 1. 50% of total cover: 50/200dy Vine Stratum (Plot size: 30 ft r	30 25 15 15 10 5 100 5 100 20%	=Total Cover	FACU FAC FACU FAC FACU	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) of 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.
erb Stratum (Plot size: 5 ft r) Schedonorus arundinaceus Coleataenia anceps Paspalum dilatatum Solanum carolinense Setaria parviflora Arthraxon hispidus 1. 50% of total cover: 50/200dy Vine Stratum (Plot size: 30 ft r	30 25 15 10 5 100 5 100 20%	Total Cover	FACU FAC FACU FAC FAC FAC FAC FAC FAC	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) of 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.

Profile Desc	cription: (Describe	to the de	-			ator or c	onfirm the absence	of indicators.)
Depth	Matrix			x Featu		. 2	_	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 - 4	7.5YR 4/2	95	10YR 4/6	5	<u>C</u>	М	Sandy Loam	
4 - 20	7.5YR 4/4	100					Sandy Loam	
_								
-								
¹ Type: C=C	oncentration, D=Dep	oletion, RN	M=Reduced Matrix, I	MS=Mas	sked San	d Grains	² Locatio	n: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indi	cators for Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue B					2 cm Muck (A10) (MLRA 147)
Histic E	oipedon (A2)		Thin Dark S	urface (S9) (MLR	RA 147, 1	48)	Coast Prairie Redox (A16)
	stic (A3)		Loamy Muc			MLRA 13	-	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gley					Piedmont Floodplain Soils (F19)
	d Layers (A5)		<u>✓</u> Depleted Ma					(MLRA 136, 147)
	uck (A10) (LRR N)	- (0.4.4)	Redox Dark		` '			Red Parent Material (F21)
	d Below Dark Surfac	e (A11)	Depleted Da		` '			(outside MLRA 127, 147, 148)
	ark Surface (A12)		Redox Depr		. ,	2) // DD		Very Shallow Dark Surface (F22) Other (Explain in Remarks)
	nosulfide (A18) Nucky Mineral (S1)		Iron-Mangai		15562 (L.I.	2) (LKK		Other (Explain in Remarks)
	Gleyed Matrix (S4)		Umbric Surf	-	3) (MI R 4	122 13	6)	
	Redox (S5)		Piedmont FI				3	icators of hydrophytic vegetation and
	Matrix (S6)		Red Parent				,	wetland hydrology must be present,
	rface (S7)				. () (unless disturbed or problematic.
	Layer (if observed)	:						
Type:								
Depth (i	nches):						Hydric Soil Pres	ent? Yes 🗸 No
Remarks:								
Indicato	r F3 is preseı	nt Soi	ls disturbed	hy ca	attle d	razin	7	
maicato	i i o is presei	11. 501	is distarbed	Бу СС	attic g	n azırı	۶.	
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WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: Snow Creek Wetland Mi	tigation Project	City/County: Frankli	n County	Sampling Date: 2025-07-22			
Applicant/Owner: Mountain Valley P			State: Virginia	Sampling Point: SP-13			
Investigator(s): Patrick Meier, Wyatt Ja	-	Section, Township, Range					
Landform (hillside, terrace, etc.): Floodpl		ocal relief (concave, convex		Slope (%): 1			
Subregion (LRR or MLRA): P 136	Lat: 36.856351		-79.742893	Slope (78) Datum: NAD83_2011			
,							
Soil Map Unit Name: 11A - Comus-Mag							
Are climatic / hydrologic conditions on the site				explain in Remarks.)			
Are Vegetation, Soil, or Hydro			Circumstances" present?	Yes No V			
Are Vegetation, Soil, or Hydro	logynaturally prob	lematic? (If needed, e	xplain any answers in Re	emarks.)			
SUMMARY OF FINDINGS – Attach	site map showing	sampling point locat	ions, transects, im	portant features, etc.			
Hydrophytic Vegetation Present?	Yes No 🗸	Is the Sampled Area					
Hydric Soil Present?	Yes No ✓	within a Wetland?	Yes	No 🗸			
Wetland Hydrology Present?	Yes No 🗸						
Remarks:							
Upland sample plot adjacent t	o PFM W-01. Veg	etation and soils s	ionificantly distur	rhed hy cattle			
grazing. Hydrology significant			•	-			
	-	•		cipitation 100i			
indicates wetter than normal o	onaitions were pi	resent 3 months p	rior to survey.				
HYDROLOGY							
Wetland Hydrology Indicators:				(minimum of two required)			
Primary Indicators (minimum of one is required)			Surface Soil Crac	, ,			
Surface Water (A1)	True Aquatic Plants			ed Concave Surface (B8)			
High Water Table (A2)	Hydrogen Sulfide Oc						
Saturation (A3) Water Marks (B1)	Presence of Reduce	neres on Living Roots (C3) Moss Trim Lines (B16) ced Iron (C4) Dry-Season Water Table (C2)					
Sediment Deposits (B2)		on in Tilled Soils (C6)	Crayfish Burrows				
Drift Deposits (B3)	Thin Muck Surface (on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Other (Explain in Re		Stunted or Stress	• • • •			
Iron Deposits (B5)		,	Geomorphic Posit	, ,			
Inundation Visible on Aerial Imagery (B7	⁷)		Shallow Aquitard				
Water-Stained Leaves (B9)		Microtopographic Relief (D4)					
Aquatic Fauna (B13)			FAC-Neutral Test	(D5)			
Field Observations:							
Surface Water Present? Yes	No Depth (inch						
Water Table Present? Yes	No V Depth (inch						
Saturation Present? Yes	No _ Depth (inch	nes): Wetland	Hydrology Present?	Yes No V			
(includes capillary fringe)		innantiana) if					
Describe Recorded Data (stream gauge, mo	nitoring well, aerial priolo	s, previous inspections), ii	avaliable:				
Remarks:							
No indicators are present. H	Avdrology distur	hed by ditching.					
no maioatoro are precenti.	lydrology diota.	bea by areaning.					

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

ee Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
				(1)
	<u> </u>			Total Number of Dominant Species Across All Strata: 2 (B)
				Species Across All Strata: 2 (B)
				Percent of Dominant Species
				That Are OBL, FACW, or FAC: 50.00 (A/B)
				Prevalence Index worksheet:
	=	=Total Cover		Total % Cover of: Multiply by:
50% of total cover:	20%	of total cover	:	OBL species 0 x 1 = 0
apling/Shrub Stratum (Plot size: 15 ft r)			FACW species $0 x 2 = 0$
	_			FAC species 60 $x 3 = 180$
				FACU species 40 $x 4 = 160$
				UPL species $0 \times 5 = 0$
		-		Column Totals: 100 (A) 340 (B
				Prevalence Index = B/A = 3.40
	· ——			Hydrophytic Vegetation Indicators:
	· ——			1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
				3 - Prevalence Index is ≤3.0 ¹
		=Total Cover		4 - Morphological Adaptations (Provide supporting
50% of total cover:	20%	of total cover		data in Remarks or on a separate sheet)
erb Stratum (Plot size: 5 ft r)				Problematic Hydrophytic Vegetation ¹ (Explain)
Coleataenia anceps	35		FAC	¹ Indicators of hydric soil and wetland hydrology must b
Schedonorus arundinaceus	30		FACU	present, unless disturbed or problematic.
Paspalum dilatatum	15		FAC	Definitions of Four Vegetation Strata:
Solanum carolinense	10		FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of
Setaria parviflora	10		FAC	more in diameter at breast height (DBH), regardless o
				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
· <u></u>				of size, and woody plants less than 3.28 ft tall.
·	100	Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 50.		of total cover	20.00	height.
	20 /8	oi totai cover		
oody Vine Stratum (Plot size: 30 ft r)				
	· ——			
	· ——			
				Hydrophytic
	:	=Total Cover		Vegetation
50% of total cover:	20%	of total cover	:	Present? Yes No V
emarks: (Include photo numbers here or on a se	narate shoot)			
marks. (moldde photo humbers hele of off a se	parate srieet.)			
o indicators are present. Vege	tation dis	turbed b	y cattle	grazing.

Profile Desc	ription: (Describe	to the de	oth needed to doc	ument t	he indica	ator or c	onfirm the ab	sence of indic	ators.)	
Depth	Matrix			x Featu						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	e	Rem	narks
0 - 2	10YR 4/3	100					Sandy Loa	am		
2 - 20	7.5YR 4/4	100					Sandy Loa	am		
-										
_										
¹Type: C=Co	ncentration, D=Dep	letion, RM	=Reduced Matrix, I	MS=Mas	ked San	d Grains	. ² l	_ocation: PL=F	Pore Lining, N	Л=Matrix.
Hydric Soil I	ndicators:							Indicators f	or Problema	atic Hydric Soils ³ :
Histosol ((A1)		Polyvalue B	elow Su	rface (S8) (MLRA	147, 148)	2 cm M	uck (A10) (M	LRA 147)
Histic Ep	ipedon (A2)		Thin Dark S	urface (89) (MLR	A 147, 1	48)	Coast F	rairie Redox	(A16)
Black His			Loamy Mucl	ky Miner	al (F1) (N	ILRA 13	66)	•	A 147, 148)	
	n Sulfide (A4)		Loamy Gley						nt Floodplain	Soils (F19)
	Layers (A5)		Depleted Ma					•	A 136, 147)	
	ck (A10) (LRR N)	(8.4.4)	Redox Dark		` '				rent Material	` '
	Below Dark Surface	e (A11)	Depleted Da		, ,			-		27, 147, 148)
	rk Surface (A12) osulfide (A18)		Redox Depr Iron-Mangar			2) /I PP	N		Explain in Re	Surface (F22)
	ucky Mineral (S1)		MLRA 13		3363 (1 1.	2) (L IXIX	14,		-xpiaiii iii ite	marks)
	eyed Matrix (S4)		Umbric Surf	-	3) (MLRA	122. 13	6)			
	edox (S5)		Piedmont FI				-	³ Indicators of	of hydrophytic	c vegetation and
	Matrix (S6)		Red Parent				-	wetland	hydrology m	iust be present,
Dark Sur							•	unless	disturbed or p	problematic.
Restrictive L	ayer (if observed):									
Type:										_
Depth (in	ches):						Hydric So	il Present?	Yes	No
Remarks:										
No indica	ators are pre	sent (Soile dieturh	ed hy	, cattl	e ara	zina			
i vo inaice	itors are pre	SCIIC. C	Jons distain	ca by	Catti	c gra	zirig.			

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: Snow Creek Wetland N	/litigation Project	City/County: F	ranklin County	Sampling Date: 2025-07-22		
Applicant/Owner: Mountain Valley	Pipeline, LLC		State: Virg	ginia Sampling Point: SP-14		
Investigator(s): Patrick Meier, Wyatt		Section Township				
Landform (hillside, terrace, etc.): Flood			convex, none): Convex	Slope (%): 1		
Subregion (LRR or MLRA): P 136	Lat: 36.857001	odi rener (derioave,	Long: -79.743207	Datum: NAD83_201		
		norcent clance r				
Soil Map Unit Name: 10B - Colescreek-						
Are climatic / hydrologic conditions on the s	•			no, explain in Remarks.)		
Are Vegetation, Soil, or Hyd			Normal Circumstances" pres	sent? Yes No V		
Are Vegetation, Soil, or Hyd	rologynaturally prob	lematic? (If ne	eded, explain any answers i	in Remarks.)		
SUMMARY OF FINDINGS – Attac	h site map showing	sampling point	locations, transects	, important features, etc.		
Hydrophytic Vegetation Present?	Yes 🗸 No	Is the Sampled	Area			
Hydric Soil Present?	Yes No 🗸	within a Wetlan		No 🗸		
Wetland Hydrology Present?	Yes No 🗸			_		
Remarks:						
Sample point within upland is	sland adiacent to P	EM W-01. Ve	getation and soils s	significantly disturbed		
by cattle grazing. Hydrology				•		
Tool indicates wetter than no	•	-	_	-		
Tool indicates wetter than ne	minar corrations we	ore present s	months prior to su	ii vey.		
HYDROLOGY						
Wetland Hydrology Indicators:			-	ators (minimum of two required)		
Primary Indicators (minimum of one is required)			Surface Soil	, ,		
Surface Water (A1)	True Aquatic Plants			getated Concave Surface (B8)		
High Water Table (A2)	Hydrogen Sulfide O		Drainage Pat			
Saturation (A3)	Oxidized Rhizosphe	=	· · · —			
Water Marks (B1)	Presence of Reduce			Water Table (C2)		
Sediment Deposits (B2)	Recent Iron Reducti					
Drift Deposits (B3)	Thin Muck Surface (sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Other (Explain in Re	emarks)		tressed Plants (D1)		
Iron Deposits (B5)				Position (D2)		
Inundation Visible on Aerial Imagery (B7)		Shallow Aqui	tard (D3)		
Water-Stained Leaves (B9)		Microtopographic Relief (D4)				
Aquatic Fauna (B13)			FAC-Neutral	Test (D5)		
Field Observations:						
Surface Water Present? Yes	No Depth (inch	nes):				
Water Table Present? Yes	No V Depth (inch	nes):				
Saturation Present? Yes	No 🗸 Depth (inch	nes): V	Vetland Hydrology Presen	nt? Yes No V		
(includes capillary fringe)						
Describe Recorded Data (stream gauge, r	nonitoring well, aerial photo	s, previous inspection	ons), if available:			
Remarks:						
No indicators are present	Uvdralagy diatur	had by ditak	ina			
No indicators are present.	nyurology distui	bed by ditci	iirig.			

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

20% (Dominant Species?		Dominance Test worksheet: Number of Dominant Species 1 (A) Total Number of Dominant 1 (B) Percent of Dominant Species 1 (B) Percent of Dominant Species 100.00 (A/B) Prevalence Index worksheet: Multiply by: OBL species 0 x 1 = 0 FACW species 5 x 2 = 10 FAC species 85 x 3 = 255 FACU species 10 x 4 = 40 UPL species 0 x 5 = 0 Column Totals: 100 (A) 305 (B
20% (-Total Cover		Number of Dominant Species 1 (A) Total Number of Dominant 1 (B) Percent of Dominant Species 1 (B) Percent of Dominant Species 1 (B) Prevalence Index worksheet: 1 1 Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 5 x 2 = 10 FAC species 85 x 3 = 255 FACU species 10 x 4 = 40 UPL species 0 x 5 = 0 Column Totals: 100 (A) 305
20% (of total cover:		That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B) Prevalence Index worksheet: Multiply by: OBL species 0 x 1 = 0 x 2 = 10 FACW species 5 x 2 = 10 x 2 = 55 FAC species 6 x 4 = 40 x 4 = 40 UPL species 7 0 x 5 = 0 Column Totals: 100 (A) 305 (B
20% (of total cover:		Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Total % Cover of: Multiply by: OBL species FACW species FAC species FACU species UPL species Column Totals: Total Number of Dominant Species 10
20% (of total cover:		Species Across All Strata: 1 (B) Percent of Dominant Species 100.00 (A/B) Prevalence Index worksheet: 100.00 (A/B) Prevalence Index worksheet: Multiply by: 0 OBL species 0 x 1 = 0 FACW species 5 x 2 = 10 FAC species 85 x 3 = 255 FACU species 10 x 4 = 40 UPL species 0 x 5 = 0 Column Totals: 100 (A) 305 (B
20% (of total cover:		Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B) Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 5 x 2 = 10 FAC species 85 x 3 = 255 FACU species 10 x 4 = 40 UPL species 0 x 5 = 0 Column Totals: 100 (A) (B)
20% (of total cover:		That Are OBL, FACW, or FAC: 100.00 (A/B) Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 5 x 2 = 10 FAC species 85 x 3 = 255 FACU species 10 x 4 = 40 UPL species 0 x 5 = 0 Column Totals: 100 (A)
20% (of total cover:		Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 5 x 2 = 10 FAC species 85 x 3 = 255 FACU species 10 x 4 = 40 UPL species 0 x 5 = 0 Column Totals: 100 (A) 305 (B)
20% (of total cover:		Total % Cover of: $ \begin{array}{c ccccc} \hline $
20% (of total cover:		OBL species 0 $x 1 = 0$ FACW species 5 $x 2 = 10$ FAC species 85 $x 3 = 255$ FACU species 10 $x 4 = 40$ UPL species 0 $x 5 = 0$ Column Totals: 100 (A) 305 (B
			FACW species 5
			FAC species 85 $\times 3 = 255$ FACU species 10 $\times 4 = 40$ UPL species 0 $\times 5 = 0$ Column Totals: 100 (A) 305 (B)
			FAC species 85 $\times 3 = 255$ FACU species 10 $\times 4 = 40$ UPL species 0 $\times 5 = 0$ Column Totals: 100 (A) 305 (B)
			FACU species 10 $x 4 = 40$ UPL species 0 $x 5 = 0$ Column Totals: 100 (A) 305 (B)
			UPL species 0 $x = 5$ 0 0 0 0 0 0 0 0 0 0
			Column Totals: 100 (A) 305 (B
	<u> </u>		Prevalence index = B/A = 3.05
			Hydrophytic Vegetation Indicators:
 			1 - Rapid Test for Hydrophytic Vegetation
			2 - Dominance Test is >50%
=			3 - Prevalence Index is ≤3.0 ¹
	Total Cover		4 - Morphological Adaptations ¹ (Provide supporting
20% (of total cover:		data in Remarks or on a separate sheet)
			Problematic Hydrophytic Vegetation ¹ (Explain)
75	~	FAC	¹ Indicators of hydric soil and wetland hydrology must b
10		FAC	present, unless disturbed or problematic.
10		FACU	Definitions of Four Vegetation Strata:
5		FACW	
			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of 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.
	:Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
20% (of total cover:	20.00	height.
	Total Cause		Hydrophytic
			Vegetation
20% (of total cover:	<u> </u>	Present? Yes No No
ate sheet.)			
,			
1	= 20% of the sheet.)	=Total Cover =Total Cover = 20% of total cover = Total Cover = 20% of total cover	FACW FACW

Profile Desc	ription: (Describe	to the de	pth needed to doc	ument th	ne indica	ator or c	onfirm the ab	sence of indic	ators.)	
Depth	Matrix			x Featur		2				
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Rem	narks
0 - 4	10YR 4/3	95	7.5YR 4/4	5	С	М	Sandy Clay I	oam		
4 - 20	5YR 4/6	90	7.5YR 5/3	10	D	М	Sandy Clay	/		
_										
							-			
-										
¹ Type: C=Co	oncentration, D=Dep	letion, RM	1=Reduced Matrix, N	//S=Mas	ked San	d Grains	. ² L	ocation: PL=P	ore Lining, N	∕I=Matrix.
Hydric Soil I	ndicators:							Indicators f	or Problema	atic Hydric Soils ³ :
Histosol			Polyvalue Be				-		ıck (A10) (M	-
	ipedon (A2)		Thin Dark S				-		rairie Redox	(A16)
Black His			Loamy Muck	-		ILRA 13	66)	-	A 147, 148)	
	n Sulfide (A4)		Loamy Gley						nt Floodplain	Soils (F19)
	Layers (A5)		Depleted Ma					-	A 136, 147)	(== 1)
	ck (A10) (LRR N)	- (044)	Redox Dark		. ,				ent Material	` '
	Below Dark Surface	e (A11)	Depleted Da					-		27, 147, 148)
	rk Surface (A12)		Redox Depre			o) // DD	NI.			urface (F22)
	osulfide (A18) ucky Mineral (S1)		Iron-Mangar		sses (Fi.	2) (LKK	IN,	Other (E	xplain in Re	marks)
	leyed Matrix (S4)		Umbric Surfa	-) (MI PA	122 13	·6)			
	edox (S5)		Piedmont Flo				-	³ Indicators o	f hydrophytic	vegetation and
			Red Parent							ust be present,
	Matrix (S6) face (S7)		Red Parent	wateriai	(FZI) (IV I	LKA IZ	7, 147, 140)		listurbed or p	-
	_ayer (if observed):							4		
Type:	.uyo. (0200.10u).									
Depth (in	iches):						Hydric Soi	I Present?	Yes	No 🗸
Remarks:	<u> </u>									
							•			
No indica	ators are pre	sent. S	Soils disturbe	ed by	catti	e gra	zıng.			

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: Snow Creek Wetland Mi	tigation Project	City/County: Fra	anklin County	Sampling Date: 2025-08-06			
Applicant/Owner: Mountain Valley P	ipeline, LLC		State: Virgin	ia Sampling Point: SP-15			
Investigator(s): P.Meier	· · ·	Section, Township, F					
Landform (hillside, terrace, etc.): Slope			onvex, none): Concave	Slope (%): 5			
Subregion (LRR or MLRA): P 136	Lat: 36.856690°		ong: -79.7443457	Datum: NAD83_201			
							
Soil Map Unit Name: 27D - Minnieville I		•	NWI classific				
Are climatic / hydrologic conditions on the site		_	No 🔽 (If no	, explain in Remarks.)			
Are Vegetation, Soil, or Hydro	logy <u> </u>	sturbed? Are "No	rmal Circumstances" presen	nt? Yes No V			
Are Vegetation, Soil, or Hydro	logynaturally probl	ematic? (If need	ed, explain any answers in F	Remarks.)			
SUMMARY OF FINDINGS – Attach	site map showing s	sampling point l	ocations, transects, ir	mportant features, etc.			
Hydrophytic Vegetation Present?	Yes 🗸 No	Is the Sampled A	·ea				
Hydric Soil Present?	Yes No 🗸	within a Wetland?		No 🗸			
Wetland Hydrology Present?	Yes No 🗸			-			
Remarks:							
Unland area clang western ad	go of W O1 at too	of billolope V	agatation and sails	oignificantly			
Upland area along western ed	_	•	•	•			
disturbed by cattle grazing. Hy		-	-				
Precipitation Tool indicates we	etter than normal	conditions wer	e present 3 months	s prior to survey.			
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicator	rs (minimum of two required)			
Primary Indicators (minimum of one is requir	ed; check all that apply)		Surface Soil Cra	acks (B6)			
Surface Water (A1)	True Aquatic Plants			ated Concave Surface (B8)			
High Water Table (A2)	Hydrogen Sulfide Oc						
Saturation (A3)		res on Living Roots (0					
Water Marks (B1)	Presence of Reduce		Dry-Season Wa				
Sediment Deposits (B2)		on in Tilled Soils (C6)					
Drift Deposits (B3) Algal Mat or Crust (B4)	Thin Muck Surface (Other (Explain in Re			le on Aerial Imagery (C9) ssed Plants (D1)			
Iron Deposits (B5)	Other (Explain in Ne	iliaiks)	Geomorphic Pos	, ,			
Inundation Visible on Aerial Imagery (B7	')		Shallow Aquitare				
Water-Stained Leaves (B9)	,		Microtopographi				
Aquatic Fauna (B13)			✓ FAC-Neutral Te				
Field Observations:							
Surface Water Present? Yes	No Popth (inch	es):					
Water Table Present? Yes	No Pepth (inch						
Saturation Present? Yes	No V Depth (inch		tland Hydrology Present?	Yes No 🗸			
(includes capillary fringe)							
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos	s, previous inspection	s), if available:				
Remarks:							
FAC-neutral test is met. Hy	drology disturb	ad by drain til	es and ditching				
1 AC-lieutial test is lilet. Thy	diology distuibe	ed by drain th	es and ditering.				

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

Sampling Point: SP-15

· · · · · · · · · · · · · · · · · · ·	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 ft r)	% Cover	Species?	Status	Dominance Test worksheet:
1. 2.				Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
3. 4.				Total Number of Dominant Species Across All Strata: 2 (B)
5 6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)
7.				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
50% of total cover:	20%	of total cover:		OBL species $0 x 1 = 0$
Sapling/Shrub Stratum (Plot size: 15 ft r)				FACW species 20 $\times 2 = 40$
1.				FAC species 55 $\times 3 = 165$
2.				FACU species $\frac{5}{}$ $x 4 = \frac{20}{}$
3.				UPL species $0 \times 5 = 0$
4.				Column Totals: 80 (A) 225 (B)
5.				Prevalence Index = B/A = 2.81
6.				Hydrophytic Vegetation Indicators:
7.				1 - Rapid Test for Hydrophytic Vegetation
8.				✓ 2 - Dominance Test is >50%
9.				3 - Prevalence Index is ≤3.0 ¹
		=Total Cover		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:		of total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft r)				Problematic Hydrophytic Vegetation ¹ (Explain)
1. Arthraxon hispidus	30	✓	FAC	
2. Panicum anceps	20			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. Paspalum dilatatum	20		FAC	Definitions of Four Vegetation Strata:
4. Diodia virginiana	10		FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5. Juncus effusus	10		FACW	more in diameter at breast height (DBH), regardless of
6. Setaria pumila	5		FAC	height.
7 Solanum carolinense	5		FACU	Conline/Chrub Wasdy plants avaluding vines less
8.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft
0.				(1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11.				of size, and woody plants less than 3.28 ft tall.
···	100	=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 50.00		of total cover:	20.00	height.
Woody Vine Stratum (Plot size: 30 ft r		or total cover.		-
1.				
2.				
3.				
4				
5				Hydrophytic
		=Total Cover		Vegetation
50% of total cover:	20%	of total cover:		Present? Yes No No
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			

Dominance test and prevalence index are met. Vegetation disturbed by cattle grazing.

Profile Desc	ription: (Describe t	to the dep	th needed to doc	ıment t	he indica	tor or c	onfirm the abs	sence of indica	ators.)	
Depth	Matrix			x Featur	es					
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Rema	arks
0 - 2	7.5YR 4/3	100					Clay Loam			
2 - 20	2.5YR 4/6	100					Clay Loam			
			-							
¹ Type: C=Co	oncentration, D=Depl	etion, RM	=Reduced Matrix, N	MS=Mas	ked San	d Grains.	2L0	ocation: PL=Po	ore Lining, M	=Matrix.
Hydric Soil I			· ·							tic Hydric Soils ³ :
Histosol			Polyvalue Be	elow Sui	face (S8	(MLRA	147, 148)		ck (A10) (ML	-
	ipedon (A2)		Thin Dark Su						airie Redox (*
Black His	. , ,		Loamy Muck						147, 148)	, (10)
	n Sulfide (A4)		Loamy Gley			12104 10	0,		t Floodplain :	Soils (F19)
	Layers (A5)								. 136, 147)	Oolis (1 19)
			Depleted Ma						· ·	F04)
	ck (A10) (LRR N)	(8.4.4)	Redox Dark		` '				ent Material (
	Below Dark Surface	e (A11)	Depleted Da					•	de MLRA 12	
	rk Surface (A12)		Redox Depre		` '				allow Dark Su	
	osulfide (A18)		Iron-Mangar		sses (F12	2) (LRR	N,	Other (E	xplain in Ren	narks)
Sandy M	ucky Mineral (S1)		MLRA 130	5)						
Sandy G	leyed Matrix (S4)		Umbric Surfa	ace (F13	B) (MLRA	122, 13	6)	3		
Sandy R	edox (S5)		Piedmont Fl	oodplain	Soils (F	19) (MLF	RA 148)			vegetation and
Stripped	Matrix (S6)		Red Parent	Material	(F21) (M	LRA 127	⁷ , 147, 148)			ust be present,
Dark Sur	face (S7)							unless di	sturbed or pr	roblematic.
Restrictive L	.ayer (if observed):									
Type:										
Depth (in	iches):						Hydric Soi	Present?	Yes	No
Remarks:										
Na bydri	o opil indicat	- HO - HO	mat Caila	dia+	ما امما		tla ava=im			
No nyari	c soil indicate	ors are	met. Soils o	ııstuı	bea t	у сат	tie grazin	ıg.		

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: Snow Creek Wetland M	itigation Project	City/County: F	ranklin County	Sampling Date:	2025-08-06		
Applicant/Owner: Mountain Valley F		` '		nia Sampling Point:			
Investigator(s): P.MEIER		Section, Township	, Range:				
Landform (hillside, terrace, etc.): Floodp	lain Lo	_	convex, none): Concave	Slope (%):	2		
Subregion (LRR or MLRA): P 136	Lat: 36.856687		Long: -79.7443005		NAD83_201		
Soil Map Unit Name: 27D - Minnieville			NWI classif				
Are climatic / hydrologic conditions on the sit			 _	o, explain in Remark	e)		
Are Vegetation , Soil , or Hydro			Normal Circumstances" prese				
			·		NO V		
Are Vegetation, Soil, or Hydro SUMMARY OF FINDINGS – Attach	·		eded, explain any answers in locations, transects,	,	res, etc.		
	4	<u> </u>			•		
Hydrophytic Vegetation Present?	Yes No No	Is the Sampled	4				
Hydric Soil Present?	Yes No No	within a Wetland	d? Yes <u></u> ✓	No			
Wetland Hydrology Present?	Yes No						
Remarks:							
PEM W-01 along western edge o		•	•	_	-		
disturbed by cattle grazing. Hydr	ology significantly o	disturbed by di	tching. The USACE A	ntecedent Prec	pitation		
Tool indicates wetter than norma	al conditions were p	resent 3 month	ns prior to survey.				
HYDROLOGY							
Wetland Hydrology Indicators:	_		Secondary Indicate	ors (minimum of two	equired)		
Primary Indicators (minimum of one is requi	red; check all that apply)		Surface Soil C				
Surface Water (A1)	True Aquatic Plants			tated Concave Surfa	ce (B8)		
—— High Water Table (A2)	Hydrogen Sulfide Od		Drainage Patte				
Saturation (A3)		meres on Living Roots (C3) Moss Trim Lines (B16)					
Water Marks (B1)	Presence of Reduce			ater Table (C2)			
Sediment Deposits (B2)	Recent Iron Reduction				: (00)		
Drift Deposits (B3) Algal Mat or Crust (B4)	Thin Muck Surface (Other (Explain in Re			ble on Aerial Imager essed Plants (D1)	/ (C9)		
Iron Deposits (B5)	Other (Explain in No	illaiks)	Geomorphic P	` ,			
Inundation Visible on Aerial Imagery (B	7)		Shallow Aquita				
Water-Stained Leaves (B9)	• ,		Microtopograp				
Aquatic Fauna (B13)			FAC-Neutral T				
Field Observations:							
Surface Water Present? Yes	No _ Depth (inch	nes):					
Water Table Present? Yes	No V Depth (inch	nes):					
Saturation Present? Yes	No / Depth (inch	nes): v	Vetland Hydrology Present	? Yes_ <u>'</u>	No		
(includes capillary fringe)							
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos	s, previous inspection	ons), if available:				
Remarks:							
Wetland hydrology indicate	ors C3, D2, and D)5 are met. F	Hydrology disturbe	ed by drain til	es		
and ditching.							

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

Sampling Point: SP-16

Tree Charles (Diet sine, 20 ft v	Absolute	Dominant	Indicator	Barrierana Tarkuradakan
Tree Stratum (Plot size: 30 ft r) 1.	% Cover	Species?	Status	Dominance Test worksheet:
2.				Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
3. 4.				Total Number of Dominant Species Across All Strata: 2 (B)
5. 6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)
7.				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
50% of total cover:	20%	of total cover:		OBL species 10 x 1 = 10
Sapling/Shrub Stratum (Plot size: 15 ft r)				FACW species 45 $x = 90$
1.				FAC species 40 $\times 3 = 120$
2.				FACU species $0 x4 = 0$
3.				UPL species $0 \times 5 = 0$
4.				Column Totals: 95 (A) 220 (B)
5.				Prevalence Index = B/A = 2.31
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
Ω				✓ 2 - Dominance Test is >50%
9.				✓ 3 - Prevalence Index is ≤3.0 ¹
9		=Total Cover		4 - Morphological Adaptations ¹ (Provide supporting
EOO/ of total poyers				data in Remarks or on a separate sheet)
50% of total cover:	20%	of total cover:		
Herb Stratum (Plot size: 5 ft r)	30	✓	E 4 0\4/	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Juncus effusus	20		FACW	¹ Indicators of hydric soil and wetland hydrology must be
2. Arthraxon hispidus			FAC	present, unless disturbed or problematic.
3. Panicum anceps	15			Definitions of Four Vegetation Strata:
4. Persicaria hydropiperoides	10		OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5. Microstegium vimineum	10		FAC	more in diameter at breast height (DBH), regardless of height.
6. Diodia virginiana	10		FACW	noight.
7. Paspalum dilatatum	10		FAC	Sapling/Shrub – Woody plants, excluding vines, less
8. Vernonia noveboracensis	5		FACW	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				(1 m) tan.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
	110	=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 55.00	20%	of total cover:	22.00	height.
Woody Vine Stratum (Plot size: 30 ft r)				
1				
2.				
3.				
4.				
5.				
		=Total Cover		Hydrophytic
50% of total cover:		of total cover:		Vegetation Present? Yes No
Remarks: (Include photo numbers here or on a separate or	ale SHEEL.)			

Dominance test and prevalence index are met. Vegetation disturbed by cattle grazing.

	ription: (Describe	to the de	pth needed to doc	ument t	ne indica	tor or c	onfirm the abse	nce of indic	ators.)	
Depth	Matrix			x Featu						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remark	s
0 - 8	10YR 5/2	80	7.5YR 4/4	20	<u>C</u>	PL / M	Clay Loam			
8 - 15	5YR 4/6	90	7.5YR 6/2	10	D	M	Clay Loam			_
15 - 20	5YR 4/6	100					Clay Loam			
-										
_										
¹ Type: C=Co	oncentration, D=Dep	letion, RN	/I=Reduced Matrix, l	MS=Mas	ked San	d Grains	. ² Loc	cation: PL=P	ore Lining, M=N	latrix.
Hydric Soil I	ndicators:							Indicators f	or Problematic	Hydric Soils ³ :
Histosol ((A1)		Polyvalue B	elow Su	face (S8	(MLRA	147, 148)	2 cm Mu	uck (A10) (MLR /	A 147)
Histic Ep	ipedon (A2)		Thin Dark S	urface (S	89) (MLR	A 147, 1	48)	Coast P	rairie Redox (A1	6)
Black His	stic (A3)		Loamy Muc	ky Miner	al (F1) (N	ILRA 13	6)	(MLR	A 147, 148)	
Hydroger	n Sulfide (A4)		Loamy Gley	ed Matri	x (F2)			Piedmor	nt Floodplain So	ils (F19)
Stratified	Layers (A5)		Depleted Ma	atrix (F3)				(MLR	A 136, 147)	
2 cm Mu	ck (A10) (LRR N)		Redox Dark	Surface	(F6)		_	Red Par	ent Material (F2	1)
Depleted	Below Dark Surface	e (A11)	Depleted Da	ark Surfa	ce (F7)			(outsi	de MLRA 127,	147, 148)
Thick Da	rk Surface (A12)		Redox Depr	essions	(F8)		_	Very Sh	allow Dark Surfa	ace (F22)
Iron Mon	osulfide (A18)		Iron-Mangai	nese Ma	sses (F1	2) (LRR	N,	Other (E	xplain in Remai	ks)
Sandy M	ucky Mineral (S1)		MLRA 13	6)						
Sandy G	leyed Matrix (S4)		Umbric Surf	ace (F13) (MLRA	122, 13				
Sandy Re	edox (S5)		Piedmont FI	oodplair	Soils (F	19) (MLF	RA 148)	³ Indicators o	f hydrophytic ve	getation and
Stripped	Matrix (S6)		Red Parent	Material	(F21) (M	LRA 12	7, 147, 148)	wetland	hydrology must	be present,
Dark Sur	face (S7)							unless d	listurbed or prob	lematic.
Daniel Albert										
Restrictive L	.ayer (if observed):									
Type:	.ayer (if observed):									
							Hydric Soil F	Present?	Yes	No
Type:							Hydric Soil F	Present?	Yes	No
Type: _ Depth (in Remarks:	iches):				مرط ام			Present?	Yes	No
Type: _ Depth (in Remarks:			net. Soils dis	turbe	d by	cattle		Present?	Yes	No
Type: _ Depth (in Remarks:	iches):		net. Soils dis	turbe	d by	cattle		Present?	Yes	No
Type: _ Depth (in Remarks:	iches):		net. Soils dis	turbe	d by	cattle		Present?	Yes	No
Type: _ Depth (in Remarks:	iches):		net. Soils dis	turbe	d by (cattle		Present?	Yes_ <u>v</u>	No
Type: _ Depth (in Remarks:	iches):		net. Soils dis	turbe	d by (cattle		Present?	Yes	No
Type: _ Depth (in Remarks:	iches):		net. Soils dis	turbe	d by (cattle		Present?	Yes	No
Type: _ Depth (in Remarks:	iches):		net. Soils dis	turbe	d by (cattle	· · ·	Present?	Yes	No
Type: _ Depth (in Remarks:	iches):		net. Soils dis	turbe	d by (cattle	· · ·	Present?	Yes_ <u>v</u>	No
Type: _ Depth (in Remarks:	iches):		net. Soils dis	turbe	d by	cattle	· · ·	Present?	Yes_ <u>v</u>	No
Type: _ Depth (in Remarks:	iches):		net. Soils dis	turbe	d by	cattle	· · ·	Present?	Yes_ 🗸	No
Type: _ Depth (in Remarks:	iches):		net. Soils dis	turbe	d by	cattle	· · ·	Present?	Yes	No
Type: _ Depth (in Remarks:	iches):		net. Soils dis	turbe	d by	cattle	· · ·	Present?	Yes 🔽	No
Type: _ Depth (in Remarks:	iches):		net. Soils dis	turbe	d by	cattle	· · ·	Present?	Yes 🗸	No
Type: _ Depth (in Remarks:	iches):		net. Soils dis	turbe	d by	cattle	· · ·	Present?	Yes	No
Type: _ Depth (in Remarks:	iches):		net. Soils dis	turbe	d by	cattle	· · ·	Present?	Yes	No
Type: _ Depth (in Remarks:	iches):		net. Soils dis	turbe	d by	cattle	· · ·	Present?	Yes 🗸	No
Type: _ Depth (in Remarks:	iches):		net. Soils dis	turbe	d by	cattle		Present?	Yes 🗸	No
Type: _ Depth (in Remarks:	iches):		net. Soils dis	turbe	d by	cattle		Present?	Yes 🗸	No
Type: _ Depth (in Remarks:	nches):		net. Soils dis	turbe	d by	cattle		Present?	Yes_V	No
Type: _ Depth (in Remarks:	nches):		net. Soils dis	turbe	d by	cattle		Present?	Yes 🗸	No
Type: _ Depth (in Remarks:	nches):		net. Soils dis	turbe	d by	cattle		Present?	Yes 🗸	No

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region

See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: Snow Creek Wetland Mi	itigation Project	City/County: Franl	klin County	Sampling Date: 2025-08-06			
Applicant/Owner: Mountain Valley F		, ,		Sampling Point: SP-17			
Investigator(s): P.Meier	-	Section, Township, Rar					
Landform (hillside, terrace, etc.): Floodp	lain Lo		vex, none): Concave	Slope (%): 2			
Subregion (LRR or MLRA): P 136	Lat: 36.856967		ng: -79.744061	Datum: NAD83_201			
Soil Map Unit Name: 27D - Minnieville			NWI classification				
		•	 -				
Are climatic / hydrologic conditions on the site				plain in Remarks.)			
Are Vegetation, Soil, or Hydro			al Circumstances" present?	Yes No			
Are Vegetation, Soil, or Hydro	ologynaturally probl	lematic? (If needed,	, explain any answers in Rem	narks.)			
SUMMARY OF FINDINGS – Attach	site map showing	sampling point loc	ations, transects, imp	ortant features, etc.			
Hydrophytic Vegetation Present?	Yes ✔ No	Is the Sampled Area					
Hydric Soil Present?	Yes No	within a Wetland?		No			
Wetland Hydrology Present?	Yes V No						
Remarks:							
Northwestern corner of PEM W-0	11 noar drain tile out	lets and dowateri	ng ditch. Vegetation a	and soils			
significantly disturbed by cattle			•				
1 -		•					
Precipitation Tool indicates wette	er than normal cond	itions were preser	nt 3 months prior to st	urvey.			
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicators (n	ninimum of two required)			
Primary Indicators (minimum of one is requi	red; check all that apply)		Surface Soil Cracks	s (B6)			
Surface Water (A1)	True Aquatic Plants	(B14)	Sparsely Vegetated	l Concave Surface (B8)			
<u>✓</u> High Water Table (A2)	Hydrogen Sulfide Od	Odor (C1) Drainage Patterns (B10)					
Saturation (A3)		res on Living Roots (C3)					
— Water Marks (B1)	Presence of Reduce		Dry-Season Water				
Sediment Deposits (B2)		on in Tilled Soils (C6)	Crayfish Burrows (0				
Drift Deposits (B3)	Thin Muck Surface (,		n Aerial Imagery (C9)			
Algal Mat or Crust (B4) Iron Deposits (B5)	Other (Explain in Re	marks)	Stunted or Stressed Geomorphic Position	` ,			
Inundation Visible on Aerial Imagery (B	7)		Shallow Aguitard (E	, ,			
Water-Stained Leaves (B9)	')		Microtopographic R	,			
Aquatic Fauna (B13)			FAC-Neutral Test (I				
Field Observations:				,			
Surface Water Present? Yes	No Pepth (inch	es):					
Water Table Present? Yes ✓	No Depth (inch						
Saturation Present? Yes	No Depth (inch		nd Hydrology Present?	Yes 🗸 No			
(includes capillary fringe)							
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photo	s, previous inspections),	if available:				
Remarks:							
 Wetland hydrology indicato	ore A2 A3 and D	15 are met					
Wetland Hydrology malcate	713 AZ, AJ, and D	o are met.					

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

Sampling Point: SP-17

	Absolute	Dominant	Indicator	
<u>Tree Stratum</u> (Plot size: 30 ft r)	% Cover	Species?	Status	Dominance Test worksheet:
1 2.				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
3. 4.				Total Number of Dominant Species Across All Strata: ³ (B)
5. 6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)
7.				Prevalence Index worksheet:
		Total Cover		Total % Cover of: Multiply by:
50% of total cover:		of total cover:		OBL species 30 x 1 = 30
Sapling/Shrub Stratum (Plot size: 15 ft r)		Ji lolai covei.		FACW species 30
1				FAC species 30
2.				FACU species $\frac{1}{0}$ $x = \frac{1}{0}$
3.				$\begin{array}{c c} \text{VPL species} & & \text{X4-} \\ \text{UPL species} & & \text{VS} = & 0 \\ \end{array}$
4.				00 100
5.				Column Totals: 90 (A) 180 (B) Prevalence Index = B/A = 2.00
6.				Hydrophytic Vegetation Indicators:
7.				1 - Rapid Test for Hydrophytic Vegetation
8.				✓ 2 - Dominance Test is >50%
				✓ 3 - Prevalence Index is ≤3.0 ¹
9.		Total Cavar		4 - Morphological Adaptations ¹ (Provide supporting
500/ -51-1-1		Total Cover		data in Remarks or on a separate sheet)
50% of total cover:	20% (of total cover:		
Herb Stratum (Plot size: 5 ft r)	20	~	0.01	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Carex lurida	30		OBL	¹ Indicators of hydric soil and wetland hydrology must be
2. Arthraxon hispidus	20		FAC	present, unless disturbed or problematic.
3. Juncus effusus	20		FACW	Definitions of Four Vegetation Strata:
4. Juncus tenuis	10		FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5. Panicum anceps	10			more in diameter at breast height (DBH), regardless of height.
6. Echinochloa muricata	5		FACW	noight.
7. Diodia virginiana	5		FACW	Sapling/Shrub – Woody plants, excluding vines, less
8.				than 3 in. DBH and greater than or equal to 3.28 ft
9.				(1 m) tall.
10 11.				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	100 =	Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 50.00		of total cover:	20.00	height.
Woody Vine Stratum (Plot size: 30 ft r)				
1.				
2.				
3.				
4.				
5		Total Carra		Hydrophytic
50% of total cover:		Total Cover of total cover:		Vegetation Present? Yes No No No No No No No No No No No No N
Remarks: (Include photo numbers here or on a sepa	rate sheet \			'
rtemarks. (molade prioto numbers here or on a sepa	1410 311001.)			

Dominance test and prevalence index are met. Vegetation disturbed by cattle grazing.

	ription: (Describe t	to the de	oth needed to doc	ument t	he indica	ator or c	onfirm the absence	of indicators.)		
Depth	Matrix			x Featu		. 2			_	
(inches)	Color (moist)	<u>%</u>	Color (moist)		Type ¹	Loc ²	Texture		Remarks	<u> </u>
0 - 8	10YR 4/1	95	7.5YR 4/6	5	<u>C</u>	<u>M</u>	Clay Loam			
8 - 16	10YR 3/1	60					Sandy Clay Loam	Co-Matrix		
8 - 16	7.5YR 3/4	40					Sandy Clay Loam	Co-Matrix		
16 - 20	5YR 4/3	100					Sandy Clay			
¹ Type: C=Co	oncentration, D=Depl	etion, RM	=Reduced Matrix, I	MS=Mas	ked San	d Grains	. ² Location	n: PL=Pore Linir	ıg, M=M	atrix.
Hydric Soil I	ndicators:						Indic	cators for Probl	ematic	Hydric Soils³:
Histosol	(A1)		Polyvalue B		•			2 cm Muck (A10	(MLRA	147)
	ipedon (A2)		Thin Dark S					Coast Prairie Re	•	6)
Black His	` '		Loamy Mucl			ILRA 13		(MLRA 147, 14	•	
	n Sulfide (A4)		Loamy Gley				'	Piedmont Floodp		ls (F19)
	Layers (A5)		Depleted Ma	` '	·			(MLRA 136, 14		45
	ck (A10) (LRR N)	- (0.4.4)	Redox Dark		` '		<u></u> '	Red Parent Mate	•	•
	Below Dark Surface rk Surface (A12)	e (A11)	Depleted Da		, ,		,	outside MLR. Very Shallow Da		
	osulfide (A18)		Iron-Mangar		` '	2) (I DD		Other (Explain in		
	ucky Mineral (S1)		MLRA 13		3303 (1 1/	<i>2)</i> (L IXIX	`	Other (Explain in	Keman	(3)
	leyed Matrix (S4)		Umbric Surf	-	3) (MLRA	122. 13	6)			
	edox (S5)		Piedmont FI	•			3,	cators of hydrop	hytic ve	getation and
	Matrix (S6)		Red Parent				•	wetland hydrolog	y must	be present,
Dark Sur	face (S7)						ι	unless disturbed	or probl	ematic.
Restrictive L	.ayer (if observed):									
Type:										
Depth (in	iches):						Hydric Soil Prese	ent? Yes		No
Remarks:										
Hydric so	oil indicator F	3 is m	net. Soils dis	turbe	d by	cattle	grazing.			
,		0 .0			, c. 10 y	J G T T T T	g. ag.			

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region

See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: Snow Creek Wetland Mit	tigation Project	City/County: Franklir	n County	Sampling Date:	2025-08-06		
Applicant/Owner: Mountain Valley P		<u> </u>	State: Virginia	'			
Investigator(s): P.Meier		Section, Township, Range					
Landform (hillside, terrace, etc.): Slope	Lo	cal relief (concave, convex,		Slope (%):	5		
Subregion (LRR or MLRA): P 136			-79.7440311		NAD83_2011		
,				- Dataiii	10.12.1		
Soil Map Unit Name: 27D - Minnieville I			NWI classificatio				
Are climatic / hydrologic conditions on the site	• •		No (If no, ex				
Are Vegetation, Soil, or Hydrol	logy significantly di	sturbed? Are "Normal (Circumstances" present?	Yes	No 🔽		
Are Vegetation, Soil, or Hydrol	logynaturally probl	ematic? (If needed, ex	xplain any answers in Rem	narks.)			
SUMMARY OF FINDINGS – Attach	site map showing s	sampling point locati	ons, transects, imp	ortant featur	es, etc.		
Hydrophytic Vegetation Present?	Yes 🗸 No	Is the Sampled Area	<u></u>				
Hydric Soil Present?	Yes No 🗸	within a Wetland?	Yes	No 🗸			
Wetland Hydrology Present?	Yes 🗸 No						
Remarks:							
Upland area adjacent to northwes	at carpar of DEM W.	01 noor drain tile ou	tlata and dawatarin	a ditab Vaa	estation		
•							
and soils significantly disturbed b			•	_			
Antecedent Precipitation Tool ind	licates wetter than	normal conditions w	ere present 3 mont	hs prior to s	urvey.		
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicators (n	ninimum of two r	equired)		
Primary Indicators (minimum of one is requir	ed: check all that apply)		Surface Soil Cracks		oquirou,		
Surface Water (A1)	True Aquatic Plants	(B14)	Sparsely Vegetated		ce (B8)		
High Water Table (A2)	Hydrogen Sulfide Oc						
Saturation (A3)		res on Living Roots (C3)	Moss Trim Lines (B				
Water Marks (B1)	Presence of Reduce	=	Dry-Season Water				
Sediment Deposits (B2)		on in Tilled Soils (C6)	Crayfish Burrows (C				
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation Visible o	n Aerial Imagery	(C9)		
Algal Mat or Crust (B4)	Other (Explain in Re	marks)	Stunted or Stressed	d Plants (D1)			
Iron Deposits (B5)			Geomorphic Positio	on (D2)			
Inundation Visible on Aerial Imagery (B7	')		Shallow Aquitard (D	D3)			
Water-Stained Leaves (B9)			Microtopographic R	Relief (D4)			
Aquatic Fauna (B13)			FAC-Neutral Test (I	D5)			
Field Observations:							
Surface Water Present? Yes	No Depth (inch	es):					
Water Table Present? Yes	No V Depth (inch						
Saturation Present? Yes	No _ Depth (inch	es): Wetland	Hydrology Present?	Yes_	No		
(includes capillary fringe)							
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos	s, previous inspections), if a	vailable:				
Remarks:							

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

Sampling Point: SP-18

· · · · · · · · · · · · · · · · · · ·	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 ft r)	% Cover	Species?	Status	Dominance Test worksheet:
1. 2.				Number of Dominant Species That Are OBL, FACW, or FAC: $\frac{3}{}$ (A)
3. 4.				Total Number of Dominant Species Across All Strata: (B)
5 6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)
7.				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
50% of total cover:	20%	of total cover:		OBL species $0 x 1 = 0$
Sapling/Shrub Stratum (Plot size: 15 ft r)				FACW species 30 $\times 2 = 60$
1.				FAC species 55 $\times 3 = 165$
2.				FACU species $\frac{5}{}$ $x 4 = \frac{20}{}$
3.				UPL species $0 \times 5 = 0$
4.				Column Totals: 90 (A) 245 (B)
5.				Prevalence Index = B/A = 2.72
6.				Hydrophytic Vegetation Indicators:
7.				1 - Rapid Test for Hydrophytic Vegetation
8.				✓ 2 - Dominance Test is >50%
9.				3 - Prevalence Index is ≤3.0 ¹
		=Total Cover		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:		of total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft r)		or total cover.		Problematic Hydrophytic Vegetation ¹ (Explain)
1. Arthraxon hispidus	30	✓	FAC	
Paspalum dilatatum	20		FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. Juncus effusus	20		FACW	Definitions of Four Vegetation Strata:
4. Panicum anceps	10			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5. Diodia virginiana	10		FACW	more in diameter at breast height (DBH), regardless of
6 Schedonorus arundinaceus	5		FACU	height.
7. Setaria pumila	5		FAC	Continue/Charle Mandy plants avaluation visco loss
8.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft
0.				(1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11.				of size, and woody plants less than 3.28 ft tall.
···	100	=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 50.00		of total cover:	20.00	height.
Woody Vine Stratum (Plot size: 30 ft r		or total cover.		
1				
2.				
3.				
4				
5		-Tatal Carra		Hydrophytic
F00/ - £ 1-1-1 · · ·		=Total Cover		Vegetation No.
50% of total cover:	20%	of total cover:		Present? Yes No No
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			

Dominance test and prevalence index are met. Vegetation disturbed from cattle grazing.

Profile Desc	ription: (Describe	to the de	pth needed to doc	ument t	ne indica	tor or c	onfirm the abs	ence of indi	ators.)	
Depth	Matrix			x Featur		2				
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Rem	arks
0 - 4	7.5YR 5/3	80	7.5YR 4/6	20	<u>C</u>	PL / M	Clay Loam			
4 - 20	5YR 4/4	90	7.5YR 5/2	10	D	М	Clay			
-										
¹ Type: C=Co	oncentration, D=Dep	letion, RM	1=Reduced Matrix, I	 ∕/S=Mas	ked San	d Grains	. ² Lo	ocation: PL=F	ore Lining, M	I=Matrix.
Hydric Soil I	ndicators:							Indicators f	or Problema	tic Hydric Soils³:
Histosol	(A1)		Polyvalue B				•	2 cm M	uck (A10) (M I	_RA 147)
Histic Ep	ipedon (A2)		Thin Dark S				•	Coast F	rairie Redox	(A16)
Black His	` '		Loamy Mucl	y Miner	al (F1) (N	ILRA 13	6)	(MLR	A 147, 148)	
	n Sulfide (A4)		Loamy Gley						nt Floodplain	Soils (F19)
Stratified	Layers (A5)		Depleted Ma	ıtrix (F3)				(MLR	A 136, 147)	
	ck (A10) (LRR N)		Redox Dark		` '			Red Pa	rent Material	(F21)
	Below Dark Surface	e (A11)	Depleted Da					•	ide MLRA 12	
	rk Surface (A12)		Redox Depr		` '				allow Dark S	
	osulfide (A18)		Iron-Mangar		sses (F1	2) (LRR	N,	Other (E	Explain in Rer	narks)
	ucky Mineral (S1)		MLRA 13	-						
	leyed Matrix (S4)		Umbric Surf				-	3Indicators	of budraphytia	vegetation and
Sandy R	edox (S5)		Piedmont Fl	oodplain	Soils (F	19) (Ml f	RA 148)	mulcators	пуагорпунс	-
								wotland	hydrology m	
Stripped	Matrix (S6)		Red Parent		(F21) (M	LRA 12	7, 147, 148)		hydrology m	*
Stripped Dark Sur	Matrix (S6) face (S7)				(F21) (M	LRA 12	7, 147, 148)		hydrology m disturbed or p	*
Stripped Dark Sur Restrictive L	Matrix (S6)	:			(F21) (M	LRA 127	7, 147, 148)			*
Stripped Dark Sur Restrictive I Type:	Matrix (S6) face (S7) _ayer (if observed):	:			(F21) (M	LRA 12		unless	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir	Matrix (S6) face (S7) _ayer (if observed):	:			(F21) (M	LRA 12	7, 147, 148) Hydric Soil	unless		*
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) _ayer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: Snow Creek Wetland Mi	tigation Project	City/County: Fra	anklin County	Sampling Date: 2025-08-06			
Applicant/Owner: Mountain Valley P	ipeline, LLC		State: Virgin	ia Sampling Point: SP-15			
Investigator(s): P.Meier	· · ·	Section, Township, F					
Landform (hillside, terrace, etc.): Slope			onvex, none): Concave	Slope (%): 5			
Subregion (LRR or MLRA): P 136	Lat: 36.856690°		ong: -79.7443457	Datum: NAD83_201			
							
Soil Map Unit Name: 27D - Minnieville I		•	NWI classific				
Are climatic / hydrologic conditions on the site		_	No 🔽 (If no	, explain in Remarks.)			
Are Vegetation, Soil, or Hydro	logy <u> </u>	sturbed? Are "No	rmal Circumstances" presen	nt? Yes No V			
Are Vegetation, Soil, or Hydro	logynaturally probl	ematic? (If need	ed, explain any answers in F	Remarks.)			
SUMMARY OF FINDINGS – Attach	site map showing s	sampling point l	ocations, transects, ir	mportant features, etc.			
Hydrophytic Vegetation Present?	Yes 🗸 No	Is the Sampled A	·ea				
Hydric Soil Present?	Yes No 🗸	within a Wetland?		No 🗸			
Wetland Hydrology Present?	Yes No 🗸			-			
Remarks:							
Unland area clang western ad	go of W O1 at too	of billolope V	agatation and sails	oignificantly			
Upland area along western ed	•	•	•	•			
disturbed by cattle grazing. Hy		-	-				
Precipitation Tool indicates we	etter than normal	conditions wer	e present 3 months	s prior to survey.			
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicator	rs (minimum of two required)			
Primary Indicators (minimum of one is requir	ed; check all that apply)		Surface Soil Cra	acks (B6)			
Surface Water (A1)	True Aquatic Plants			ated Concave Surface (B8)			
High Water Table (A2)	Hydrogen Sulfide Oc						
Saturation (A3)		res on Living Roots (0					
Water Marks (B1)	Presence of Reduce		Dry-Season Wa				
Sediment Deposits (B2)		on in Tilled Soils (C6)					
Drift Deposits (B3) Algal Mat or Crust (B4)	Thin Muck Surface (Other (Explain in Re			le on Aerial Imagery (C9) ssed Plants (D1)			
Iron Deposits (B5)	Other (Explain in Ne	iliaiks)	Geomorphic Pos	, ,			
Inundation Visible on Aerial Imagery (B7	')		Shallow Aquitare				
Water-Stained Leaves (B9)	,		Microtopographi				
Aquatic Fauna (B13)			✓ FAC-Neutral Te				
Field Observations:							
Surface Water Present? Yes	No Popth (inch	es):					
Water Table Present? Yes	No Pepth (inch						
Saturation Present? Yes	No V Depth (inch		tland Hydrology Present?	Yes No 🗸			
(includes capillary fringe)							
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos	s, previous inspection	s), if available:				
Remarks:							
FAC-neutral test is met. Hy	drology disturb	ad by drain til	es and ditching				
1 AC-lieutial test is lilet. Thy	diology distuibe	ed by drain th	es and ditering.				

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

Sampling Point: SP-15

· · · · · · · · · · · · · · · · · · ·	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 ft r)	% Cover	Species?	Status	Dominance Test worksheet:
1. 2.				Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
3. 4.				Total Number of Dominant Species Across All Strata: 2 (B)
5 6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)
7.				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
50% of total cover:	20%	of total cover:		OBL species $0 x 1 = 0$
Sapling/Shrub Stratum (Plot size: 15 ft r)				FACW species 20 $\times 2 = 40$
1.				FAC species 55 $\times 3 = 165$
2.				FACU species $\frac{5}{}$ $x 4 = \frac{20}{}$
3.				UPL species $0 \times 5 = 0$
4.				Column Totals: 80 (A) 225 (B)
5.				Prevalence Index = B/A = 2.81
6.				Hydrophytic Vegetation Indicators:
7.				1 - Rapid Test for Hydrophytic Vegetation
8.				✓ 2 - Dominance Test is >50%
9.				3 - Prevalence Index is ≤3.0 ¹
		=Total Cover		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:		of total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft r)				Problematic Hydrophytic Vegetation ¹ (Explain)
1. Arthraxon hispidus	30	✓	FAC	
2. Panicum anceps	20			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. Paspalum dilatatum	20		FAC	Definitions of Four Vegetation Strata:
4. Diodia virginiana	10		FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5. Juncus effusus	10		FACW	more in diameter at breast height (DBH), regardless of
6. Setaria pumila	5		FAC	height.
7 Solanum carolinense	5		FACU	Conline/Chrub Wasdy plants avaluding vines less
8.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft
0.				(1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11.				of size, and woody plants less than 3.28 ft tall.
···	100	=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 50.00		of total cover:	20.00	height.
Woody Vine Stratum (Plot size: 30 ft r		or total cover.		-
1.				
2.				
3.				
4				
5				Hydrophytic
		=Total Cover		Vegetation
50% of total cover:	20%	of total cover:		Present? Yes No No
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			

Dominance test and prevalence index are met. Vegetation disturbed by cattle grazing.

Profile Desc	ription: (Describe t	to the dep	th needed to doc	ıment t	he indica	tor or c	onfirm the abs	sence of indica	ators.)	
Depth	Matrix			x Featur	es					
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Rema	arks
0 - 2	7.5YR 4/3	100					Clay Loam			
2 - 20	2.5YR 4/6	100					Clay Loam			
			-							
¹ Type: C=Co	oncentration, D=Depl	etion, RM	=Reduced Matrix, N	MS=Mas	ked San	d Grains.	2L0	ocation: PL=Po	ore Lining, M	=Matrix.
Hydric Soil I			· ·							tic Hydric Soils ³ :
Histosol			Polyvalue Be	elow Sui	face (S8	(MLRA	147, 148)		ck (A10) (ML	-
	ipedon (A2)		Thin Dark Su						airie Redox (*
Black His	. , ,		Loamy Muck						147, 148)	, (10)
	n Sulfide (A4)		Loamy Gley			12104 10	0,		t Floodplain :	Soils (F19)
	Layers (A5)								. 136, 147)	Oolis (1 19)
			Depleted Ma						· ·	F04)
	ck (A10) (LRR N)	(8.4.4)	Redox Dark		` '				ent Material (
	Below Dark Surface	e (A11)	Depleted Da					•	de MLRA 12	
	rk Surface (A12)		Redox Depre		` '				allow Dark Su	
	osulfide (A18)		Iron-Mangar		sses (F12	2) (LRR	N,	Other (E	xplain in Ren	narks)
Sandy M	ucky Mineral (S1)		MLRA 130	5)						
Sandy G	leyed Matrix (S4)		Umbric Surfa	ace (F13	B) (MLRA	122, 13	6)	3		
Sandy R	edox (S5)		Piedmont Fl	oodplain	Soils (F	19) (MLF	RA 148)			vegetation and
Stripped	Matrix (S6)		Red Parent	Material	(F21) (M	LRA 127	⁷ , 147, 148)			ust be present,
Dark Sur	face (S7)							unless di	sturbed or pr	roblematic.
Restrictive L	.ayer (if observed):									
Type:										
Depth (in	iches):						Hydric Soi	Present?	Yes	No
Remarks:										
Na bydri	o opil indicat	- HO - HO	mat Caila	dia+	ما امما		tla ava=im			
No nyari	c soil indicate	ors are	met. Soils o	ııstuı	bea t	у сат	tie grazin	ıg.		

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-COR

Project/Site: Snow Creek Wetland M	itigation Project	City/County: F	ranklin County	Sampling Date:	2025-08-06
Applicant/Owner: Mountain Valley F		` ` '		nia Sampling Point:	
Investigator(s): P.MEIER		Section, Township	, Range:		
Landform (hillside, terrace, etc.): Floodp	lain Lo	_	convex, none): Concave	Slope (%):	2
Subregion (LRR or MLRA): P 136	Lat: 36.856687		Long: -79.7443005		NAD83_201
Soil Map Unit Name: 27D - Minnieville			NWI classif		
Are climatic / hydrologic conditions on the sit			 _	o, explain in Remark	e)
Are Vegetation , Soil , or Hydro			Normal Circumstances" prese		
			·		NO V
Are Vegetation, Soil, or Hydro SUMMARY OF FINDINGS – Attach	·		eded, explain any answers in locations, transects,	,	res, etc.
	4	<u> </u>			•
Hydrophytic Vegetation Present?	Yes No No	Is the Sampled	4		
Hydric Soil Present?	Yes No No	within a Wetland	d? Yes <u></u> ✓	No	
Wetland Hydrology Present?	Yes No				
Remarks:					
PEM W-01 along western edge o		•	•	_	-
disturbed by cattle grazing. Hydr	ology significantly o	disturbed by di	tching. The USACE A	ntecedent Prec	pitation
Tool indicates wetter than norma	al conditions were p	resent 3 month	ns prior to survey.		
HYDROLOGY					
Wetland Hydrology Indicators:	_		Secondary Indicate	ors (minimum of two	equired)
Primary Indicators (minimum of one is requi	red; check all that apply)		Surface Soil C		
Surface Water (A1)	True Aquatic Plants			tated Concave Surfa	ce (B8)
—— High Water Table (A2)	Hydrogen Sulfide Od		Drainage Patte		
Saturation (A3)	Oxidized Rhizospher		——————————————————————————————————————		
Water Marks (B1)	Presence of Reduce			ater Table (C2)	
Sediment Deposits (B2)	Recent Iron Reduction				: (00)
Drift Deposits (B3) Algal Mat or Crust (B4)	Thin Muck Surface (Other (Explain in Re			ble on Aerial Imager essed Plants (D1)	/ (C9)
Iron Deposits (B5)	Other (Explain in No	illaiks)	Geomorphic P	` ,	
Inundation Visible on Aerial Imagery (B	7)		Shallow Aquita		
Water-Stained Leaves (B9)	• ,		Microtopograp		
Aquatic Fauna (B13)			FAC-Neutral T		
Field Observations:					
Surface Water Present? Yes	No _ Depth (inch	nes):			
Water Table Present? Yes	No V Depth (inch	nes):			
Saturation Present? Yes	No / Depth (inch	nes): v	Vetland Hydrology Present	? Yes_ <u>'</u>	No
(includes capillary fringe)					
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos	s, previous inspection	ons), if available:		
Remarks:					
Wetland hydrology indicate	ors C3, D2, and D)5 are met. F	Hydrology disturbe	ed by drain til	es
and ditching.					
_					

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

Sampling Point: SP-16

Tree Charles (Diet sine, 20 ft v	Absolute	Dominant	Indicator	Barrierana Tarkuradakan
Tree Stratum (Plot size: 30 ft r) 1.	% Cover	Species?	Status	Dominance Test worksheet:
2.				Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
3. 4.				Total Number of Dominant Species Across All Strata: 2 (B)
5. 6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)
7.				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
50% of total cover:	20%	of total cover:		OBL species 10 x 1 = 10
Sapling/Shrub Stratum (Plot size: 15 ft r)				FACW species 45 $x = 90$
1.				FAC species 40 $\times 3 = 120$
2.				FACU species $0 x4 = 0$
3.				UPL species $0 \times 5 = 0$
4.				Column Totals: 95 (A) 220 (B)
5.				Prevalence Index = B/A = 2.31
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
Ω				✓ 2 - Dominance Test is >50%
9.				✓ 3 - Prevalence Index is ≤3.0 ¹
9		=Total Cover		4 - Morphological Adaptations ¹ (Provide supporting
EOO/ of total poyers				data in Remarks or on a separate sheet)
50% of total cover:	20%	of total cover:		
Herb Stratum (Plot size: 5 ft r)	30	✓	E 4 0\4/	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Juncus effusus	20		FACW	¹ Indicators of hydric soil and wetland hydrology must be
2. Arthraxon hispidus			FAC	present, unless disturbed or problematic.
3. Panicum anceps	15			Definitions of Four Vegetation Strata:
4. Persicaria hydropiperoides	10		OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5. Microstegium vimineum	10		FAC	more in diameter at breast height (DBH), regardless of height.
6. Diodia virginiana	10		FACW	noight.
7. Paspalum dilatatum	10		FAC	Sapling/Shrub – Woody plants, excluding vines, less
8. Vernonia noveboracensis	5		FACW	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				(1 m) tan.
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
	110	=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 55.00	20%	of total cover:	22.00	height.
Woody Vine Stratum (Plot size: 30 ft r)				
1				
2.				
3.				
4.				
5.				
		=Total Cover		Hydrophytic
50% of total cover:		of total cover:		Vegetation Present? Yes No
				<u> </u>
Remarks: (Include photo numbers here or on a separate or	ale SHEEL.)			

Dominance test and prevalence index are met. Vegetation disturbed by cattle grazing.

	ription: (Describe	to the de	pth needed to doc	ument t	ne indica	tor or c	onfirm the abse	nce of indic	ators.)	
Depth	Matrix			x Featu						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remark	s
0 - 8	10YR 5/2	80	7.5YR 4/4	20	<u>C</u>	PL / M	Clay Loam			
8 - 15	5YR 4/6	90	7.5YR 6/2	10	D	M	Clay Loam			_
15 - 20	5YR 4/6	100					Clay Loam			
-										
_										
¹ Type: C=Co	oncentration, D=Dep	letion, RN	/I=Reduced Matrix, l	MS=Mas	ked San	d Grains	. ² Loc	cation: PL=P	ore Lining, M=N	latrix.
Hydric Soil I	ndicators:							Indicators f	or Problematic	Hydric Soils ³ :
Histosol ((A1)		Polyvalue B	elow Su	face (S8	(MLRA	147, 148)	2 cm Mu	uck (A10) (MLR /	A 147)
Histic Ep	ipedon (A2)		Thin Dark S	urface (S	89) (MLR	A 147, 1	48)	Coast P	rairie Redox (A1	6)
Black His	stic (A3)		Loamy Muc	ky Miner	al (F1) (N	ILRA 13	6)	(MLR	A 147, 148)	
Hydroger	n Sulfide (A4)		Loamy Gley	ed Matri	x (F2)			Piedmor	nt Floodplain So	ils (F19)
Stratified	Layers (A5)		Depleted Ma	atrix (F3)				(MLR	A 136, 147)	
2 cm Mu	ck (A10) (LRR N)		Redox Dark	Surface	(F6)		_	Red Par	ent Material (F2	1)
Depleted	Below Dark Surface	e (A11)	Depleted Da	ark Surfa	ce (F7)			(outsi	de MLRA 127,	147, 148)
Thick Da	rk Surface (A12)		Redox Depr	essions	(F8)		_	Very Sh	allow Dark Surfa	ace (F22)
Iron Mon	osulfide (A18)		Iron-Mangai	nese Ma	sses (F1	2) (LRR	N,	Other (E	xplain in Remai	ks)
Sandy M	ucky Mineral (S1)		MLRA 13	6)						
Sandy G	leyed Matrix (S4)		Umbric Surf	ace (F13) (MLRA	122, 13				
Sandy Re	edox (S5)		Piedmont FI	oodplair	Soils (F	19) (MLF	RA 148)	³ Indicators o	f hydrophytic ve	getation and
Stripped	Matrix (S6)		Red Parent	Material	(F21) (M	LRA 12	7, 147, 148)	wetland	hydrology must	be present,
Dark Sur	face (S7)							unless d	listurbed or prob	lematic.
Daniel Albert										
Restrictive L	.ayer (if observed):									
Type:	.ayer (if observed):									
							Hydric Soil F	Present?	Yes	No
Type:							Hydric Soil F	Present?	Yes	No
Type: _ Depth (in Remarks:	nches):				مرط ام			Present?	Yes	No
Type: _ Depth (in Remarks:			net. Soils dis	turbe	d by	cattle		Present?	Yes	No
Type: _ Depth (in Remarks:	nches):		net. Soils dis	turbe	d by	cattle		Present?	Yes	No
Type: _ Depth (in Remarks:	nches):		net. Soils dis	turbe	d by	cattle		Present?	Yes	No
Type: _ Depth (in Remarks:	nches):		net. Soils dis	turbe	d by (cattle		Present?	Yes_ <u>v</u>	No
Type: _ Depth (in Remarks:	nches):		net. Soils dis	turbe	d by (cattle		Present?	Yes	No
Type: _ Depth (in Remarks:	nches):		net. Soils dis	turbe	d by (cattle	· · ·	Present?	Yes	No
Type: _ Depth (in Remarks:	nches):		net. Soils dis	turbe	d by (cattle	· · ·	Present?	Yes	No
Type: _ Depth (in Remarks:	nches):		net. Soils dis	turbe	d by (cattle	· · ·	Present?	Yes_ <u>v</u>	No
Type: _ Depth (in Remarks:	nches):		net. Soils dis	turbe	d by	cattle	· · ·	Present?	Yes_ <u>v</u>	No
Type: _ Depth (in Remarks:	nches):		net. Soils dis	turbe	d by	cattle	· · ·	Present?	Yes_ 🗸	No
Type: _ Depth (in Remarks:	nches):		net. Soils dis	turbe	d by	cattle	· · ·	Present?	Yes	No
Type: _ Depth (in Remarks:	nches):		net. Soils dis	turbe	d by	cattle	· · ·	Present?	Yes 🔽	No
Type: _ Depth (in Remarks:	nches):		net. Soils dis	turbe	d by	cattle	· · ·	Present?	Yes 🗸	No
Type: _ Depth (in Remarks:	nches):		net. Soils dis	turbe	d by	cattle	· · ·	Present?	Yes	No
Type: _ Depth (in Remarks:	nches):		net. Soils dis	turbe	d by	cattle	· · ·	Present?	Yes	No
Type: _ Depth (in Remarks:	nches):		net. Soils dis	turbe	d by	cattle		Present?	Yes 🗸	No
Type: _ Depth (in Remarks:	nches):		net. Soils dis	turbe	d by	cattle		Present?	Yes 🗸	No
Type: _ Depth (in Remarks:	nches):		net. Soils dis	turbe	d by	cattle		Present?	Yes 🗸	No
Type: _ Depth (in Remarks:	nches):		net. Soils dis	turbe	d by	cattle		Present?	Yes_V	No
Type: _ Depth (in Remarks:	nches):		net. Soils dis	turbe	d by	cattle		Present?	Yes 🗸	No
Type: _ Depth (in Remarks:	nches):		net. Soils dis	turbe	d by	cattle		Present?	Yes 🗸	No

U.S. Army Corps of Engineers

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region

See ERDC/EL TR-12-9; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Snow Creek Wetland Mi	tigation Project	City/County: Frank	lin County	Sampling Date:	2025-08-06
Applicant/Owner: Mountain Valley F	ipeline, LLC		State: Virginia	- Sampling Point:	SP-17
Investigator(s): P.Meier		Section, Township, Rang	 ne:	_	
Landform (hillside, terrace, etc.): Floodpl	ain Lo	cal relief (concave, conve		Slope (%):	2
Subregion (LRR or MLRA): P 136	Lat: 36.856967		:-79.744061	Datum:	NAD83_201
Soil Map Unit Name: 27D - Minnieville I			NWI classificat		
Are climatic / hydrologic conditions on the site	e typical for this time of yea	ar? Yes	No ✔ (If no, e	explain in Remark	s.)
Are Vegetation, Soil, or Hydro	ology significantly di	sturbed? Are "Norma	 I Circumstances" present?	Yes	No 🗸
Are Vegetation, Soil, or Hydro			explain any answers in Re		
SUMMARY OF FINDINGS – Attach	<u></u>				res, etc.
Hydrophytic Vegetation Present?	Yes No No	Is the Sampled Area	v ./		
Hydric Soil Present?	Yes No No	within a Wetland?	Yes	No	
Wetland Hydrology Present?	Yes No				
Remarks:					
Northwestern corner of PEM W-0)1 near drain tile out	lets and dewaterin	g ditch. Vegetation	and soils	
significantly disturbed by cattle g	jrazing. Hydrology s	significantly disturb	ed by ditching. The	USACE Ante	ecedent
Precipitation Tool indicates wette	er than normal cond	itions were present	t 3 months prior to s	survey.	
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicators ((minimum of two	required)
Primary Indicators (minimum of one is requi	red; check all that apply)		Surface Soil Crack	ks (B6)	
Surface Water (A1)	True Aquatic Plants	(B14)	Sparsely Vegetate	ed Concave Surfa	ice (B8)
<u>✓</u> High Water Table (A2)	Hydrogen Sulfide Oc	dor (C1)	Drainage Patterns	s (B10)	
✓ Saturation (A3)	Oxidized Rhizospher	res on Living Roots (C3)	Moss Trim Lines (B16)	
Water Marks (B1)	Presence of Reduce	d Iron (C4)	Dry-Season Water	r Table (C2)	
Sediment Deposits (B2)	Recent Iron Reduction	on in Tilled Soils (C6)	Crayfish Burrows	(C8)	
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation Visible	on Aerial Imager	y (C9)
Algal Mat or Crust (B4)	Other (Explain in Re	marks)	Stunted or Stresse	ed Plants (D1)	
Iron Deposits (B5)			Geomorphic Posit		
Inundation Visible on Aerial Imagery (B7	<u>(</u>)		Shallow Aquitard (
Water-Stained Leaves (B9)			Microtopographic		
Aquatic Fauna (B13)			✓ FAC-Neutral Test	(D5)	
Field Observations:					
Surface Water Present? Yes Water Table Present? Yes	No Depth (inch				
Water Table Present? Yes <u>✓</u>	No Depth (inch	· ——		_	
Saturation Present? Yes	No Depth (inch	es): 0 Wetlan	d Hydrology Present?	Yes_	No
(includes capillary fringe)					
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos	s, previous inspections), if	available:		
Remarks:					
		_			
Wetland hydrology indicato	rs A2, A3, and D	5 are met.			

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

Sampling Point: SP-17

	Absolute	Dominant	Indicator	
<u>Tree Stratum</u> (Plot size: 30 ft r)	% Cover	Species?	Status	Dominance Test worksheet:
1 2.				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
3. 4.				Total Number of Dominant Species Across All Strata: ³ (B)
5. 6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)
7.				Prevalence Index worksheet:
		Total Cover		Total % Cover of: Multiply by:
50% of total cover:		of total cover:		OBL species 30 x 1 = 30
Sapling/Shrub Stratum (Plot size: 15 ft r)		Ji lolai covei.		FACW species 30
1				FAC species 30
2.				FACU species $\frac{1}{0}$ $x = \frac{1}{0}$
3.				$\begin{array}{c c} \text{VPL species} & & \text{X4-} \\ \text{UPL species} & & \text{VS} = & 0 \\ \end{array}$
4.				00 100
5.				Column Totals: 90 (A) 180 (B) Prevalence Index = B/A = 2.00
6.				Hydrophytic Vegetation Indicators:
7.				1 - Rapid Test for Hydrophytic Vegetation
8.				✓ 2 - Dominance Test is >50%
				✓ 3 - Prevalence Index is ≤3.0 ¹
9.		Total Cavar		4 - Morphological Adaptations ¹ (Provide supporting
F00/ - f1-1-1		Total Cover		data in Remarks or on a separate sheet)
50% of total cover:	20% (of total cover:		
Herb Stratum (Plot size: 5 ft r)	20	~	0.01	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Carex lurida	30		OBL	¹ Indicators of hydric soil and wetland hydrology must be
2. Arthraxon hispidus	20		FAC	present, unless disturbed or problematic.
3. Juncus effusus	20		FACW	Definitions of Four Vegetation Strata:
4. Juncus tenuis	10		FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5. Panicum anceps	10			more in diameter at breast height (DBH), regardless of height.
6. Echinochloa muricata	5		FACW	noight.
7. Diodia virginiana	5		FACW	Sapling/Shrub – Woody plants, excluding vines, less
8.				than 3 in. DBH and greater than or equal to 3.28 ft
9.				(1 m) tall.
10 11.				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	100 =	Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 50.00		of total cover:	20.00	height.
Woody Vine Stratum (Plot size: 30 ft r)				
1.				
2.				
3.				
4.				
5		Total Carra		Hydrophytic
50% of total cover:		Total Cover of total cover:		Vegetation Present? Yes No No No No No No No No No No No No N
Remarks: (Include photo numbers here or on a sepa	rate sheet \			'
rtemarks. (molade prioto numbers here or on a sepa	1410 311001.)			

Dominance test and prevalence index are met. Vegetation disturbed by cattle grazing.

SOIL Sampling Point: SP-17

	ription: (Describe t	to the de	oth needed to doc	ument t	he indica	ator or c	onfirm the absence	of indicators.)		
Depth	Matrix			x Featu		. 2			_	
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Remarks	<u> </u>
0 - 8	10YR 4/1	95	7.5YR 4/6	5	<u>C</u>	<u>M</u>	Clay Loam			
8 - 16	10YR 3/1	60					Sandy Clay Loam	Co-Matrix		
8 - 16	7.5YR 3/4	40					Sandy Clay Loam	Co-Matrix		
16 - 20	5YR 4/3	100					Sandy Clay			
¹ Type: C=Co	oncentration, D=Depl	etion, RM	=Reduced Matrix, I	MS=Mas	ked San	d Grains	. ² Location	n: PL=Pore Linir	ıg, M=M	atrix.
Hydric Soil I	ndicators:						Indic	cators for Probl	ematic	Hydric Soils³:
Histosol	(A1)		Polyvalue B		•			2 cm Muck (A10	(MLRA	147)
	ipedon (A2)		Thin Dark S					Coast Prairie Re	•	6)
Black His	` '		Loamy Mucl			ILRA 13		(MLRA 147, 14	•	
	n Sulfide (A4)		Loamy Gley				'	Piedmont Floodp		ls (F19)
	Layers (A5)		Depleted Ma	` '	·			(MLRA 136, 14		45
	ck (A10) (LRR N)	- (0.4.4)	Redox Dark		` '		<u></u> '	Red Parent Mate	•	•
	Below Dark Surface rk Surface (A12)	e (A11)	Depleted Da		, ,		,	outside MLR) Very Shallow Da		
	osulfide (A18)		Iron-Mangar		` '	2) (I DD		Other (Explain in		
	ucky Mineral (S1)		MLRA 13		3303 (1 1/	<i>2)</i> (L IXIX	`	Other (Explain in	Keman	(3)
	leyed Matrix (S4)		Umbric Surf	-	3) (MLRA	122. 13	6)			
	edox (S5)		Piedmont FI	•			3,	cators of hydrop	hytic ve	getation and
	Matrix (S6)		Red Parent				•	wetland hydrolog	y must	be present,
Dark Sur	face (S7)						ι	unless disturbed	or probl	ematic.
Restrictive L	.ayer (if observed):									
Type:										
Depth (in	iches):						Hydric Soil Prese	ent? Yes	<u> </u>	No
Remarks:										
Hydric so	oil indicator F	3 is m	net. Soils dis	turbe	d by	cattle	grazing.			
,		0 .0			, c. 10 y	J G T T T T	g. ag.			

U.S. Army Corps of Engineers

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region

See ERDC/EL TR-12-9; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Snow Creek Wetland Mit	tigation Project	City/County: Fr	anklin County	_Sampling Date:	2025-08-06
Applicant/Owner: Mountain Valley P	ipeline, LLC		State: Virginia	Sampling Point:	SP-18
Investigator(s): P.Meier		Section, Township,	Range:		
Landform (hillside, terrace, etc.): Slope	Lo	cal relief (concave, c	onvex, none): Convex	Slope (%):	5
Subregion (LRR or MLRA): P 136	Lat: 36.8570917		Long: -79.7440311		NAD83_2011
Soil Map Unit Name: 27D - Minnieville I			NWI classificat		
Are climatic / hydrologic conditions on the site				explain in Remarks	s.)
Are Vegetation ✓ , Soil ✓ , or Hydrol		-	ormal Circumstances" present?		
Are Vegetation, Soil, or Hydrol			ded, explain any answers in Re		
SUMMARY OF FINDINGS – Attach				,	res, etc.
Hydrophytic Vegetation Present?	Yes 🗸 No	Is the Sampled A	roa		
Hydric Soil Present?	Yes No V	within a Wetland		No 🗸	
-	Yes No				
Remarks:					
Upland area adjacent to northwes	et corner of DEM W.	-01 noar drain ti	le outlets and dewateri	ing ditch Vec	noteter
and soils significantly disturbed b				-	
Antecedent Precipitation Tool ind			•	•	
Allecedent Frecipitation Footing	ICales Weller man	Hormai condido	IIS wele present s mon	Illis prior to s	uivey.
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicators	 (minimum of two r	equired)
Primary Indicators (minimum of one is requir	ed; check all that apply)		Surface Soil Crac	ks (B6)	
Surface Water (A1)	True Aquatic Plants	(B14)	Sparsely Vegetate	ed Concave Surfa	ce (B8)
High Water Table (A2)	Hydrogen Sulfide Oc	dor (C1)	Drainage Patterns	s (B10)	
Saturation (A3)	✓ Oxidized Rhizospher	res on Living Roots (C3) Moss Trim Lines (B16)	
Water Marks (B1)	Presence of Reduce	d Iron (C4)	Dry-Season Wate	r Table (C2)	
Sediment Deposits (B2)		on in Tilled Soils (C6)	Crayfish Burrows	(C8)	
Drift Deposits (B3)	Thin Muck Surface (•	Saturation Visible	on Aerial Imagery	/ (C9)
Algal Mat or Crust (B4)	Other (Explain in Re	marks)	Stunted or Stresse		
Iron Deposits (B5)			Geomorphic Posit	ion (D2)	
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard	(D3)	
Water-Stained Leaves (B9)			Microtopographic		
Aquatic Fauna (B13)			FAC-Neutral Test	(D5)	
Field Observations:					
Surface Water Present? Yes	No Depth (inch				
Water Table Present? Yes	No V Depth (inch			,	
Saturation Present? Yes	No _ Depth (inch	es): We	etland Hydrology Present?	Yes_	No
(includes capillary fringe)					
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos	s, previous inspection	ns), if available:		
Remarks:	 				
Nemarks.					

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

Sampling Point: SP-18

· · · · · · · · · · · · · · · · · · ·	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 ft r)	% Cover	Species?	Status	Dominance Test worksheet:
1. 2.				Number of Dominant Species That Are OBL, FACW, or FAC: $\frac{3}{}$ (A)
3. 4.				Total Number of Dominant Species Across All Strata: (B)
5 6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)
7.				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
50% of total cover:	20%	of total cover:		OBL species $0 x 1 = 0$
Sapling/Shrub Stratum (Plot size: 15 ft r)				FACW species 30 $\times 2 = 60$
1.				FAC species 55 $\times 3 = 165$
2.				FACU species $\frac{5}{}$ $x 4 = \frac{20}{}$
3.				UPL species $0 \times 5 = 0$
4.				Column Totals: 90 (A) 245 (B)
5.				Prevalence Index = B/A = 2.72
6.				Hydrophytic Vegetation Indicators:
7.				1 - Rapid Test for Hydrophytic Vegetation
8.				✓ 2 - Dominance Test is >50%
9.				3 - Prevalence Index is ≤3.0 ¹
		=Total Cover		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:		of total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft r)		or total cover.		Problematic Hydrophytic Vegetation ¹ (Explain)
1. Arthraxon hispidus	30	✓	FAC	
Paspalum dilatatum	20		FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. Juncus effusus	20		FACW	Definitions of Four Vegetation Strata:
4. Panicum anceps	10			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5. Diodia virginiana	10		FACW	more in diameter at breast height (DBH), regardless of
6 Schedonorus arundinaceus	5		FACU	height.
7. Setaria pumila	5		FAC	Continue/Charle Mandy plants avaluating visco loss
8.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft
0.				(1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless
11.				of size, and woody plants less than 3.28 ft tall.
···	100	=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 50.00		of total cover:	20.00	height.
Woody Vine Stratum (Plot size: 30 ft r		or total cover.		
1				
2.				
3.				
4				
5		-Tatal Carra		Hydrophytic
F00/ - £ 1-1-1 · · ·		=Total Cover		Vegetation No.
50% of total cover:	20%	of total cover:		Present? Yes No No
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			

Dominance test and prevalence index are met. Vegetation disturbed from cattle grazing.

SOIL Sampling Point: SP-18

Profile Desc	ription: (Describe	to the de	pth needed to doc	ument t	ne indica	tor or c	onfirm the abs	ence of indi	ators.)	
Depth	Matrix			x Featur		2				
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Rem	arks
0 - 4	7.5YR 5/3	80	7.5YR 4/6	20	<u>C</u>	PL / M	Clay Loam			
4 - 20	5YR 4/4	90	7.5YR 5/2	10	D	М	Clay			
-										
¹ Type: C=Co	oncentration, D=Dep	letion, RM	1=Reduced Matrix, I	 ∕/S=Mas	ked San	d Grains	. ² Lo	ocation: PL=F	ore Lining, M	I=Matrix.
Hydric Soil I	ndicators:							Indicators f	or Problema	tic Hydric Soils³:
Histosol	(A1)		Polyvalue B				•	2 cm M	uck (A10) (M I	_RA 147)
Histic Ep	ipedon (A2)		Thin Dark S				•	Coast F	rairie Redox	(A16)
Black His	` '		Loamy Mucl	y Miner	al (F1) (N	ILRA 13	6)	(MLR	A 147, 148)	
	n Sulfide (A4)		Loamy Gley						nt Floodplain	Soils (F19)
Stratified	Layers (A5)		Depleted Ma	ıtrix (F3)				(MLR	A 136, 147)	
	ck (A10) (LRR N)		Redox Dark		` '			Red Pa	rent Material	(F21)
	Below Dark Surface	e (A11)	Depleted Da					•	ide MLRA 12	
	rk Surface (A12)		Redox Depr		` '				allow Dark S	
	osulfide (A18)		Iron-Mangar		sses (F1	2) (LRR	N,	Other (E	Explain in Rer	narks)
	ucky Mineral (S1)		MLRA 13	-						
	leyed Matrix (S4)		Umbric Surf				-	3Indicators	of budraphytia	vegetation and
Sandy R	edox (S5)		Piedmont Fl	oodplain	Soils (F	19) (Ml f	RA 148)	mulcators	пуагорпунс	-
								wotland	hydrology m	
Stripped	Matrix (S6)		Red Parent		(F21) (M	LRA 12	7, 147, 148)		hydrology m	*
Stripped Dark Sur	Matrix (S6) face (S7)				(F21) (M	LRA 12	7, 147, 148)		hydrology m disturbed or p	*
Stripped Dark Sur Restrictive L	Matrix (S6)	:			(F21) (M	LRA 127	7, 147, 148)			*
Stripped Dark Sur Restrictive I Type:	Matrix (S6) face (S7) _ayer (if observed):	:			(F21) (M	LRA 12		unless	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir	Matrix (S6) face (S7) _ayer (if observed):	:			(F21) (M	LRA 12	7, 147, 148) Hydric Soil	unless		*
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) _ayer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.
Stripped Dark Sur Restrictive L Type: Depth (ir Remarks:	Matrix (S6) face (S7) Layer (if observed):		Red Parent	Vaterial			Hydric Soil	unless of	disturbed or p	roblematic.





Photograph C-1: View of wetland sample plot (SP)-01 within PEM W-01, facing northwest.



Photograph C-2: View of wetland SP-01 within PEM W-01, facing southeast.





Photograph C-3: View of upland SP-02 adjacent to PEM W-01, facing north.



Photograph C-4: View of upland SP-02 adjacent to PEM W-01, facing south.





Photograph C-5: View of wetland SP-03 within PEM W-01, facing east.



Photograph C-6: View of wetland SP-03 within PEM W-01, facing northwest.





Photograph C-7: View of upland SP-04 adjacent to PEM W-01, facing northwest.



Photograph C-8: View of upland SP-04 adjacent to PEM W-01, facing southeast.





Photograph C-9: View of wetland SP-05 within PEM W-01, facing north.



Photograph C-10: View of wetland SP-05 within PEM W-01, facing south.





Photograph C-11: View of upland SP-06 adjacent to PEM W-01, facing north.



Photograph C-12: View of upland SP-06 adjacent to PEM W-01, facing south.





Photograph C-13: View of upland SP-07 in floodplain east of PEM W-01, facing east.



Photograph C-14: View of upland SP-07 in floodplain east of PEM W-01, facing west.





Photograph C-15: View of upland SP-08 in floodplain east of PEM W-01, facing north.



Photograph C-16: View of upland SP-08 in floodplain east of PEM W-01, facing south.





Photograph C-17: View of upland SP-09 adjacent to PEM W-01, facing northeast.



Photograph C-18: View of upland SP-09 adjacent to PEM W-01, facing southwest.





Photograph C-19: View of wetland SP-10 within PEM W-01, facing west.



Photograph C-20: View of wetland SP-10 within PEM W-01, facing east.





Photograph C-21: View of wetland SP-11 within PEM W-01, facing north.



Photograph C-22: View of wetland SP-11 within PEM W-01, facing south.





Photograph C-23: View of upland SP-12 adjacent to PEM W-01, facing east.



Photograph C-24: View of upland SP-12 adjacent to PEM W-01, facing west.





Photograph C-25: View of upland SP-13 in floodplain east of PEM W-01, facing north.



Photograph C-26: View of upland SP-13 in floodplain east of PEM W-01, facing south.





Photograph C-27: View of upland SP-14 adjacent to PEM W-01, facing north.



Photograph C-28: View of upland SP-14 adjacent to PEM W-01, facing south.





Photograph C-29: View of upland SP-15 adjacent to PEM W-01, facing north.



Photograph C-30: View of upland SP-15 adjacent to PEM W-01, facing south.





Photograph C-31: View of wetland SP-16 within PEM W-01, facing north.



Photograph C-32: View of wetland SP-16 within PEM W-01, facing south.





Photograph C-33: View of wetland SP-17 within PEM W-01, facing southeast.



Photograph C-34: View of wetland SP-17 within PEM W-01, facing west.





Photograph C-35: View of upland SP-18 adjacent to PEM W-01, facing east.



Photograph C-36: View of upland SP-18 adjacent to PEM W-01, facing west.





Photograph C-37: View of linear wetland portion of W-01, facing northeast.



Photograph C-38: View of linear wetland portion of W-01, facing northwest.



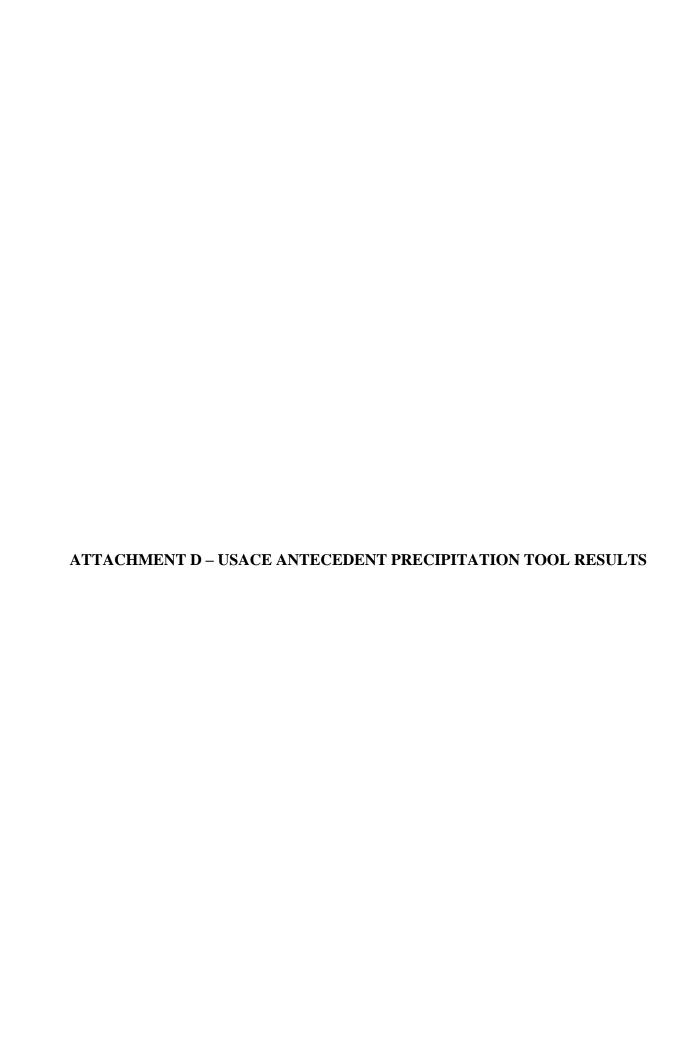


Photograph C-39: View of perennial stream (S)-01 / Snow Creek, facing downstream/north.

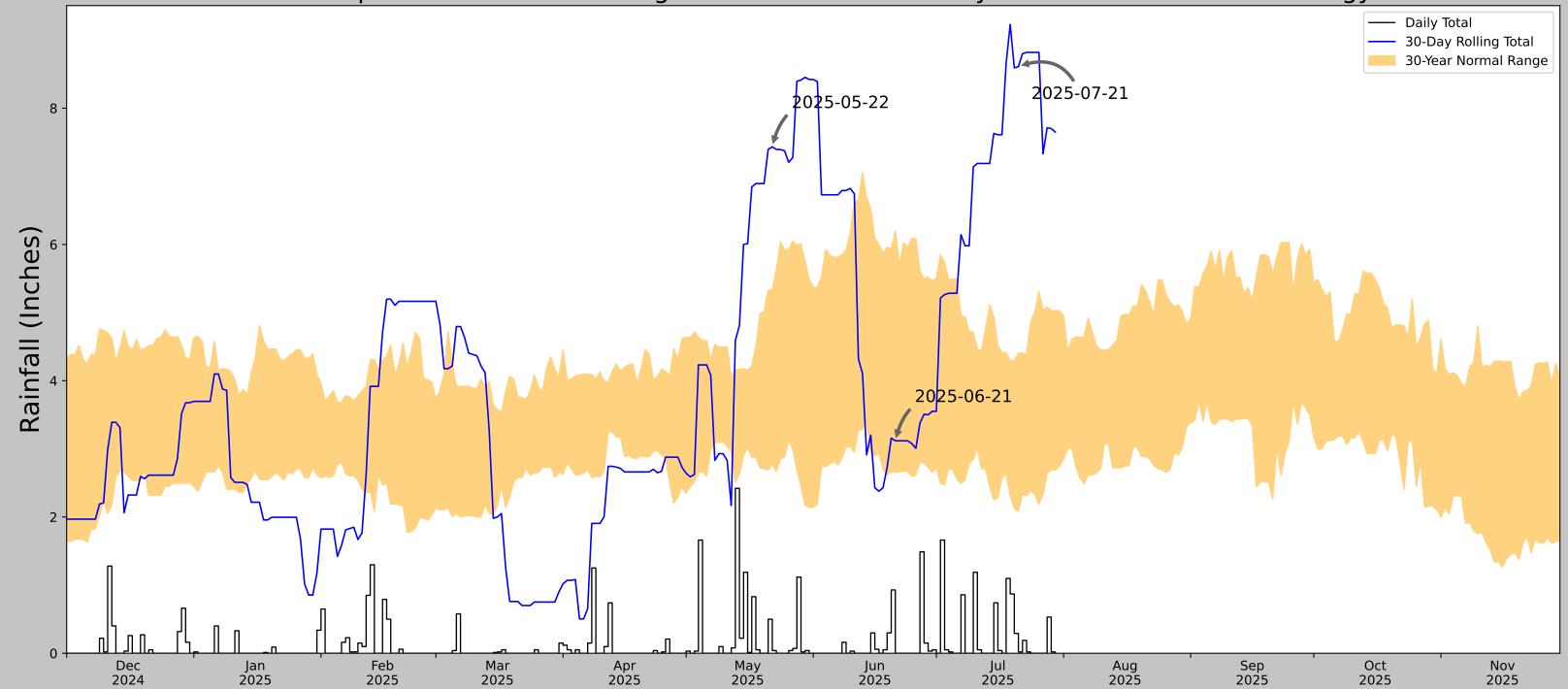


Photograph C-40: View of perennial S-01 / Snow Creek, facing upstream/south.





Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.85764, -79.74351
Observation Date	2025-07-21
Elevation (ft)	820.525
Drought Index (PDSI)	Mild wetness (2025-06)
WebWIMP H ₂ O Balance	Dry Season

30 Days Ending	30 th %ile (in)	70 th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-07-21	2.082284	4.408662	8.610236	Wet	3	3	9
2025-06-21	2.661417	6.196457	3.11811	Normal	2	2	4
2025-05-22	2.779528	5.330709	7.433071	Wet	3	1	3
Result							Wetter than Normal - 16

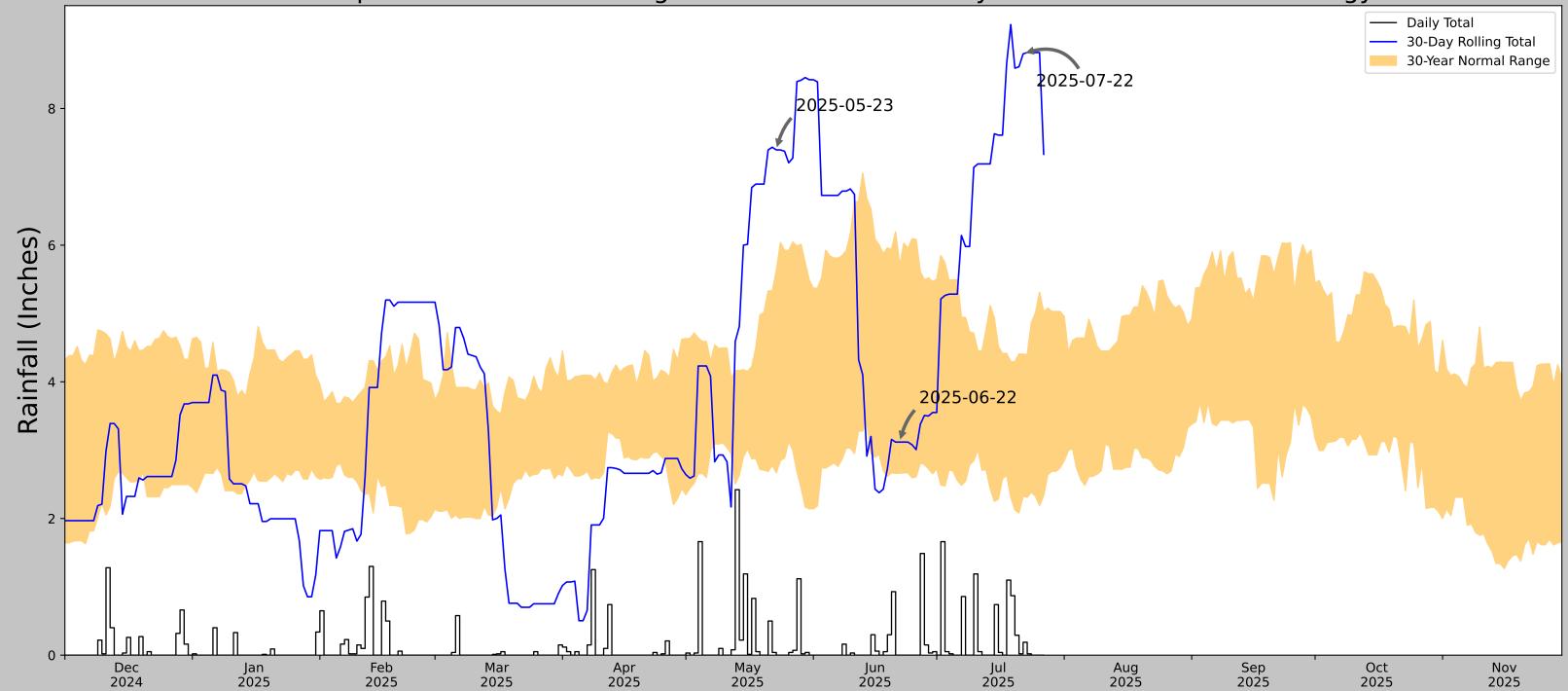
Figures and tables made by the Antecedent Precipitation Tool Version 3.0



Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
MARTINSVILLE FLTR PLT	36.7047, -79.8653	779.856	12.533	40.669	6.15	11294	88
MARTINSVILLE 0.4 WSW	36.6809, -79.8697	983.924	1.662	204.068	1.087	0	2
PHILPOTT DAM 2	36.7764, -80.0272	1123.032	10.242	343.176	8.124	56	0
EDEN	36.4742, -79.7433	678.15	17.305	101.706	9.547	3	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.85648, -79.74364
Observation Date	2025-07-22
Elevation (ft)	800.525
Drought Index (PDSI)	Mild wetness (2025-06)
WebWIMP H ₂ O Balance	Dry Season

30 Days Ending	30 th %ile (in)	70 th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-07-22	2.327559	4.405118	8.799213	Wet	3	3	9
2025-06-22	2.662599	5.702756	3.11811	Normal	2	2	4
2025-05-23	2.669291	5.633858	7.393701	Wet	3	1	3
Result							Wetter than Normal - 16

Figures and tables made by the Antecedent Precipitation Tool Version 3.0



Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
MARTINSVILLE FLTR PLT	36.7047, -79.8653	779.856	12.462	20.669	5.866	11294	88
MARTINSVILLE 0.4 WSW	36.6809, -79.8697	983.924	1.662	204.068	1.087	0	2
PHILPOTT DAM 2	36.7764, -80.0272	1123.032	10.242	343.176	8.124	56	0
EDEN	36.4742, -79.7433	678.15	17.305	101.706	9.547	3	0



U.S. Army Corps of Engineers (USACE)

REQUEST FOR JURISDICTIONAL DETERMINATION (JD)

For use of this form, see Sec 404 CWA, Sec 10 RHA, Sec 103 MPRSA; the proponent agency is CECW-COR.

Form Approved -OMB No. 0710-0024 Expires 2027-09-30

DATA REQUIRED BY THE PRIVACY ACT OF 1974

Authority

Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and

Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332.

Principal Purpose The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the review area that are or that may be subject to federal jurisdiction under the regulatory authorities referenced above.

Routine Uses

This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice or FOIA request as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in any approved jurisdictional determination (AJD), which will

be made available to the public on the District's website and on the Headquarters USACE website.

Disclosure

Submission of requested information is voluntary, however, if the information is not provided there may be some delay in

processing your request. Failure to provide this information will not result in an adverse action.

System of Record Notice (SORN): The information received is entered into our permit tracking database and a SORN has been

completed (SORN #A1145b) and may be accessed at the following website:

1. To (District Name): U.S. Army Corps of Engineers - Norfolk District

http://dpcld.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570115/a1145b-ce.aspx

The Agency Disclosure Notice (ADN)

The Public reporting burden for this collection of information, 0710-0024, is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

City/Township/Parish: Penhook Acreage of Parcel/Review Area for JD: 25.0 acres Section: Township: Range: Latitude (decimal degrees): 36.856759 Longitude (decimal degrees): -79.745641 (For linear projects, please include the center point of the proposed alignment.) 3. Please attach a survey/plat map and vicinity map identifying location and review area for the JD. 4. I currently own this property. I am an agent/consultant acting on behalf of the requester. Other (provide explanation):	2. I am requesting a JD on property located a	at (Street Address): 1699-1655 Airport Ro	ad (GPIN 1090002401)	
Section: Township: Range: Latitude (decimal degrees): 36.856759 Longitude (decimal degrees): -79.745641 (For linear projects, please include the center point of the proposed alignment.) 3. Please attach a survey/plat map and vicinity map identifying location and review area for the JD. 4. Lourrently own this property. I plan to purchase this property. I am an agent/consultant acting on behalf of the requester.	City/Township/Parish: Penhook		County: Franklin	State: Virginia	
Latitude (decimal degrees): 36.856759 Longitude (decimal degrees): -79.745641 (For linear projects, please include the center point of the proposed alignment.) 3. Please attach a survey/plat map and vicinity map identifying location and review area for the JD. 4. Lourrently own this property. I plan to purchase this property. I am an agent/consultant acting on behalf of the requester.	Acreage of Parcel/Review Area for JD: 25	0.0 acres	_		
Longitude (decimal degrees): -79.745641 (For linear projects, please include the center point of the proposed alignment.) 3. Please attach a survey/plat map and vicinity map identifying location and review area for the JD. 4. I currently own this property. I plan to purchase this property. I am an agent/consultant acting on behalf of the requester.	Section:	Township:		Range:	
3. Please attach a survey/plat map and vicinity map identifying location and review area for the JD. 4 I currently own this property I plan to purchase this property I am an agent/consultant acting on behalf of the requester.	Latitude (decimal degrees): 36.856759		Longitude (decima	l degrees): -79.745641 °	
4. I currently own this property. I plan to purchase this property. I am an agent/consultant acting on behalf of the requester.	(For line	ar projects, pleas	e include the center point of	the proposed alignment.)	
I am an agent/consultant acting on behalf of the requester	3. Please attach a survey/plat map and vicin	ity map identifying	location and review area fo	r the JD.	
	4. I currently own this property.		I plan to	purchase this property.	
Other (provide explanation):	I am an agent/consultant acting on be	ehalf of the reques	ster:		
	Other (provide explanation):				

5. Reason for request: (c.	heck as many as applicable)		
I intend to constru	ct/develop a project or perform activities on this parcel	which would be desig	gned to avoid all aquatic resources.
I intend to constru under Corps author	ct/develop a project or perform activities on this parcel ority.	which would be desi	gned to avoid all jurisdictional aquatic resources
	ct/develop a project or perform activities on this parcel and minimize impacts to jurisdictional aquatic resource		
	ct/develop a project or perform activities on this parcel ny permit application and the JD is to be used in the pe		uthorization from the Corps; this request is
	ct/develop a project or perform activities in a navigable o the ebb and flow of the tide.	water of the U.S. wh	ich is included on the district Section 10 list
A Corps JD is req	uired in order to obtain my local/state authorization.		
intend to contest	jurisdiction over a particular aquatic resource and requon the parcel.	uest the Corps confirm	n that jurisdiction does/does not exist over the
I believe that the s	site may be comprised entirely of dry land.		
Other (provide de	tails below);		
Implementation of F	Permittee Responsible Mitigation (PRM) solution	1	
6. Type of determination	being requested		
am requesting a			
I am requesting a			
I am requesting a	"no permit required" letter as I believe my proposed ac	tivity is not regulated.	
I am requesting a	verification of an aquatic resources delineation but I ar	n not requesting a JD	ı.
I am unclear as to	which JD I would like to request and require additiona	l information to inform	n my decision.
7. Typed or Printed Name	e: Paul Sherman	Daytime Phone No.	: 916-577-0659
Company Name:	Burns & McDonnell	Email Address:	pasherman@burnsmcd.com
Address:	4480 Cox Road, Suite 300 Glen Allen, Virginia 23060		
and do hereby grant Corp	e indicating that you have the authority, or are acting as os personnel right of entry to legally access the site if no e property rights to request a JD on the subject property	eeded to perform the	
Signature:	Therman		Date: 2025-08-04

ENG FORM 6247, SEP 2024 Page 2 of 2



August 8, 2025

Frances Greenway
Virginia Department of Wildlife Resources
P.O. Box 90778
Henrico, VA 23228
Submitted via Email at ESSProjects@dwr.virginia.gov

Re: Threatened and Endangered Species Habitat Assessment and Request for Concurrence

Mountain Valley Pipeline, LLC

Snow Creek Permittee Responsible Mitigation Project

Franklin County, Virginia

Burns & McDonnell Project Number: 186472

Dear Ms. Greenway:

Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) was retained by Mountain Valley Pipeline, LLC (client) to assess potential impacts to protected species from implementation of the proposed Snow Creek Permittee Responsible Wetland Mitigation (PRM) project (Project) in Franklin County, Virginia (VA). The Project is located 7.15 miles southeast of Snydorsville, VA, 1.75 miles northeast of the intersection at Sontag Road (VA Route 619) and Snow Creek Road (VA Route 890) and is accessed via Airport Road. A General Location Map illustrating the Project location has been included in Attachment A (Figure A-1).

The following information is being provided to the Virginia Department of Wildlife Resources (VDWR), for review and concurrence under the Virginia State Threatened and Endangered Species Consultation requirements

INTRODUCTION

Activities associated with the Project will consist of excavating, filling, grading, and the enhancement, restoration, and creation of wetland resources. The habitat assessment was conducted within a 25-acre area encompassing the proposed Project (Survey Area; Appendix A; Figure A-4). The Survey Area consists of an existing maintained cattle pasture along an east facing slope that transitions into a floodplain along the western bank of Snow Creek. The Survey Area is bordered by a road on its western side and woodlands to the west, north and northeast. Snow Creek borders its eastern edge, and pastureland continues to the south. Woody vegetation was generally absent from the Survey Area except for a narrow riparian strip along the western bank of Snow Creek. Typical woody species within the Survey Area consisted of American sycamore (*Platanus occidentalis*), tuliptree (*Liriodendron tulipifera*), and green ash (*Fraxinus pennsylvanica*). The predominant herbaceous vegetation within the Survey Area consisted of beaked panic grass (*Coleataenia anceps*), tall fescue (*Schedonorus arundinaceus*), Virginia buttonweed (*Diodia virginiana*), dallisgrass (*Paspalum dilatatum*), Japanese stiltgrass (*Microstegium vimineum*), and hairy crabgrass (*Digitaria sanguinalis*).



Frances Greenway Virginia Department of Wildlife Resources August 8, 2025 Page 2

HABITAT ASSESSMENT

In July 2025, Patrick Meier, Wyatt Jackson, and Lily Cooper, biologists with Burns & McDonnell, completed a pedestrian survey to evaluate the potential for State protected species habitat to occur within the Project area.

In addition to the pedestrian field survey, the Virginia Fish and Wildlife Information Service (VAFWIS) was reviewed, and an Initial Project Assessment (IPA) report was generated for the Project (Attachment B). The IPA identifies all critical resources within a 2-mile radius surrounding the Project location. The IPA listed 11 species of varying conservation status as potentially occurring in the Survey Area (Table 1). Additionally, a desktop review was performed using aerial imagery, USFWS National Wetlands Inventory (NWI) data, U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) Web Soil Survey for Franklin County, VA, and United States Geological Survey (USGS) National Hydrography Dataset (NHD) data. Figures depicting this data can be found in Attachment A.

Table 1: Protected Species with Potential to Occur in the Project Area

Species Name	Federal Status ^a	State Status ^a	Preferred Habitat	Impact			
	Mammals						
Northern long-eared bat (Myotis septentrionalis)	FT	ST	Suitable habitat consists of crevices underneath peeling bark and cavities in both live and dead trees, caves and mines, or other functionally similar structures such as barns or sheds.	Habitat <i>present</i> in Survey Area - Not Likely to Adversely Affect			
Little brown bat (<i>Myotis lucifugus</i>)	N/A	SE	Suitable habitat consists of buildings and trees with cavities and crevices, as well as within rock and wood piles in forested areas near water, and caves and mines.	Habitat <i>present</i> in Survey Area - Not Likely to Adversely Affect			
Tri-colored bat (Perimyotis subflavus)	FPE	SE	Suitable habitat consists of trees and buildings with cavities and crevices in areas with significant edge habitat with a preference for hardwood forests. They prefer having a proximity to open bodies of water and an open understory to feed in. This species also hibernates in caves and mines.	Habitat <i>present</i> in Survey Area - Not Likely to Adversely Affect			



Frances Greenway Virginia Department of Wildlife Resources August 8, 2025 Page 3

Species Name	Federal Status ^a	State Status ^a	Preferred Habitat	Impact	
			Birds		
Peregrine falcon (Falco peregrinus)	N/A	ST	Suitable habitat consists of high elevation cliffs and man-made structures (such as skyscrapers) adjacent to open landscapes. Usually found with proximity to rivers and coastlines, barrier islands, mudflats, lake edges, and mountainsides.	Habitat <i>not present</i> in Survey Area – <i>No Effect</i>	
Loggerhead shrike (Lanius ludovicianus)	N/A	ST	Suitable habitat consists of open country within a matrix of scrubshrub vegetation. This species needs thorny scrub or fence posts/utility poles to perch and impale prey. Often seen utilizing agricultural fields, cemeteries, pastures, orchards, riparian areas, savannas, prairies, and golf courses.	Habitat <i>not present</i> in Survey Area – <i>No Effect</i>	
Migrant loggerhead shrike (Lanius ludovicianus migrans)	N/A	ST	Suitable habitat consists of open country within a matrix of scrub shrub vegetation. This species needs thorny scrub or fence posts/utility poles to perch and impale prey. Often seen utilizing agricultural fields, cemeteries, pastures, orchards, riparian areas, savannas, prairies, and golf courses.	Habitat <i>not present</i> in Survey Area – <i>No Effect</i>	
Reptiles					
Bog turtle (Gleptemys muhlenbergii)	FT	SE	Suitable habitat consists of shallow, open, wetland habitats containing hummocky vegetation and varying microclimates.	Habitat <i>present</i> in Survey Area – Not Likely to Adversely Affect	
Mussels					
James spinymussel (Parvaspina collina)	FE	SE	Suitable habitat includes riffle- run complexes in streams with clean, swift-flowing currents. Species prefers gravel, sand or cobble substrates.	Habitat <i>not present</i> in Survey Area – <i>No Effect</i>	



Species Name	Federal Status ^a	State Status ^a	Preferred Habitat	Impact
Atlantic pigtoe (Fusconaia masoni)	FT	ST	Suitable habitat consists of small creeks to larger rivers with excellent water quality. This species prefers coarse sand and gravel, and water flow needs to be sufficient to maintain clean, silt-free substrates.	Habitat <i>not present</i> in Survey Area – <i>No Effect</i>
			Fish	
Orangefin madtom (Noturus gilberti)	N/A	ST	Suitable habitat consists of medium to large streams with swift riffles with small cobble substrates, generally free of sedimentation, in the upper Roanoke, Dan, and James rivers.	Habitat <i>not present</i> in Survey Area – <i>No Effect</i>
Roanoke logperch (<i>Percina rex</i>)	FE	SE	Suitable habitat includes gravel and boulder runs of small to medium rivers. Typically found in warm, clear streams of medium to low gradient.	Habitat <i>not present</i> in Survey Area – <i>No Effect</i>

^aF = Federal, S = State, T = Threatened, E = Endangered, P = Proposed Source: Virginia Department of Game and Inland Fisheries (VDGIF) – https://services.dwr.virginia.gov/fwis/index.asp?Menu=Home, Accessed August 4th, 2025;

ANALYSIS BY SPECIES

This habitat assessment includes species under the jurisdiction of the United States Fish & Wildlife Service (USFWS) and the VDWR and protected by the ESA (16 U.S.C. 1531 et seq.) and Article 6 of Chapter 5 of Title 29.1 of the Code of Virginia. The VAFWIS IPA was used to identify protected species with potential to occur in the Project area (https://services.dwr.virginia.gov/fwis/index.asp?Menu=Home). An analysis of the habitat present on-site will be presented for each species in the sections below.

Mammals

The IPA listed three bat species as having potential to occur within the Survey Area. The listed bat species include the **northern long-eared bat**, the **little brown bat**, and the **tri-colored bat**. These species have similar habitat requirements. These bat species commonly roost underneath bark, or in cavities or crevices in live and dead trees. They may also be found roosting in caves and mines. Sometimes these species will roost in anthropogenic structures that contain crevices and cavities such as wooden barns, sheds, or culverts. The little brown bat is also known to utilize wood piles and crevices in large rocks for roosting. The Survey Area is mainly treeless, but there is a small



forested margin along the eastern limits of the Survey Area that may contain suitable summer roosting habitat for these bat species.

The forested edge habitat along Snow Creek and the eastern border of the Survey Area was comprised of American sycamore (*Platanus occidentalis*), tuliptree (*Liriodendron tulipifera*), and green ash (*Fraxinus pennsylvanica*), in relatively good condition. Few trees with cracking or peeling bark were observed. The forested strip abuts an open area and a stream, creating suitable hunting habitat for little brown bat. No tree clearing is currently planned for this Project. If any removal of woody vegetation occurs, it will be outside of the designated time of year restrictions (TOYR) (May 15 – July 31).

The VDWR's Northern Long-eared Bat, Tri-colored Bat, and Little Brown Bat Consultation Tool was reviewed to determine the presence of known maternity roosts, hibernacula, and capture locations in the Project vicinity (Attachment B). The Survey Area is not located within any consultation ranges. No known maternity roosts or hibernacula for any bat species were documented near the Project. The nearest recorded bat capture was a tricolored bat, captured approximately 14 miles northeast of the Survey Area. No northern long-eared bat or little brown bat captures were recorded in the Project vicinity.

While suitable summer roosting habitat for listed species was found within the Project Survey Area, no tree clearing is currently planned for this Project. If tree clearing occurs, it will be conducted outside of the applicable time of year restrictions (May 15 – July 31). If roosting bats or hibernacula are observed, Mountain Valley Pipeline, LLC will report the observation to state and federal agencies to prevent disturbance and remain in regulatory compliance. Based on available data and assessment methodologies, the Project is *not likely to adversely affect* the northern long-eared bat, tri-colored bat, or the little brown bat.

Birds

The IPA listed the **peregrine falcon** as having potential to occur within the Survey Area. The peregrine falcon prefers to nest at elevations that are high relative to the surrounding landscape. It is known to persist in urbanized environments and nest on ledges upon skyscrapers. The area within a 2-mile radius of the Survey Area is rural, with no large buildings, cliffs or abrupt elevation changes; the topography consists of rolling hills. No evidence of present or past inhabitation by peregrine falcons was observed during the habitat assessment. Based on available data and assessment methodologies, the Project will have *no effect* on the peregrine falcon.

The IPA lists both the **resident** and **migratory loggerhead shrike** as having potential to occur within the Survey Area. Both varieties have similar habitat needs that consist of open rangeland in a matrix of scrub-shrub vegetation with abundant perches and thorns or posts to impale prey. These birds are known to utilize anthropogenic structures such as powerline corridors, fences, roadsides, and golf courses. Though the Survey Area is generally open pastureland, the landscape matrix surrounding it is dense forest and mowed pastureland lacking the attributes preferred by the



Loggerhead Shrike. The thorny species preferred by this species were not present within the Survey Area, making it poor habitat. Based on available data and assessment methodologies, the Project will have *no effect* on these taxa.

Fish

The IPA listed the orangefin madtom as having potential to occur within the Survey Area. This species prefers medium to large streams with swift riffles with small cobble substrates, generally free of sedimentation, in the upper Roanoke, Dan, and James Rivers. The section of Snow Creek within the Survey Area is heavily impacted by cattle grazing, and of relatively poor water quality. Therefore, no habitat is present for this species within the Survey Area. Based on available data and assessment methodologies, the Project will have *no effect* on the orangefin madtom.

The IPA listed the **Roanoke logperch** as having potential to occur within the Survey Area. This species prefers gravel and boulder runs of small to medium rivers. Typically found in warm, clear streams of medium to low gradient, its range is threatened by damming, grazing, and habitat loss. The section of Snow Creek within the Survey Area is heavily impacted by cattle grazing, and of relatively poor water quality. Therefore, no habitat is present for this species within the Survey Area. Based on available data and assessment methodologies, the Project will have *no effect* on the Roanoke logperch.

Mussels

The IPA listed the **James spinymussel** and the **Atlantic pigtoe** as having potential to occur within the Survey Area. Suitable habitat for these species shares similar characteristics. They prefer streams with swift flows, free of sedimentation, with sand to gravel substrates. Further, the James spinymussel prefers riffle-run complexes of excellent water quality and may inhabit streams with cobble substrates. The section of Snow Creek within the Survey Area is sedimented, heavily impacted by cattle grazing, and of relatively poor water quality. Therefore, no habitat is present for this species within the Survey Area. Based on available data and assessment methodologies, the Project will have *no effect* on the listed mussel species.

Reptiles

The IPA listed the **bog turtle** as having potential to occur within the Survey Area. The bog turtle prefers shallow, open, wetland habitats with hummocky vegetation. This species is semi-aquatic. Wet areas within cow pastures, riparian areas, and patches of sedges are used for cover, nesting, basking, and hibernation. The PEM wetland within the Survey Area contained flooded areas, hummocks, sedges, and plentiful open space, and the mosaic of riparian habitat nearby may provide suitable habitat for the bog turtle. However, no individuals or evidence of inhabitation were observed on site during pedestrian surveys. If bog turtles are found on site, appropriate measures and consultation with the VDWR will be taken to prevent incidental take or disturbance to the species. Based on available data and assessment methodologies, the Project is *not likely to adversely affect* the bog turtle.



Bald Eagle Nest Review

The Center for Conservation Biology's Bald Eagle Nest Locator application was reviewed to evaluate if any bald eagle (*Haliaeetus leucocdephalus*) nests were documented within the vicinity of the Survey Area. No nests were documented within a 2-mile radius (Appendix B). Based on the lack of active documented nests in the Project vicinity and a lack of suitable habitat within the Survey Area, the Project is not anticipated to have adverse effects on bald eagles. If impacts to nesting bald eagles are anticipated, it is recommended that construction should not occur during Virginia's Time of Year Restrictions (TOYR) guidelines for bald eagle nesting season (December 15 through July 15). No bald eagle stick nests or migratory bird nesting sites were observed in the Survey Area.

CONCLUSIONS

Based on the results of the habitat assessment, Burns & McDonnell has concluded that the proposed Project will have *no effect* on the peregrine falcon, loggerhead shrike and migrant variant, James spineymussel, Atlantic pigtoe, orangefin madtom, and Roanoke logperch and is *not likely to adversely affect* the northern long-eared bat, little brown bat, tri-colored bat, and bog turtle. We respectfully request your written concurrence with this determination. If you have any questions regarding the proposed Project or the contents of this habitat assessment report, please contact me at 716-489-0547 or by e-mail at wjackson2@burnsmcd.com at your convenience.

Sincerely,

Wyatt Jackson, PWS Environmental Scientist

Wyst Seedy

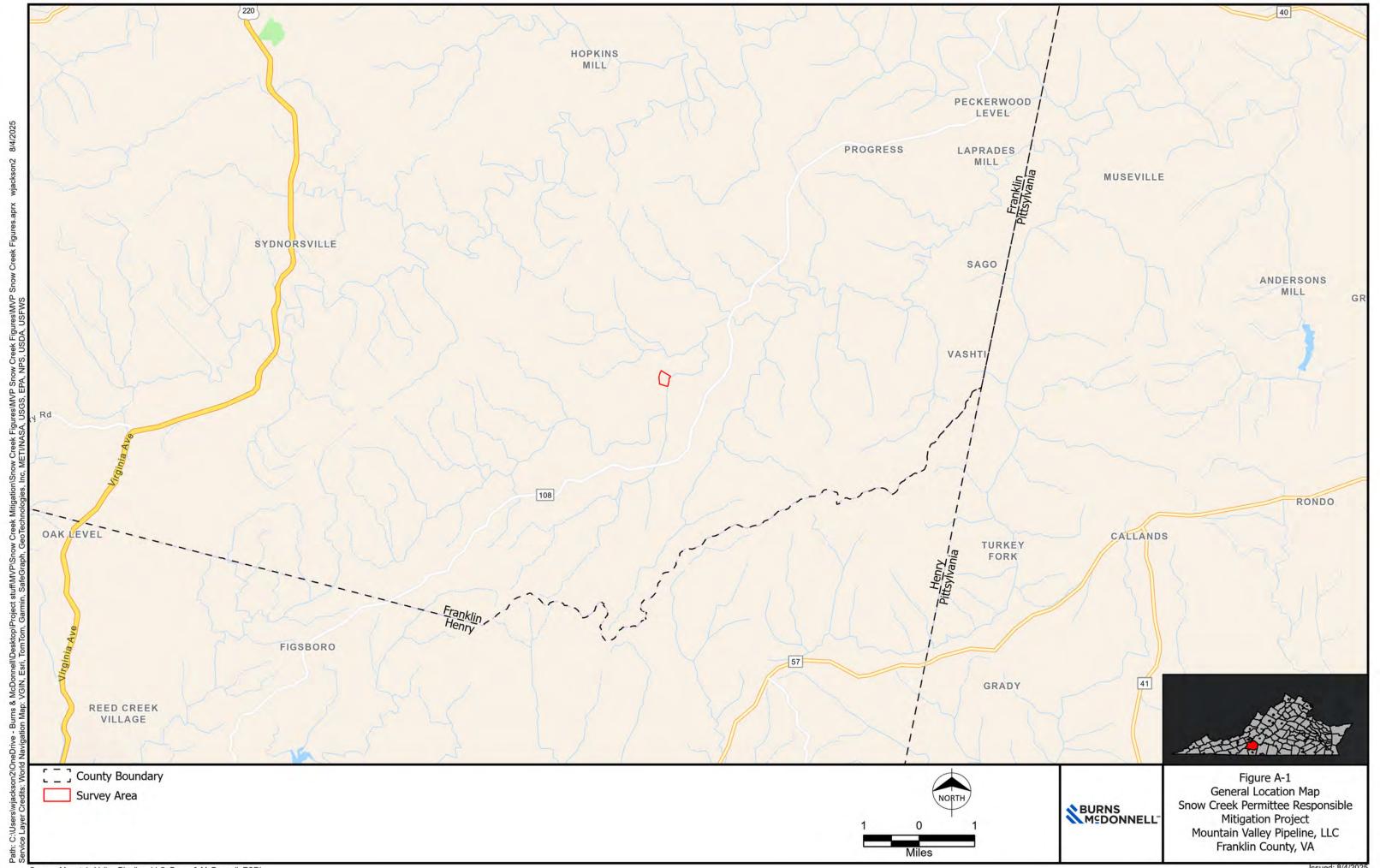
Attachments:

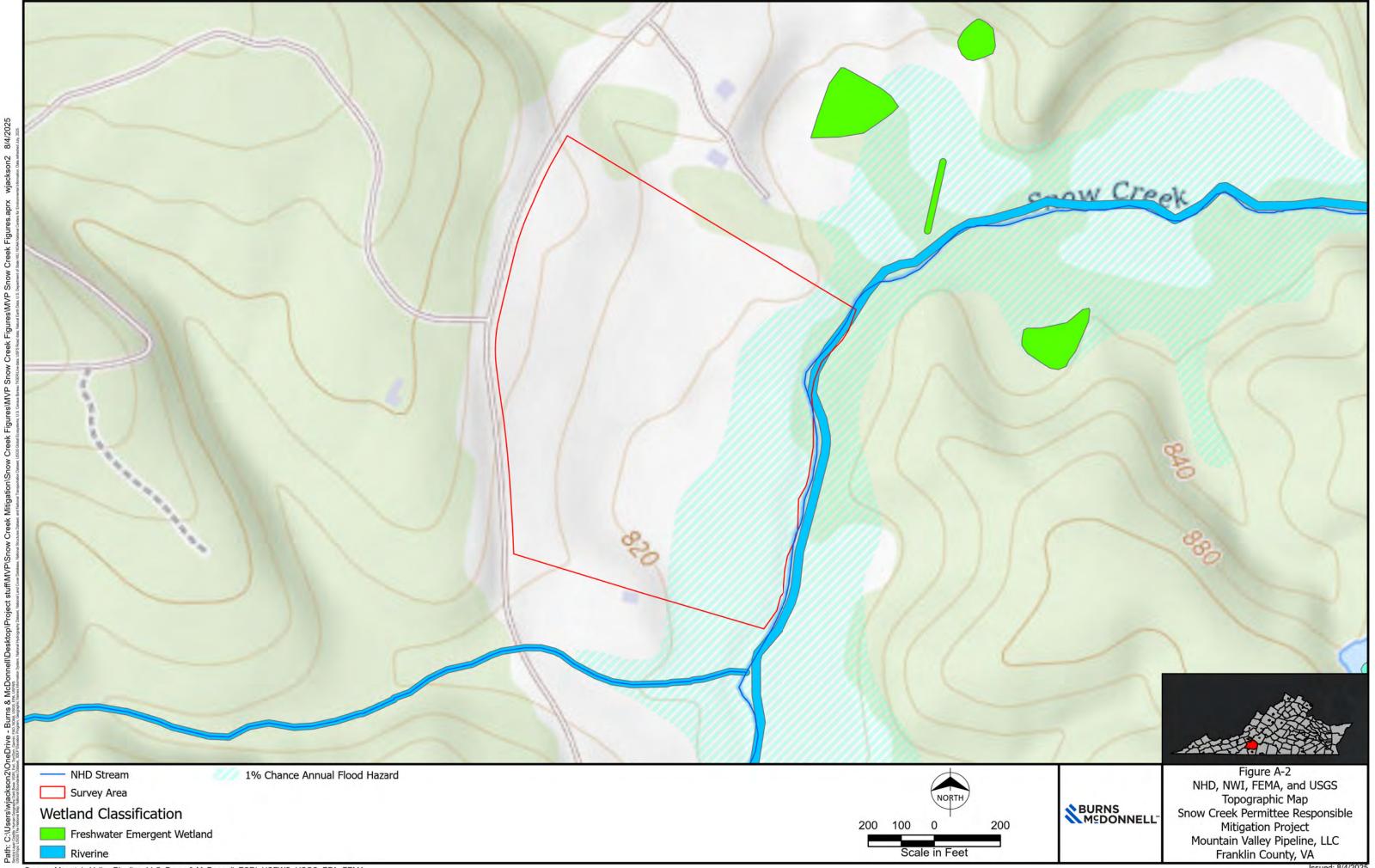
Attachment A - Figures

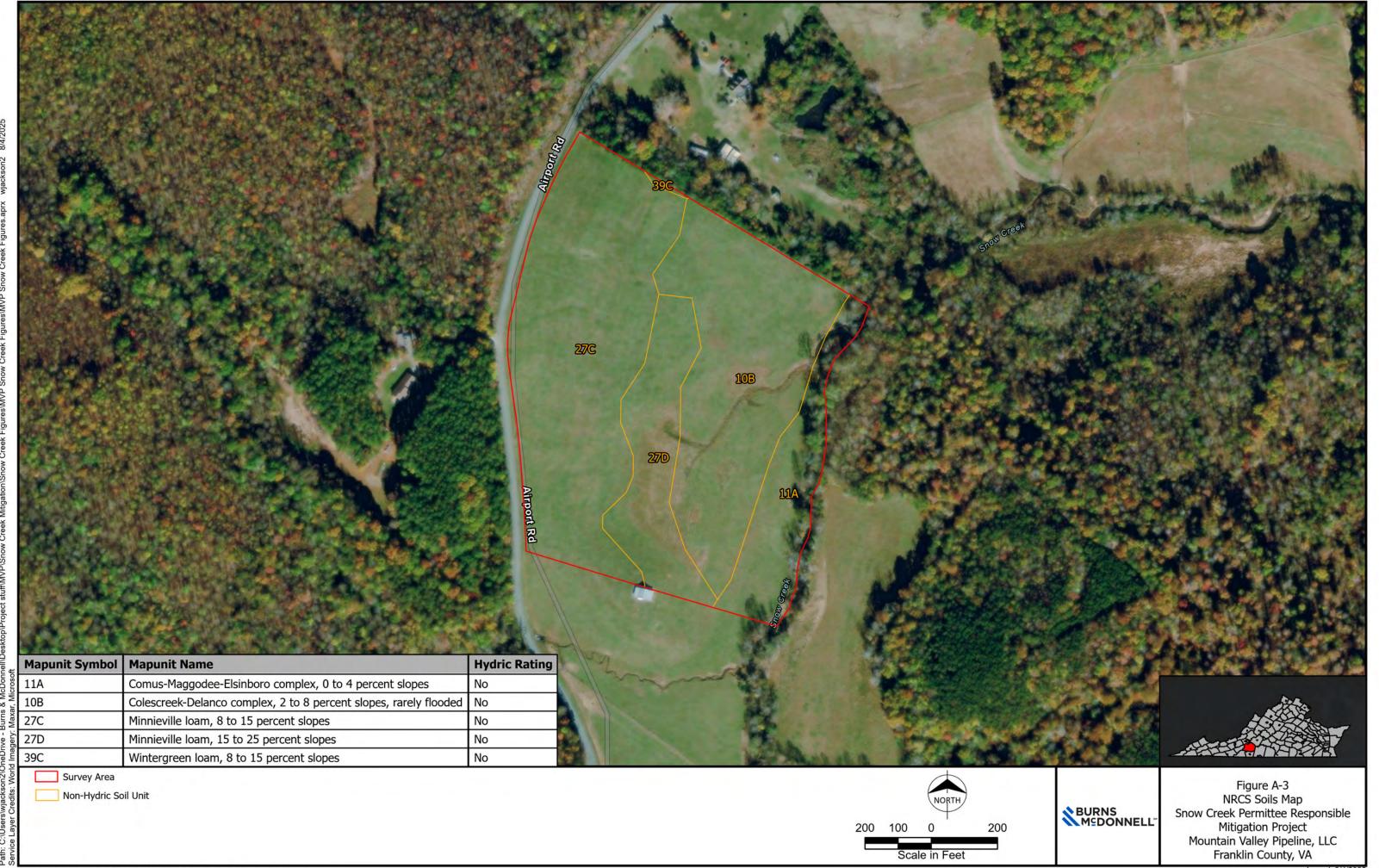
Attachment B - Environmental Database Reviews

Attachment C - Site Photographs













Virginia Department of Wildlife Resources An official website Here's how you know





Virginia Department of Wildlife Resources

Known or likely to occur within a 3 mile radius around point 36,51,24.4 -79,44,37.9

462 Known or Likely Species ordered by Status Concern for Conservation

(displaying first 22) (22 species with Status* or Tier I** or Tier II**)

Home » By Map » VaFWIS GeographicSelect Options

VaFWIS Search Report Compiled on 8/4/2025, 2:29:45 PM

in 067 Franklin County, 089 Henry County, VA

<u>Help</u>

View Map of

Site Location

Species Information By Name

Visitor Options

By Land Management

References

Geographic Search

By Map

By Coordinates

By Place Name

Help

Show This Page as Printer Friendly

BOVA Code	Status*	Tier**	Common Name	Scientific Name
050022	FESE	la	Bat, Northern Long-eared	Myotis septentrionalis
060017	FESE	la	Spinymussel, James	Parvaspina collina
030061	FTSE	la	Turtle, Bog	Glyptemys muhlenbergii
060173	FTST	la	Pigtoe, Atlantic	Fusconaia masoni
050020	SE	la	Bat, little brown	Myotis lucifugus
050027	FPSE	la	Bat, Tricolored	Perimyotis subflavus
010214	SE	lla	Roanoke Logperch	Percina rex
040096	ST	la	Falcon, peregrine	Falco peregrinus
040293	ST	la	Shrike, loggerhead	Lanius Iudovicianus
010127	ST	IIb	Madtom, orangefin	Noturus gilberti
040292	ST		Shrike, migrant loggerhead	Lanius Iudovicianus migrans
030012	СС	IVa	Rattlesnake, timber	Crotalus horridus
010174		la	Bass, Roanoke	Ambloplites cavifrons
010343		lb	Ashy Darter	Etheostoma cinereum
010341		lla	Logperch, blotchside	Percina burtoni
040052		lla	Duck, American black	Anas rubripes
040036		lla	Night-heron, yellow-crowned	Nyctanassa violacea violacea
040320		lla	Warbler, cerulean	Setophaga cerulea
040140		lla	Woodcock, American	Scolopax minor
060071		lla	Lampmussel, yellow	Lampsilis cariosa

To view All 462 species View 462

IIb

llb

*FE=Federal Endangered; FT=Federal Threatened; SE=State Endangered; ST=State Threatened; FP=Federal Proposed; FC=Federal Candidate;

**I=VA Wildlife Action Plan - Tier II - Critical Conservation Need; III=VA Wildlife Action Plan - Tier III - Very High Conservation Need; IV=VA Wildlife Action Plan - Tier III - High Conservation Need; IV=VA Wildlife Action Plan - Tier IV - Moderate Conservation Need Virginia Widlife Action Plan Conservation Opportunity Ranking:
a - On the ground management strategies/actions exist and can be feasibly implemented.; b On the ground actions or research needs have been identified but cannot feasibly be implemented at this time.; c -

Cuckoo, black-billed

Rail, king

No on the ground actions or research needs have been identified or all identified conservation opportunities have been exhausted.

Anadromous Fish Use Streams

N/A

040203

040105

Impediments to Fish Passage

N/A

Threatened and Endangered Waters (4 Reaches)

View Map of All

Coccyzus erythropthalmus

Rallus elegans

Threatened and Endangered Waters

Stream Name		T&E Waters Species		
	Highest TE*	BOVA Code, Status*, Tier**, Common & Scientific Name	View Map	

Search VA DWR



Fish and Wildlife Information Service

Snow Creek (0185280)	SE	010127	ST	IIb	Madtom, orangefin	Noturus gilberti	Vos
Show Creek (0165260)		010214	SE	lla	Roanoke Logperch	Percina rex	<u>Yes</u>
Snow Creek (0194274)	SE	010127	ST	IIb	Madtom, orangefin	Noturus gilberti	<u>Yes</u>
		010214	SE	lla	Roanoke Logperch	Percina rex	163
Snow Creek (0195973)	SE	010127	ST	IIb	Madtom, orangefin	Noturus gilberti	Yes
		010214	SE	lla	Roanoke Logperch	Percina rex	165
Snow Creek (0199095)	SE	010127	ST	IIb	Madtom, orangefin	Noturus gilberti	<u>Yes</u>
		010214	SE	lla	Roanoke Logperch	Percina rex	100

Managed Trout Streams

N/A

Bald Eagle Concentration Areas and Roosts

N/A

Bald Eagle Nests

N/A

Habitat Predicted for Aquatic WAP Tier I & II Species (4 Reaches)

View Map Combined Reaches from Below of Habitat Predicted for WAP Tier I & II Aquatic Species

	Tier Species						View
Stream Name	Highest TE [*]	BOVA	BOVA Code, Status*, Tier**, Common & Scientific Name				
Crab Creek (30101011)	SE	010127	ST	IIb	Madtom, orangefin	Noturus gilberti	Yes
Clab Cleek (30101011)	SL	010214	SE	lla	Roanoke Logperch	Percina rex	165
Crossy Fork (20101011)	SE	010127	ST	IIb	Madtom, orangefin	Noturus gilberti	Van
Grassy Fork (30101011)) SE	010214	SE	lla	Roanoke Logperch	Percina rex	<u>Yes</u>
Keaton Branch	SE	010127	ST	llb	Madtom, orangefin	Noturus gilberti	Van
(30101011)		010214	SE	lla	Roanoke Logperch	Percina rex	<u>Yes</u>
	SE	010127	ST	IIb	Madtom, orangefin	Noturus gilberti	
Snow Creek (30101011)		010174		la	Bass, Roanoke	Ambloplites cavifrons	<u>Yes</u>
		010214	SE	lla	Roanoke Logperch	Percina rex	
		010127	ST	IIb	Madtom, orangefin	Noturus gilberti	
Snow Creek (30101011)	SE	010174		la	Bass. Roanoke	Ambloplites cavifrons	<u>Yes</u>
		010214	SE	lla	Roanoke Logperch	Percina rex	

Habitat Predicted for Terrestrial WAP Tier I & II Species

N/A

Virginia Breeding Bird Atlas Blocks (1 records)

View Map of All Query Results
Virginia Breeding Bird Atlas Blocks

BBA ID	Atlas Quadrangle Block Name	Breeding Bird Atlas Species	View Map

		Different Species	Highest TE*	Highest Tier**	
32046	Gladehill, SE	56		III	<u>Yes</u>

Public Holdings: (1 names)

Name	Agency	Level
Turkeycock Mountain Wildlife Management Area	Va DGIF	

Summary of BOVA Species Associated with Cities and Counties of the Commonwealth of Virginia:

FIPS Code	City and County Name	Different Species	Highest TE	Highest Tier
067	<u>Franklin</u>	377	FESE	I
089	<u>Henry</u>	329	FESE	I

USGS 7.5' Quadrangles:

Snow Creek Gladehill Mtn. Valley Penhook

USGS NRCS Watersheds in Virginia:

N/A

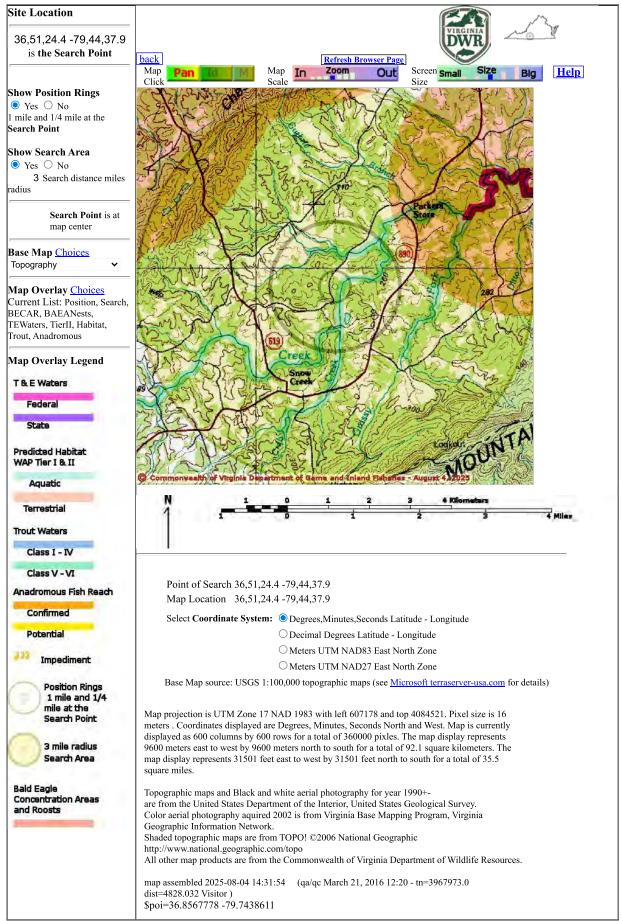
USGS National 6th Order Watersheds Summary of Wildlife Action Plan Tier I, II, III, and IV Species:

HU6 Code	USGS 6th Order Hydrologic Unit	Different Species	Highest TE	Highest Tier
RD27	Upper Leatherwood Creek	52	SE	
RU31	Big Chestnut Creek	49	SE	1
RU32	Pigg River-Owens Creek	54	SE	
RU33	Snow Creek-Crab Creek	51	SE	
RU35	Snow Creek-Gourd Creek	55	SE	I

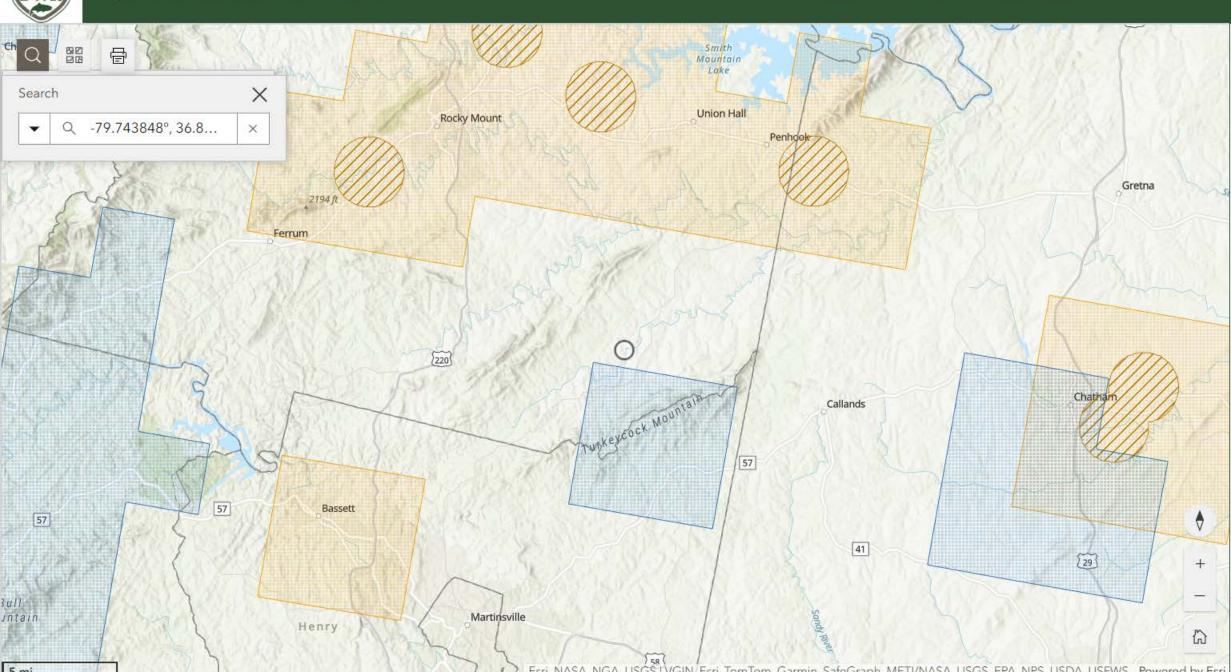
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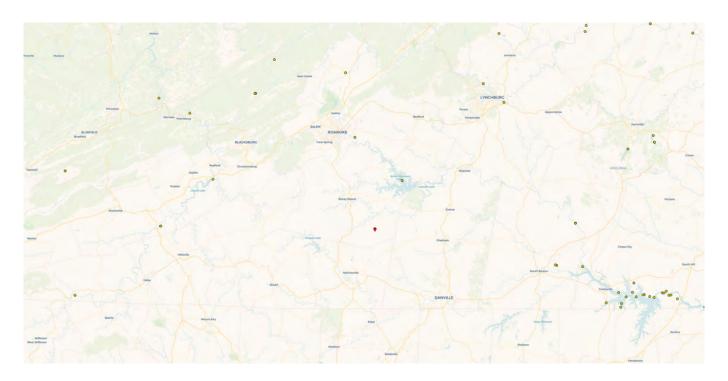








CCB Mapping Portal



Layers: VA Eagle Nest Locator

Map Center [longitude, latitude]: [-79.71954345703125, 36.966352227940526]

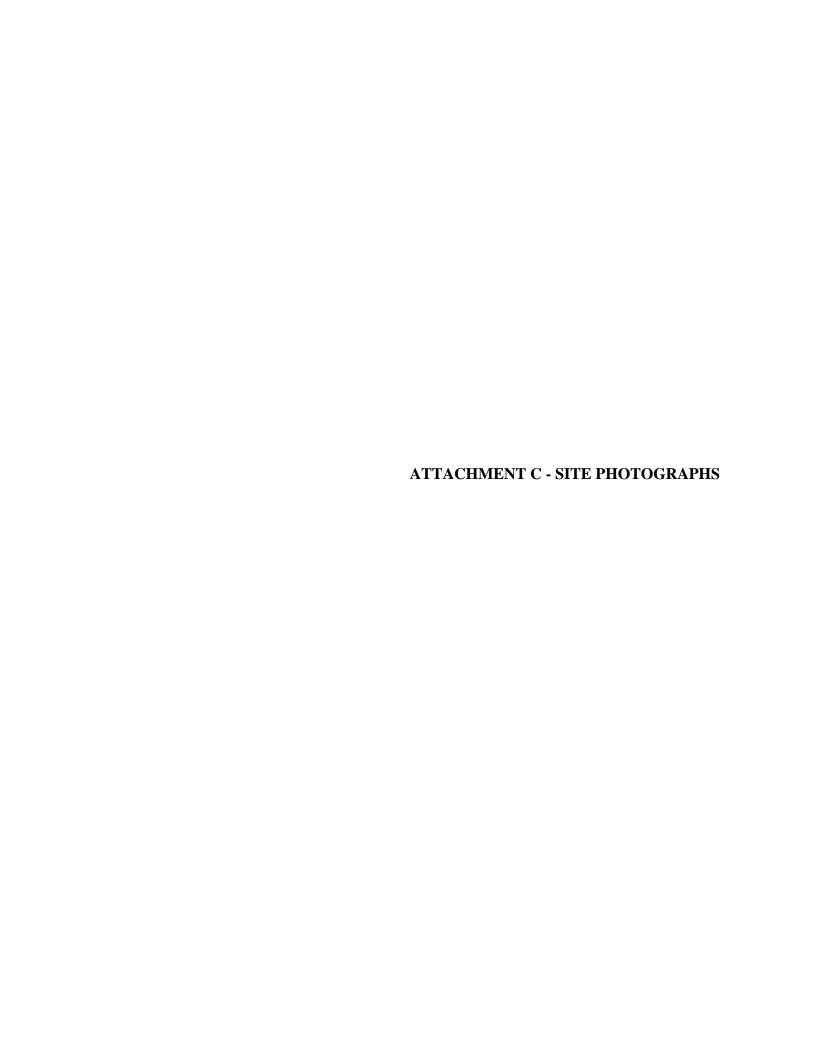
Map Link:

Report Generated On: 08/04/2025

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Report generated by The Center for Conservation Biology Mapping Portal.

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Photograph C-1: View of Palustrine Emergent (PEM) wetland (W)-01, facing northwest.



Photograph C-2: View of PEM W-01, facing southeast.





Photograph C-3: View of upland adjacent to PEM W-01, facing north.



Photograph C-4: View of upland adjacent to PEM W-01, facing south.





Photograph C-5: View of PEM W-01, facing east.



Photograph C-6: View of PEM W-01, facing northwest.





Photograph C-7: View of upland adjacent to PEM W-01, facing northwest.



Photograph C-8: View of upland adjacent to PEM W-01, facing southeast.





Photograph C-9: View of PEM W-01, facing north.



Photograph C-10: View of PEM W-01, facing south.





Photograph C-11: View of upland adjacent to PEM W-01, facing north.



Photograph C-12: View of upland adjacent to PEM W-01, facing south.





Photograph C-13: View of upland in floodplain east of PEM W-01, facing east.



Photograph C-14: View of upland in floodplain east of PEM W-01, facing west.





Photograph C-15: View of upland in floodplain east of PEM W-01, facing north.



Photograph C-16: View of upland in floodplain east of PEM W-01, facing south.





Photograph C-17: View of upland adjacent to PEM W-01, facing northeast.



Photograph C-18: View of upland adjacent to PEM W-01, facing southwest.





Photograph C-19: View of PEM W-01, facing west.



Photograph C-20: View of PEM W-01, facing east.





Photograph C-21: View of PEM W-01, facing north.



Photograph C-22: View of PEM W-01, facing south.





Photograph C-23: View of upland adjacent to PEM W-01, facing east.



Photograph C-24: View of upland adjacent to PEM W-01, facing west.





Photograph C-25: View of upland in floodplain east of PEM W-01, facing north.



Photograph C-26: View of upland in floodplain east of PEM W-01, facing south.





Photograph C-27: View of upland adjacent to PEM W-01, facing north.



Photograph C-28: View of upland adjacent to PEM W-01, facing south.





Photograph C-29: View of perennial stream (S)-01 / Snow Creek, facing downstream/north.



Photograph C-30: View of perennial S-01 / Snow Creek, facing upstream/south.





Photograph C-31: View of linear portion of PEM W-01, facing northeast.



Photograph C-32: View of linear portion of PEM W-01, facing northwest.

