# **Dickerson Power Plant**

Montgomery County, Maryland wssi #MD2258.01

Waters of the U.S. (Including Wetlands)
Delineation

September 15, 2023

Prepared for: Soltesz 2 Research Place, Suite 100 Rockville, Maryland 20850

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## Waters of the U.S. (Including Wetlands) Delineation

## Dickerson Power Plant (±291.72 acres) WSSI #MD2258.01

#### **Introduction**

Wetland Studies and Solutions, Inc. (WSSI) has determined the boundaries of potentially jurisdictional wetlands and other waters of the U.S. (i.e., streams and ponds) on the referenced site. These waters of the U.S. include palustrine open water (POW), palustrine forested (PFO), palustrine emergent (PEM) wetlands, and perennial and intermittent stream channels associated with the Little Monocacy River and Potomac River. Our findings are depicted as a surveyed map on the Waters of the U.S. (Including Wetlands) Delineation Map (Attachment I) and are discussed briefly below.

#### **Project Location**

The site is located at 21200 Martinsburg Road in Dickerson, Montgomery County, Maryland. Exhibit 1 is a vicinity map that depicts the approximate boundaries of the site and its general location.

## **Methodology**

This wetland delineation was performed pursuant to the *Corps of Engineers Wetlands Delineation Manual*, Technical Report Y-87-1 (1987 Manual) and subsequent guidance, and modified by the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region*, Version 2.0 dated April 2012. Field work was performed by Jennifer M. Favela, P.W.S.<sup>1</sup>, Michael J. Klebasko, P.W.S.<sup>2</sup>, Marius Flemmer, W.P.I.T.<sup>3</sup>, Dan Lekites, Rachel Shumway, and Tom Ballinger on August 23, 2023.

Prior to conducting field work, relevant background information was reviewed, including, the U.S. Department of Agriculture - Natural Resources Conservation Service (NRCS) soil survey map for Montgomery County, Maryland (<u>Exhibits 2a, 2b</u>); the Digital National Wetlands Inventory maps (<u>Exhibit 3</u>, downloaded May 2023); the U.S. Geological Survey (USGS) maps which include 20-foot topographic lines, forest, structures, and roads, as well as the locations of ponds, intermittent, and perennial streams (<u>Exhibit 4</u>); the 2020 Infrared Aerial Photograph (<u>Exhibit 5</u>); and DNR Wetlands and Wetlands of Special State Concern (<u>Exhibit 6</u>). The watershed classification was also reviewed and pursuant to the Code of Maryland Regulations (COMAR) 26.08.02.08, the site drains to the Little Monocacy River and the Potomac River, which are both classified as Use I-P Waterways. Pursuant to COMAR 26.08.02.04-1, the Little Monocacy River and the Potomac River are not located within a Tier II watershed.

Observations of vegetation, soils, and hydrology were recorded at representative locations in the wetlands and adjacent non-wetland areas to determine the wetland boundaries. Wetland Determination data forms describing representative plant communities, hydrology indicators, and soil characteristics are included as <u>Exhibit 7</u>. Photographs of the data point locations, representative wetland and non-wetland communities, and other existing site conditions are

Dickerson Power Plant - Waters of the U.S. Delineation

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<sup>&</sup>lt;sup>2</sup> Professional Wetland Scientist #777, Society of Wetlands Scientists Certification Program, Inc.

<sup>&</sup>lt;sup>3</sup> Wetland Professional In Training, Society of Wetlands Scientists Certification Program, Inc.

included in <u>Exhibit 8</u>. The surveyed locations of delineated wetlands, other waters of the U.S., data sites, and assessed stream reaches and the approximate locations of photographs are depicted on Attachment I.

#### **Waters of the U.S. Delineation Findings**

In WSSI's opinion, potentially jurisdictional wetlands and other waters of the U.S. (i.e., streams and ponds) are present on this site. These features include the Little Monocacy River (a USGS-mapped perennial stream), which enters and exits the site along the northern property line as well as two, small PEM wetlands (labeled as W-3 and W-4 on <u>Attachment I</u>) located along the northeastern property line.

WSSI also identified a potentially regulated wetland/stream system (labeled as S-3, S-4, W-11 and W-12) that originates in the southeastern corner of the site and drains in north-westerly direction to a culvert under an existing access road. It appears that the culvert connects flow from the wetland/stream system to the upper of three, man-made water storage ponds. Based on our review of historical environmental maps, it also appears that the three man-made ponds and adjacent PEM wetlands (labeled as W-5 through W-10) were originally constructed in-stream. As a result, these ponds and adjacent wetlands will likely be regulated features by both the U.S. Army Corps of Engineers (USACE) and the Maryland Department of the environment (MDE).

Another potentially regulated feature characterized as a PFO wetland (labeled as W-13) exists in the extreme southwestern corner of the site adjacent to the C & O Canal. This is a depressional wetland that is described in greater detail on Wetland Determination Data Form 2 in Exhibit 7.

Numerous, man-made stormwater management ponds (labeled as "Ex. SWM" on <u>Attachment I</u>) and concrete-lined drainage ditches are also scattered throughout the site. These features appear to have been constructed in uplands and are typically not regulated by either the USACE and the MDE. Written confirmation regarding the jurisdictional nature of these man-made features are required from both regulatory agencies.

#### **Summary**

In WSSI's opinion, jurisdictional wetlands and other waters of the U.S are present within the study area, based on our site observations, as described above and depicted on <u>Attachment I</u>.

The waters of the U.S. on the site (i.e., the wetlands, streams, and jurisdictional pond) are regulated by Sections 401 and 404 of the Clean Water Act and by state wetlands laws and cannot be disturbed without the appropriate permits. Such permits may include permits from local agencies, as well as the USACE and the MDE, depending upon the extent and type of impacts.

#### **Limitations**

This study is based on examination of the vegetation, soils and hydrology and available reference documents. Field indicators can change with variations in hydrology and other factors. Therefore, our conclusions may vary significantly from future observation by others. This report assesses the potential for wetlands at the site at the time of our review and does not address conditions at a given time in the future.

Our review and report have been prepared in accordance with generally accepted guidelines for the conduct of a survey for potential wetlands. Conclusions presented herein are

Dickerson Power Plant - Waters of the U.S. Delineation

based upon our review of available information, the results of our field studies, and/or professional judgement. We make no other warranties, either expressed or implied, and our report is not a recommendation to buy, sell or develop the property.

We offer no opinion and do not purport to opine on the possible application of various building codes, zoning ordinances, other land use or platting regulations, environmental or health laws and other similar statutes, laws, ordinances, code and regulations affecting the possible use and occupancy of the Property for the purpose for which it is being used, except as specifically provided above.

The foregoing opinions are based on applicable laws, ordinances, and regulations in effect as of the date hereof and should not be construed to be an opinion as to the matters set out herein should such laws, ordinances or regulations be modified, repealed or amended.

Any reuse or modification of any of this document (whether hard copies or electronic transmittals) prepared by WSSI without written verification or adaptation by WSSI will be at the sole risk of the individual or entity utilizing said document and such use is without the authorization of WSSI. WSSI shall have no legal liability resulting from any and all claims, damages, losses, and expenses, including attorney's fees arising out of the unauthorized reuse or modification of this document. Client shall indemnify WSSI from any claims arising out of unauthorized use or modification of the document whether hard copy or electronic.

This report does not constitute a jurisdictional determination of waters of the U.S. since such determinations must be verified by the U.S. Army Corps of Engineers or the Maryland Department of the Environment (as applicable), and are subject to review by the U.S. Environmental Protection Agency.

WETLAND STUDIES AND SOLUTIONS, INC.

Michael J. Klebasko, PWS

Michal O. Kle

Maryland Environmental Science Manager

Marius Flemmer, WPIT Environmental Scientist

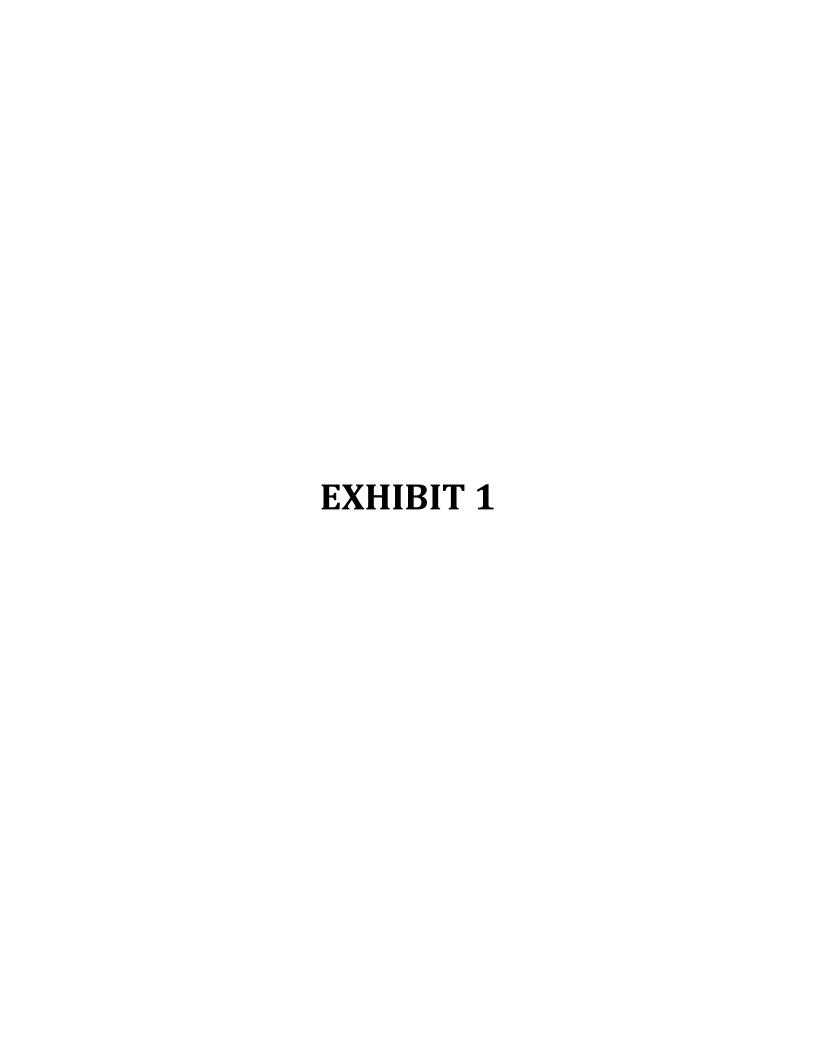
Dickerson Power Plant - Waters of the U.S. Delineation

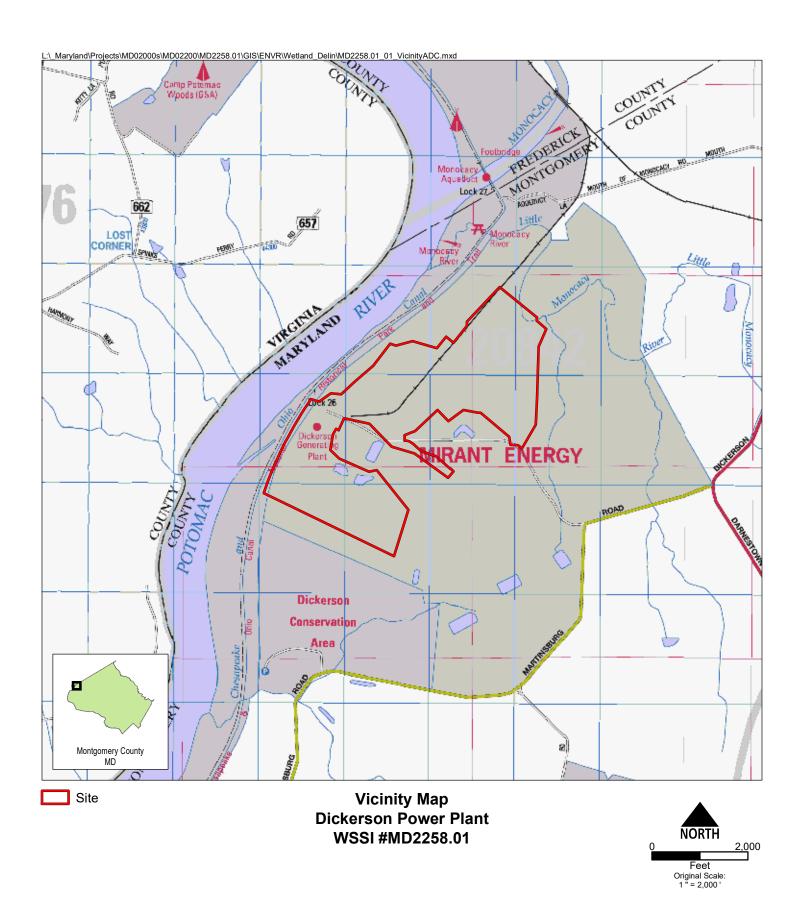
Wetland

Studies and Solutions, Inc.

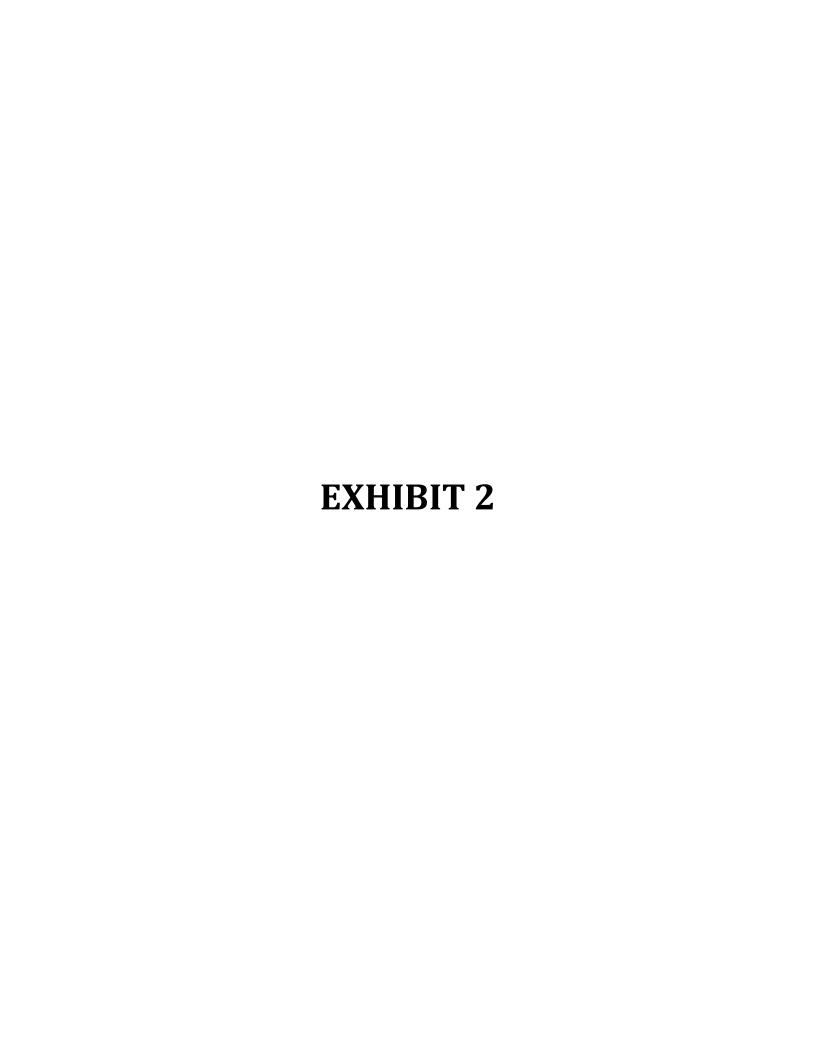
Studies and Solutions, Inc.

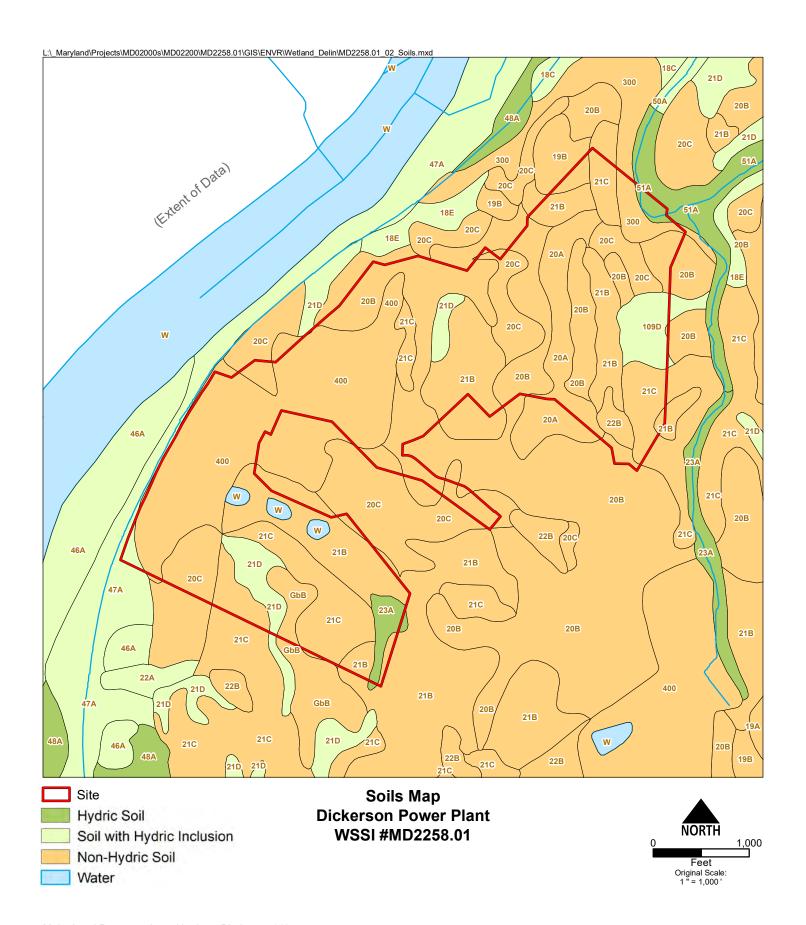
Wetland





ADC Map/Column/Row: 4925G7 Source: ADC 2008-2012



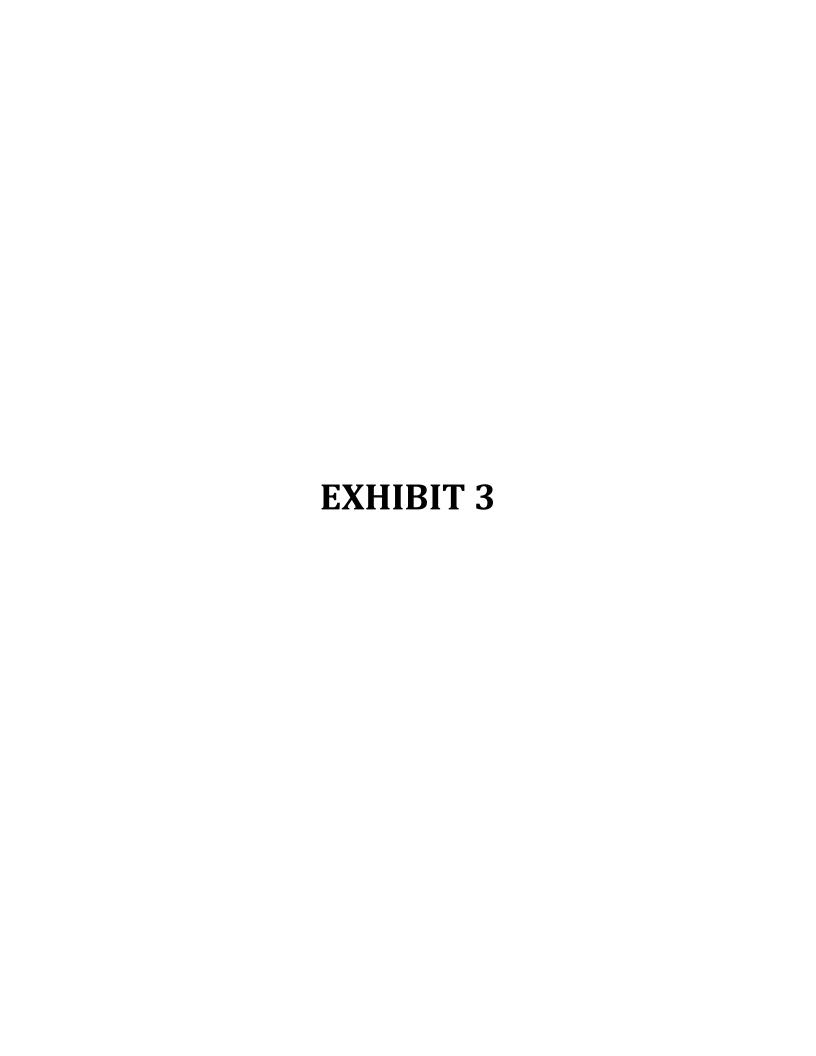


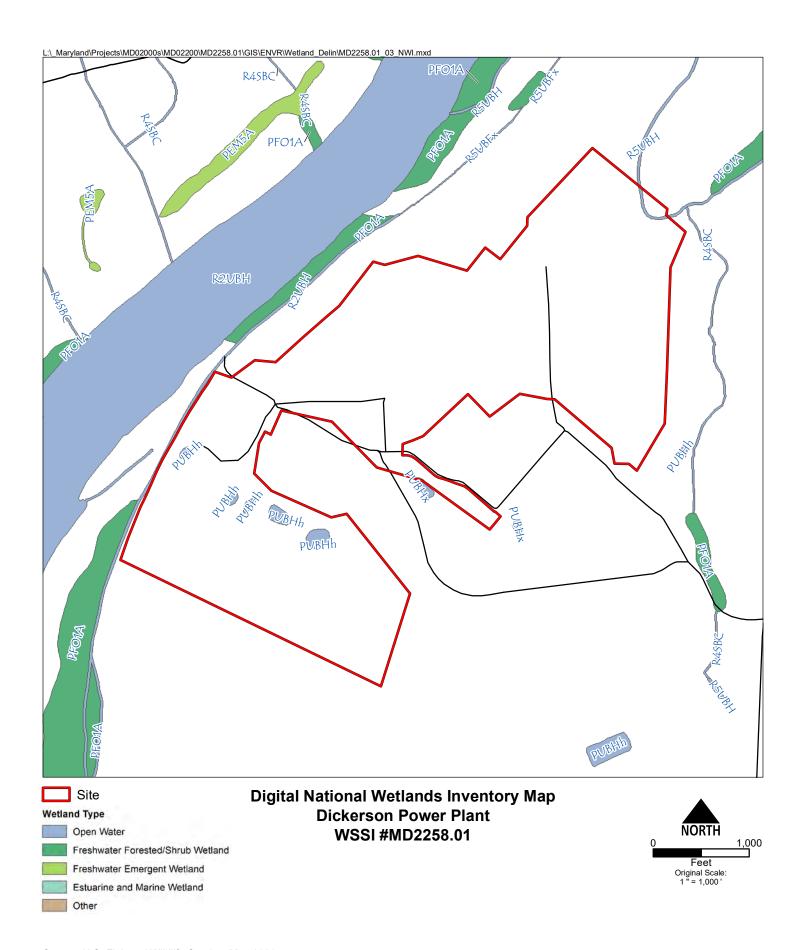
Major Land Resource Area: Northern Piedmont, 148 Land Resource Region: Northern Atlantic Slope Diversified Farming Region, S Source: Montgomery County Digital Data, U.S. Department of Agriculture, 2021

**Exhibit 2b: MAPPED SOIL TYPES** 

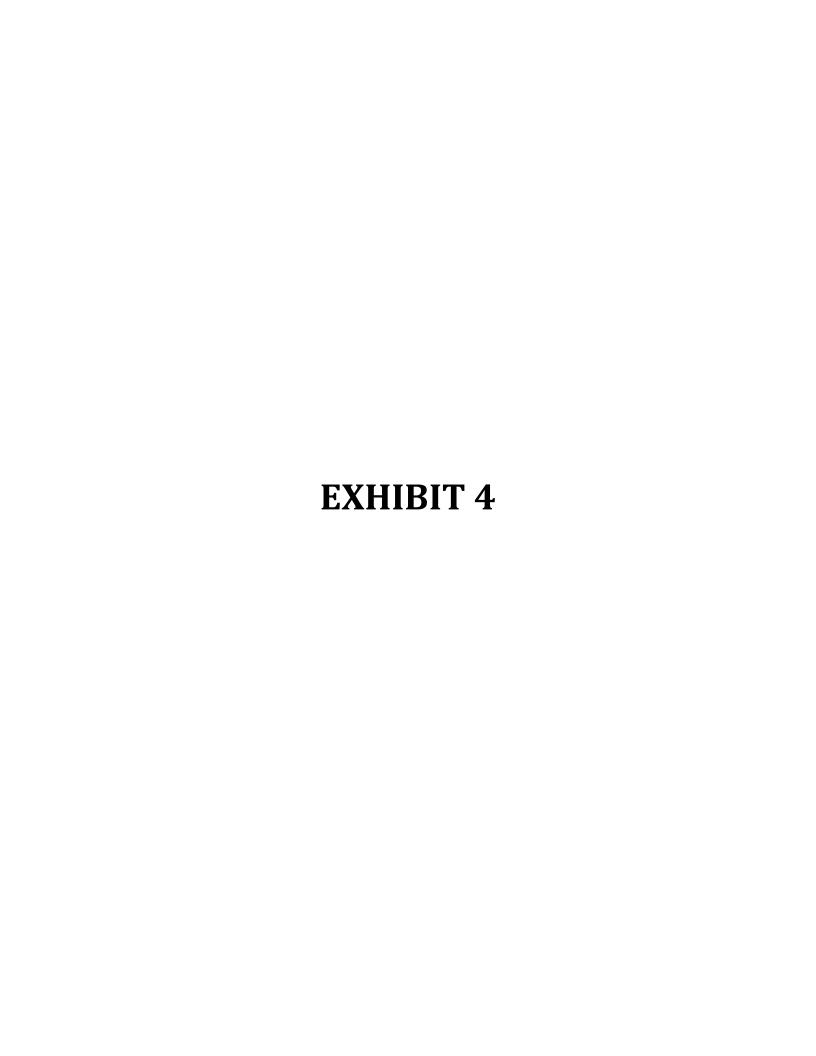
Map Unit Symbol	Map Unit Name	Hydric Rating	Hydrologic Soil Group	K Factor (Whole Soil)
19B	Bucks silt loam, 3 to 8 percent slopes	0	В	0.37
20A	Brentsville sandy loam, 0 to 3 percent slopes	0	С	0.28
20B	Brentsville sandy loam, 3 to 8 percent slopes	0	С	0.28
20C	Brentsville sandy loam, 8 to 15 percent slopes	0	С	0.28
21B	Penn silt loam, 3 to 8 percent slopes	0	В	0.37
21C	Penn silt loam, 8 to 15 percent slopes	0	В	0.37
21D	Penn silt loam, 15 to 25 percent slopes	5	В	0.43
22B	Readington silt loam, 3 to 8 percent slopes		С	0.37
23A	Croton silt loam, occasionally ponded, 0 to 3 percent slopes	85	D	0.43
47A	Lindside silt loam, 0 to 3 percent slopes, occasionally flooded	10	С	0.43
51A	Bowmansville-Melvin silt loams, 0 to 2 percent slopes, occasionally flooded	100	C/D	0.43
109D	Hyattstown channery silt loam, 15 to 25 percent slopes, very rocky	5	D	0.24
300	Rock outcrop-Blocktown complex	0	N/A	N/A
400	Urban land	0	D	N/A
GbB	Goresville and Bucks soils, 3 to 8 percent slopes	0	С	0.28
W	Census water	0	N/A	N/A

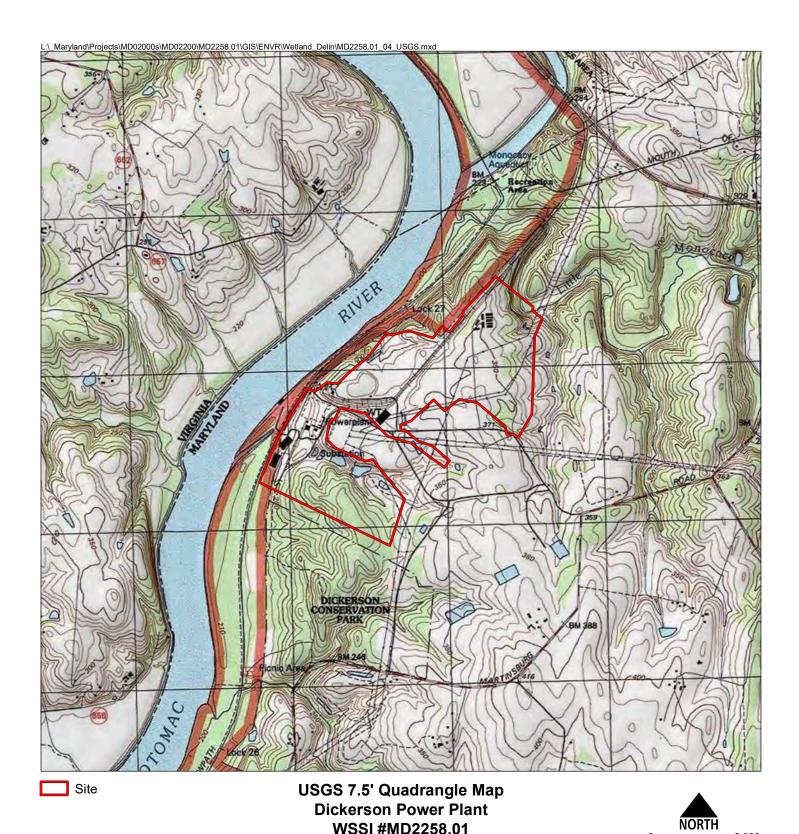
Source: <a href="http://websoilsurvey.nrcs.usda.gov">http://websoilsurvey.nrcs.usda.gov</a> (August 2023)





Source: U.S. Fish and Wildlife Service; May 2023





Poolesville, MD VA 1997 Latitude: 39°12'36"N Longitude: 77°27'28"W

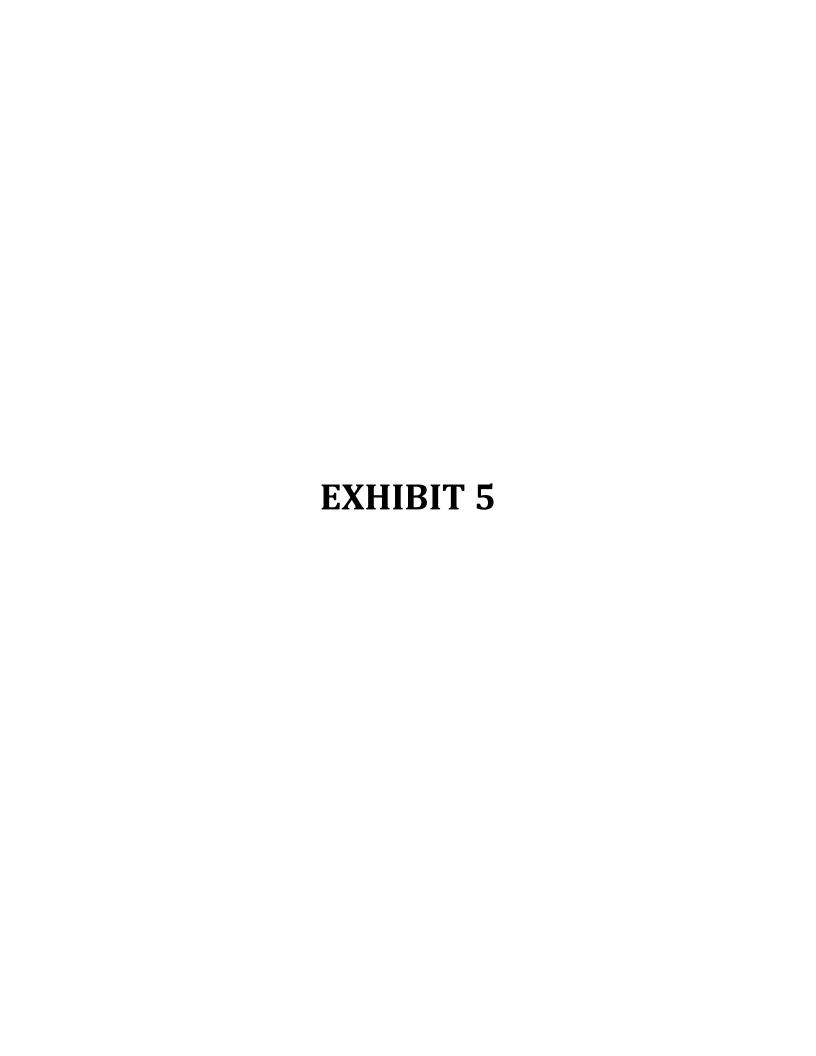
Hydrologic Unit Code (HUC): 020700080402; 020700080403

HUC12 Name: Little Monocacy River; Limestone Branch-Potomac River COE Region: Eastern Mountains and Piedmont



Original Scale: 1 " = 2,000 '

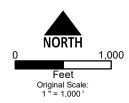
2,000



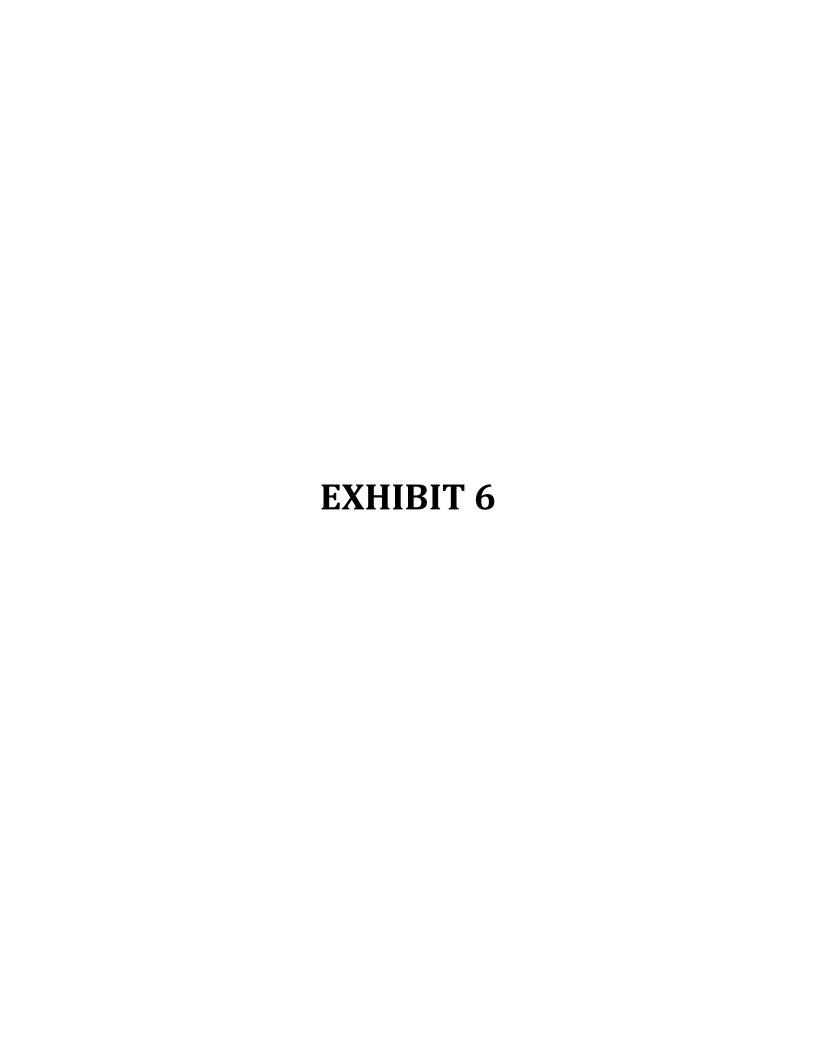


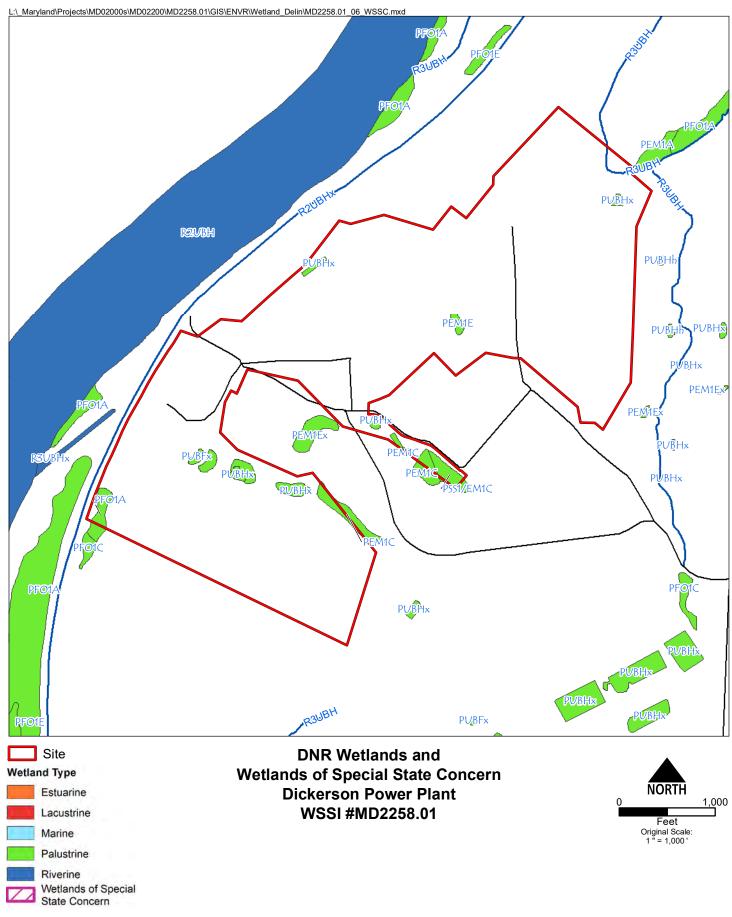
Site

Spring 2020 Near Color Infrared Imagery
Dickerson Power Plant
WSSI #MD2258.01

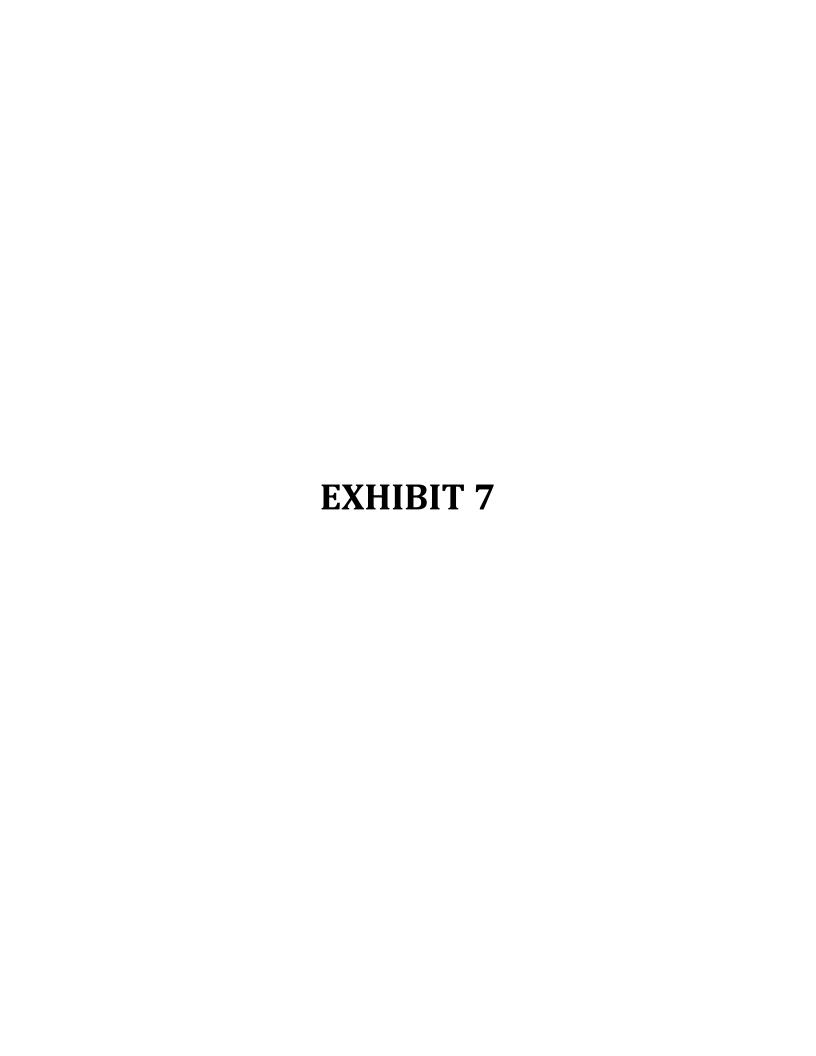


Source: DoIT, MDP, MD iMAP





Source: MD Department of Natural Resources (DNR); September 2018



Project/Site: Dickerson Power Plant City/C	City/County: Montgomery Sampling Date: 2023-08				
•	State: Maryland Sampling Point: DP1				
Investigator(s):MF/TB Section					
	ief (concave, convex, none): Concave Slope (%): 3				
Subregion (LRR or MLRA): S 148 Lat: 39.20663723					
	NWI classification:				
Are climatic / hydrologic conditions on the site typical for this time of year? Y	∕es No (If no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology significantly distur	rbed? Are "Normal Circumstances" present? Yes No				
Are Vegetation, Soil, or Hydrology naturally problems					
	npling point locations, transects, important features, etc.				
Hydrophytic Vegetation Present?  Yes   No   Yes   No   No   No   No   Hydric Soil Present?	Is the Sampled Area within a Wetland? Yes No ✔				
Wetland Hydrology Present? Yes No					
Only two (i.e., hydrophytic vegetation and hydric soils) of data point, which characterizes an herbaceous upland in	•				
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1) True Aquatic Plants ( High Water Table (A2) Hydrogen Sulfide Od Saturation (A3) Oxidized Rhizospher Water Marks (B1) Presence of Reduced Sediment Deposits (B2) Recent Iron Reduction Drift Deposits (B3) Thin Muck Surface (Oder (Explain in Rerection (B5)) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13)  Field Observations: Surface Water Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, presents)	Surface Soil Cracks (B6)  (B14) Sparsely Vegetated Concave Surface (B8)  lor (C1) Drainage Patterns (B10)  les on Living Roots (C3) Moss Trim Lines (B16)  d Iron (C4) Dry-Season Water Table (C2)  on in Tilled Soils (C6) Crayfish Burrows (C8)  C7) Saturation Visible on Aerial Imagery (C9)  marks) Stunted or Stressed Plants (D1)  Geomorphic Position (D2)  Shallow Aquitard (D3)  Microtopographic Relief (D4)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No				

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

Sampling Point: DP1

00 (1	Absolute		Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 1 (A)
2				Total Niverbay of Dansingut
3				Total Number of Dominant Species Across All Strata: 1 (B)
4				Openies / toross / tir etrata.
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				
	:	= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover:	20% of	total cover:		OBL species $0 \times 1 = 0$
Sapling/Shrub Stratum (Plot size: 15 ft r )				FACW species <u>0</u>
1 Juniperus virginiana	3		FACU	FAC species 102 x 3 = 306
" <u> </u>				FACU species <u>6</u> x 4 = <u>24</u>
2				UPL species $0 \times 5 = 0$
3				400
4				Column Totals: 108 (A) 330 (B)
5				Prevalence Index = B/A = 3.06
6				
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
	3% :	= Total Cov	er	4 - Morphological Adaptations¹ (Provide supporting
50% of total cover: 1.5	20% of	total cover:	0.6	
Herb Stratum (Plot size: 5 ft r )				data in Remarks or on a separate sheet)
1. Panicum virgatum	80	<b>✓</b>	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2 Microstegium vimineum	20		FAC	
	3		FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Asclepias syriaca	2			be present, unless disturbed or problematic.
4. Nyssa sylvatica	2		FAC	Definitions of Four Vegetation Strata:
5				
6				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1
9				
9				m) tall.
· · ·				m) tall.
10				m) tall. <b>Herb</b> – All herbaceous (non-woody) plants, regardless
10. 11.	105%	= Total Cov	er	m) tall. <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10	105%	= Total Cov	er	m) tall. <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. <b>Woody vine</b> – All woody vines greater than 3.28 ft in
10	105% : 20% of	= Total Cov total cover:	er 21.0	m) tall. <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10	105% : 20% of	= Total Cov total cover:	er 21.0	m) tall. <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. <b>Woody vine</b> – All woody vines greater than 3.28 ft in
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10	105% : 20% of	= Total Cov total cover:	er 21.0	m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.
10	105% ; 20% of	= Total Cov total cover:	er 21.0	m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
10	105% 20% of	= Total Cov total cover:	er 21.0	m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
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SOIL Sampling Point: DP1

Profile Desc	ription: (Describe	to the dep	th needed to docum	nent the	indicator	or confirm	the absence	of indicators.)
Depth	Matrix			x Feature				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 12	2.5Y 5/1	95	2.5Y 5/4	5	<u>C</u>	<u>M</u>	Silty Clay	
12 - 17	2.5YR 5/1	85	10YR 5/4	15	<u>C</u>	<u>M</u>	Silty Clay	
-								
		· <del></del>						
		· ——		-	·			
	-				· -	· ——		
		letion, RM	=Reduced Matrix, MS	S=Masked	d Sand Gr	ains.		L=Pore Lining, M=Matrix.
Hydric Soil I								ators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1) pipedon (A2)		Dark Surface Polyvalue Be		(CO) <b>(</b> I	NI DA 447		2 cm Muck (A10) (MLRA 147)
Black Hi			Polyvalue Be				146) (	Coast Prairie Redox (A16) (MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye	•	, .	, ,	F	Piedmont Floodplain Soils (F19)
Stratified	Layers (A5)		✓ Depleted Mat		. ,			(MLRA 136, 147)
	ck (A10) (LRR N)		Redox Dark S					/ery Shallow Dark Surface (TF12)
	l Below Dark Surface ork Surface (A12)	e (A11)	Depleted Dar Redox Depre				_ (	Other (Explain in Remarks)
	lucky Mineral (S1) <b>(L</b>	RR N.	Iron-Mangan			LRR N.		
	147, 148)	,	MLRA 13		, (	,		
	leyed Matrix (S4)		Umbric Surfa					licators of hydrophytic vegetation and
	edox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)  ayer (if observed):		Red Parent N	Material (F	-21) <b>(MLR</b>	A 127, 147	7) un	lless disturbed or problematic.
Type:								
Depth (inc							Hydric Soil	Present? Yes No
Remarks:							Tiyunc oon	1116361111 163 160
remarks.								

Project/Site: Dickerson Power Plant	City/County: Montgomery Sampling Date: 2023-08-23
Applicant/Owner: Soltesz	State: Maryland Sampling Point: DP2
Investigator(s):MK/DL	Section, Township, Range:
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): Concave Slope (%): 1
	621537 Long: -77.46817167 Datum: WGS 84
	cent slopes, occasionally flooded NWI classification:
Are climatic / hydrologic conditions on the site typical for this tim	e of year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology signif	icantly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology natura	ally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho	owing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes V No	
Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes  No  No	Is the Sampled Area
Wetland Hydrology Present? Yes ✓ No	within a Wetland? Yes No
Remarks:	<u> </u>
All three wetlend never store (i.e. wetlend had	release budgembysic venetation and budgic coils) were esticted
	rology, hydrophytic vegetation, and hydric soils) were satisfied
at this data point, which characterizes a paiust	rine forested wetland in the southwestern portion of the site.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that a	apply) Surface Soil Cracks (B6)
Surface Water (A1) True Aqu	uatic Plants (B14) Sparsely Vegetated Concave Surface (B8)
	n Sulfide Odor (C1) Drainage Patterns (B10)
	Rhizospheres on Living Roots (C3) Moss Trim Lines (B16)
	e of Reduced Iron (C4) Dry-Season Water Table (C2)
	ron Reduction in Tilled Soils (C6) Crayfish Burrows (C8)
	ck Surface (C7) Saturation Visible on Aerial Imagery (C9)
	xplain in Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
<ul><li>✓ Water-Stained Leaves (B9)</li><li> Aquatic Fauna (B13)</li></ul>	Microtopographic Relief (D4)  ✓ FAC-Neutral Test (D5)
Field Observations:	TAC-Neutral Test (D3)
Surface Water Present? Yes No Depth (i	inches):
Water Table Present? Yes No Depth (i	, <del></del>
Saturation Present? Yes No Depth (i	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aeria	I photos, previous inspections), if available:
Remarks:	

Sam	nlina	Point:	DP2
vaili	DIIIIU	I UIIII.	

20.4	Absolute	Dominant		Dominance Test worksheet:	
Tree Stratum (Plot size: 30 ft r		Species?		Number of Dominant Species _	
1. Acer saccharinum	50		FACW	That Are OBL, FACW, or FAC: 5 (A	.)
2. Acer negundo	15		FAC	Total Number of Dominant	
3				Species Across All Strata: 5 (B	)
4					
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A.	/R)
6				That Are OBE, I AGW, OF I AG.	,,,
7				Prevalence Index worksheet:	
·	65%	= Total Cov		Total % Cover of: Multiply by:	
50% of total cover: 32.5				OBL species 30 x 1 = 30	
Sapling/Shrub Stratum (Plot size: 15 ft r )	20 /0 01	total cover.		FACW species 90 x 2 = 180	
				FAC species 45 x 3 = 135	
1				FACU species 0 x 4 = 0	
2				UPL species 0 x 5 = 0	
3				405	Β,
4				Column Totals: 165 (A) 345 (I	B)
5				Prevalence Index = B/A = 2.09	
6				Hydrophytic Vegetation Indicators:	
7					
8				1 - Rapid Test for Hydrophytic Vegetation	
9				✓ 2 - Dominance Test is >50%	
<u>.                                    </u>		= Total Cov		3 - Prevalence Index is ≤3.0 <sup>1</sup>	
50% of total cover:				4 - Morphological Adaptations <sup>1</sup> (Provide support	ting
Herb Stratum (Plot size: 5 ft r )	2070 01	total oover.		data in Remarks or on a separate sheet)	
1. Lysimachia nummularia	35	~	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
2 Microstegium vimineum	30		FAC		
3. Persicaria hydropiperoides	30		OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must	t
	5		FACW	be present, unless disturbed or problematic.	
4. Boehmeria cylindrica		-	FACW	Definitions of Four Vegetation Strata:	
5				To a Manda de de de contrato de dispersión de Oire (7.0 cm)	
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless	
7				height.	01
8					
9				Sapling/Shrub – Woody plants, excluding vines, les than 3 in. DBH and greater than or equal to 3.28 ft (	
10				m) tall.	'
11.					
	100%	= Total Cov		<b>Herb</b> – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall.	SS
50% of total cover: 50.0	20% of			of size, and woody plants less than 5.20 it tall.	
Woody Vine Stratum (Plot size: 30 ft r )	20 /0 01	total cover.		Woody vine – All woody vines greater than 3.28 ft in	n
				height.	
1					
2					
3					
4				Hydrophytic	
5				Vegetation	
	:	= Total Cov	er	Present? Yes No	
50% of total cover:	20% of	total cover:			
Remarks: (Include photo numbers here or on a separate s	heet.)				

SOIL Sampling Point: DP2

Profile Desc	ription: (Describe t	o the dep	th needed to docur	nent the	indicator	or confirn	n the abser	nce of indicators.)	
Depth	Matrix		Redo	x Feature	s				
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	-	
0 - 8	5YR 4/2		5YR 4/6	15	С	M	Silt Loa	<u> </u>	
8 - 17	5YR 4/4		5YR 3/1	10			Silt Loa	m	
	-								
	-				-				
-									
	oncentration, D=Depl	etion, RM:	Reduced Matrix, MS	S=Masked	d Sand Gra	ains.	<sup>2</sup> Location	: PL=Pore Lining, M=Matrix.	
Hydric Soil I	ndicators:						In	dicators for Problematic Hydric Soils <sup>3</sup> :	
Histosol			Dark Surface					_ 2 cm Muck (A10) (MLRA 147)	
	pipedon (A2)		Polyvalue Be				, 148)	Coast Prairie Redox (A16)	
Black His			Thin Dark Su			47, 148)		(MLRA 147, 148)	
	n Sulfide (A4)		Loamy Gleye		(F2)			Piedmont Floodplain Soils (F19)	
	l Layers (A5) ck (A10) <b>(LRR N)</b>		✓ Depleted Ma  Redox Dark		-6)			(MLRA 136, 147)  Very Shallow Dark Surface (TF12)	
	Below Dark Surface	e (A11)	Depleted Dai	•			_	Other (Explain in Remarks)	
	rk Surface (A12)	, (, , , ,	Redox Depre				_		
	lucky Mineral (S1) (L	RR N,	Iron-Mangan			LRR N,			
MLRA	\ 147, 148)		MLRA 13	MLRA 136)					
	leyed Matrix (S4)		Umbric Surfa					Indicators of hydrophytic vegetation and	
-	edox (S5)		<ul><li>Piedmont Floodplain Soils (F19) (MLRA 14</li><li>Red Parent Material (F21) (MLRA 127, 147</li></ul>					wetland hydrology must be present,	
	Matrix (S6)		Red Parent N	/laterial (F	21) <b>(MLR</b>	A 127, 147	7)	unless disturbed or problematic.	
	_ayer (if observed):								
Type:									
	ches):						Hydric	Soil Present? Yes <u> </u>	
Remarks:									

Project/Site: Dickerson Power Plant	City/County: Montgo	omery	Sampling Date: 2023-08-23		
Applicant/Owner: Soltesz		State: Marylan			
Investigator(s):MK/DL	Section, Township, Ra	ange:			
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, cor	<sub>ivex, none):</sub> Concave	Slope (%): 2		
Subregion (LRR or MLRA): S 148			Datum: WGS 84		
Soil Map Unit Name: 21C - Penn silt Ioam					
Are climatic / hydrologic conditions on the site typical	Il for this time of year? Yes No _	(If no, explain in R	emarks.)		
Are Vegetation, Soil, or Hydrology _	significantly disturbed? Are	"Normal Circumstances" p	present? Yes No		
Are Vegetation, Soil, or Hydrology _	naturally problematic? (If n	eeded, explain any answe	rs in Remarks.)		
SUMMARY OF FINDINGS – Attach site		locations, transects	, important features, etc.		
Hydrophytic Vegetation Present? Yes	' No				
Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes  Yes	Is the Sample		No		
Wetland Hydrology Present?	_ No within a Wetla	ınd? Yes <u>✓</u>	_ No		
Remarks:					
All three wetland parameters (i.e. wet	tland hydrology, bydrophytio y	regetation and hydr	io soils) were satisfied		
All three wetland parameters (i.e., wet		•			
at this data point, which characterizes	a paiustrine emergent wettan	a in the southern po	ortion of the site.		
HYDROLOGY					
Wetland Hydrology Indicators:			tors (minimum of two required)		
Primary Indicators (minimum of one is required; ch		Surface Soil			
	True Aquatic Plants (B14)		getated Concave Surface (B8)		
	Hydrogen Sulfide Odor (C1)	Drainage Pat			
	Oxidized Rhizospheres on Living Roo				
	Presence of Reduced Iron (C4)		Water Table (C2)		
	Recent Iron Reduction in Tilled Soils (				
	Thin Muck Surface (C7) Other (Explain in Remarks)		sible on Aerial Imagery (C9)		
	Other (Explain in Remarks)	✓ Geomorphic	tressed Plants (D1)		
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)		Shallow Aqui	` '		
✓ Water-Stained Leaves (B9)					
Aquatic Fauna (B13)		Microtopographic Relief (D4)  ✓ FAC-Neutral Test (D5)			
Field Observations:			1001 (20)		
	Depth (inches):				
Water Table Present? Yes No _	Depth (inches):				
Saturation Present? Yes No	Depth (inches): 14 W	etland Hydrology Presen	nt? Yes 🗸 No		
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitorin	g well, aerial photos, previous inspection.	s) if available:			
	g 11011, doi.le. p.101000, p. 011000 1110p0011011				
Remarks:					
Ĭ					

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

Hydrophytic Vegetation

Present?

 $\frac{0\%}{50\% \text{ of total cover:}} = \text{Total Cover}$ 

50% of total cover: 20% of total cover:

50% of total cover: 5 20% of total cover: 2

= Total Cover
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_

Tree Stratum (Plot size: 30 ft r )

Sapling/Shrub Stratum (Plot size: 15 ft r )

Herb Stratum (Plot size: 5 ft r

1. Microstegium vimineum

4. Persicaria longiseta

2. Boehmeria cylindrica

3. Acer rubrum

Woody Vine Stratum (Plot size: 30 ft r

5. Vitis riparia 1

ames of plants.	Sampling Point: DP3							
Absolute Dominant Indicator	Dominance Test worksheet:							
% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)							
	Total Number of Dominant Species Across All Strata: 3 (B)							
	Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)							
	Prevalence Index worksheet:							
0% = Total Cover	Total % Cover of: Multiply by:							
- Total Gover	OBL species 0 $x_1 = 0$							
20% of total cover: 0	FACW species $\frac{4}{4}$ $\times 2 = \frac{8}{8}$							
	FAC species $\frac{1}{6}$ $\frac{1}{x}$ $\frac{1}{3}$							
	FACU species $0 \times 4 = 0$							
	UPL species $0$ $x = 0$							
	10 26 26							
	Column Totals: IO (A) 26 (B)							
	Prevalence Index = B/A = 2.60							
	Hydrophytic Vegetation Indicators:							
	1 - Rapid Test for Hydrophytic Vegetation							
	∠ 2 - Dominance Test is >50%							
	✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>							
= Total Cover	4 - Morphological Adaptations <sup>1</sup> (Provide supporting							
20% of total cover:	data in Remarks or on a separate sheet)							
3	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)							
3	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.							
1 FAC	Definitions of Four Vegetation Strata:							
1 FACW	<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.							
	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.							
10% = Total Cover 20% of total cover: 2	<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.							
20% of total cover:_2	Woody vine – All woody vines greater than 3.28 ft in height.							

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

Yes \_\_\_\_\_ No \_\_\_\_\_

SOIL Sampling Point: DP3

Profile Desc	ription: (Describe	to the dep	th needed to docur	nent the i	indicator	or confirn	n the absence	of indicators.)	
Depth	Matrix	•		x Feature				,	
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0 - 2	2.5Y 7/1		10BG 8/	35			Clay Loam	No redox, just multiple colors in matrix	
2 - 8	5B 8/		5YR 6/8	10	С	M	Clay Loam		
8 - 12	5B 8/		5YR 6/8	10	С	M	Clay Loam		
12 - 16	5Y 6/1		7.5YR 6/6	10	С	M	Clay Loam		
8 - 12	5Y 5/1	10					Clay Loam		
2 - 8	2.5Y 6/1	10			-		Clay Loam		
	·								
					-				
					-				
1Typo: C=Co	noontration D=Don	lotion DM:	=Reduced Matrix, MS				<sup>2</sup> Location: DI	L=Pore Lining, M=Matrix.	
Hydric Soil I		letion, Rivi	=Reduced Matrix, Mi	S=IVIasket	sand Gra	ains.		L=Pore Lining, M=Matrix.  ators for Problematic Hydric Soils <sup>3</sup> :	
-			Dauls Confees	(07)				•	
Histosol			Dark Surface		oo (CO) <b>/N</b> /	U DA 447		cm Muck (A10) <b>(MLRA 147)</b> oast Prairie Redox (A16)	
	ipedon (A2)		Polyvalue Be				, 148) C	, ,	
Black His			Thin Dark Su  ✓ Loamy Gleye			47, 148)	Б	(MLRA 147, 148)	
	n Sulfide (A4)				,F2)		P	iedmont Floodplain Soils (F19)	
	Layers (A5)		Depleted Ma		-0)			(MLRA 136, 147)	
	ck (A10) (LRR N)	· (A11)	Redox Dark					ery Shallow Dark Surface (TF12)	
	l Below Dark Surface irk Surface (A12)	(A11)	Redox Depre				0	ther (Explain in Remarks)	
	lucky Mineral (S1) <b>(L</b>	DD N				I DD N			
	147, 148)	.KK N,		Iron-Manganese Masses (F12) (LRR N,					
	leyed Matrix (S4)			MLRA 136) Umbric Surface (F13) (MLRA 136, 122)  3Indicators of hydrophytic vegetation and					
	edox (S5)							tland hydrology must be present,	
-	Matrix (S6)		<ul><li>Piedmont Floodplain Soils (F19) (MLRA 14)</li><li>Red Parent Material (F21) (MLRA 127, 147</li></ul>					less disturbed or problematic.	
	ayer (if observed):		Neu i alentii	viateriai (i	Z1) (WILK	A 121, 141	7) uiii	ess disturbed of problematic.	
	ayer (ii observeu).								
Type:	de V		<del></del>					Present? Yes / No	
Depth (inc	nes).		 				Hydric Soil	Present? Yes No	
Remarks:									

Project/Site: Dickerson Power Plant	City/County: Montgomery Sampling Date: 2023-08-23
Applicant/Owner: Soltesz	State: Maryland Sampling Point: DP-1X
Investigator(s):JF, RS	Section, Township, Range:
	Local relief (concave, convex, none): Concave Slope (%): 1
· · · · · · · · · · · · · · · · · · ·	Lat: 39.21166077 Long: -77.45064773 Datum: NAD 83
Soil Map Unit Name: 21B - Penn silt loam	NWI classification:
Are climatic / hydrologic conditions on the site typi	cal for this time of year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology	
	e map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	<b>∨</b> No
Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes  Yes	Is the Sampled Area
Wetland Hydrology Present? Yes	within a Wetland? Yes No No
Remarks:	
	Aland bada la an bada abaki a an Aski a and badai a sila bada aki di
•	etland hydrology, hydrophytic vegetation, and hydric soils) were satisfied
at this data point, which characterize	es a palustrine emergent wetland in the northeastern portion of the site.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required;	heck all that apply) Surface Soil Cracks (B6)
Surface Water (A1)	True Aquatic Plants (B14) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Odor (C1) Drainage Patterns (B10)
Saturation (A3)	Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1)	Presence of Reduced Iron (C4) Dry-Season Water Table (C2)
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3)	Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	<u>✓</u> Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	<b>4</b>
	Depth (inches):
	Depth (inches):
Saturation Present? Yes No _ (includes capillary fringe)	Depth (inches): Wetland Hydrology Present? Yes No
	ng well, aerial photos, previous inspections), if available:
Remarks:	
remarks.	

Sampling	Point.	DP-1X
Samuliniu	ı FUIIII.	D

5 45 6		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 5 x 15 ft r	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 1 (A)
2				
				Total Number of Dominant
3				Species Across All Strata: 1 (B)
4			- ——	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				(**2)
				Prevalence Index worksheet:
7			<del></del>	Total % Cover of: Multiply by:
		= Total Co		OBL species 60 x 1 = 60
50% of total cover:	20% of	total cover	:	
Sapling/Shrub Stratum (Plot size: 15 ft r				FACW species $5$ $x 2 = 10$
1				FAC species $15$ $\times 3 = 45$
				FACU species $0 \times 4 = 0$
2				
3			- ——	
4				Column Totals: <u>80</u> (A) <u>115</u> (B)
5				
				Prevalence Index = B/A = 1.44
6				Hydrophytic Vegetation Indicators:
7		-		✓ 1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				
0				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
		Total Co		4 - Morphological Adaptations <sup>1</sup> (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 )				· · · · · · · · · · · · · · · · · · ·
1. Persicaria hydropiper	60	~	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2 Echinochloa crus-galli	15		FAC	
3. Persicaria pensylvanica	5	-	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
				, and the second
11	000/	-	<del></del>	Herb – All herbaceous (non-woody) plants, regardless
		Total Co		of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>40.0</u>	20% of	total cover	<u>: 16.0</u>	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30 ft r )				height.
1				Troight.
2				
3			- ——	
4				
5				Uvdrophytic
13 <u></u>				Hydrophytic Vegetation
				Vegetation
F00/ - 54-4-1		Total Co		
50% of total cover:		Total Co		Vegetation
50% of total cover:Remarks: (Include photo numbers here or on a separate s	= 20% of	Total Co		Vegetation
	= 20% of	Total Co		Vegetation
	= 20% of	Total Co		Vegetation
	= 20% of	Total Co		Vegetation
	= 20% of	Total Co		Vegetation
	= 20% of	Total Co		Vegetation
	= 20% of	Total Co		Vegetation
	= 20% of	Total Co		Vegetation
	= 20% of	Total Co		Vegetation

SOIL Sampling Point: DP-1X

Profile Desc	cription: (Describe	to the dep	th needed to docun	nent the	indicator	or confirn	n the absence	of indicators.)
Depth	Matrix			x Feature				·
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 12	7.5YR 4/2	78	7.5YR 4/4	2	С	М	Clay Loam	
0 - 12			2.5YR 3/4	20	С	M		
	-							
							·	
					·			
-								
_								
				-	· <del></del>			
				-		·		
<sup>1</sup> Type: C=Ce	oncentration, D=Dep	letion, RM:	=Reduced Matrix, MS	S=Masked	d Sand Gr	ains.		L=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indica	ators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface					cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be				, <b>148)</b> C	oast Prairie Redox (A16)
	stic (A3)		Thin Dark Su			147, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		(F2)		P	iedmont Floodplain Soils (F19)
	d Layers (A5)		<u>✓</u> Depleted Mat		-0)			(MLRA 136, 147)
	ick (A10) <b>(LRR N)</b> d Below Dark Surfac	o (A11)	Redox Dark S Depleted Dar	•				ery Shallow Dark Surface (TF12) ther (Explain in Remarks)
	ark Surface (A12)	e (ATT)	Redox Depre				0	the (Explain in Kemarks)
	lucky Mineral (S1) <b>(L</b>	RR N.	Iron-Mangan			LRR N.		
	A 147, 148)	,	MLRA 13			<b>,</b>		
	Gleyed Matrix (S4)		Umbric Surfa		(MLRA 13	6, 122)	<sup>3</sup> Ind	icators of hydrophytic vegetation and
Sandy R	Redox (S5)		Piedmont Flo	odplain S	Soils (F19)	(MLRA 14	<b>48)</b> we	tland hydrology must be present,
	l Matrix (S6)		Red Parent N	/laterial (F	21) <b>(MLR</b>	A 127, 147	<b>7</b> ) unl	ess disturbed or problematic.
	Layer (if observed):							
Type: Ro								
Depth (in	ches): 12		<u></u>				Hydric Soil	Present? Yes V No No
Remarks:							•	

Project/Site: Dickerson Power Plant	City/County	/: Montgomery	Sar	mpling Date: 2023-08-23		
Applicant/Owner: Soltesz		State				
Investigator(s):JF, RS		ownship, Range:				
Landform (hillslope, terrace, etc.): Swale						
Subregion (LRR or MLRA): S 148 Lat: 3		Long: -77.4494				
Soil Map Unit Name: 21C - Penn silt Ioam		N				
Are climatic / hydrologic conditions on the site typical for t						
Are Vegetation, Soil, or Hydrology						
Are Vegetation, Soil, or Hydrology						
SUMMARY OF FINDINGS – Attach site ma			-			
		9 point locations, t		.portant routuros, etc.		
Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes Yes	No 🗸 Is th	ne Sampled Area				
		nin a Wetland?	Yes	No 🗸		
Wetland Hydrology Present? Yes	No 🗸					
None of the three wetland parameters (i.e satisfied at this data point, which characters)	•	• • • • •	-			
HYDROLOGY						
Wetland Hydrology Indicators:		Secon	ndary Indicators	(minimum of two required)		
Primary Indicators (minimum of one is required; check a	ill that apply)	S	Surface Soil Crac	cks (B6)		
Surface Water (A1) Tr	rue Aquatic Plants (B14)	s	Sparsely Vegetated Concave Surface (B8)			
	ydrogen Sulfide Odor (C1		Drainage Patterns (B10)			
	xidized Rhizospheres on					
	resence of Reduced Iron		Dry-Season Water Table (C2)			
	ecent Iron Reduction in T		Crayfish Burrows			
	nin Muck Surface (C7)		Saturation Visible Stunted or Stress	e on Aerial Imagery (C9)		
Algal Mat or Crust (B4) Or	ther (Explain in Remarks)	· —	Stunted or Stress Geomorphic Posi	, ,		
Inundation Visible on Aerial Imagery (B7)			Shallow Aquitard			
Water-Stained Leaves (B9)			/licrotopographic			
Aquatic Fauna (B13)			AC-Neutral Tes			
Field Observations:						
Surface Water Present? Yes No D	Depth (inches):	_				
Water Table Present? Yes No <u>✓</u> □	Depth (inches):	_				
Saturation Present? Yes No C (includes capillary fringe)	Depth (inches):	_ Wetland Hydrol	ogy Present?	Yes No		
Describe Recorded Data (stream gauge, monitoring wel	l, aerial photos, previous	inspections), if available:				
Remarks:						

SOIL Sampling Point: DP 2X

Profile Desc	cription: (Describe	to the de	pth needed to docu	ment the	indicator	or confirm	n the absence o	of indicators.)	
Depth	Matrix			x Feature					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Ren	narks
0 - 10	5YR 3/2	99	7.5YR 4/6	1	<u>C</u>	M	Sandy Clay Loam		_
10 - 18	7.5YR 3/2	98	7.5YR 4/4	2	С	М	Sandy Clay Loam		
-									
		_							
			<u> </u>		· -		<u> </u>		
			· ·		· <del></del>		<del></del> -		
		_							
				-					
						_			
-									
									_
¹Type: C=C	oncentration D=De	nletion RN		S=Maske	d Sand Gr	raine	<sup>2</sup> Location: PL	=Pore Lining, M=N	Matrix
Hydric Soil		pietion, ixi	W-Reduced Matrix, W	0-Maske	u Sanu Si	airis.			ntic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	e (S7)				m Muck (A10) <b>(M</b>	•
	pipedon (A2)		Polyvalue Be		ace (S8) (I	VILRA 147		ast Prairie Redox	-
	istic (A3)		Thin Dark Su					(MLRA 147, 148)	,
	en Sulfide (A4)		Loamy Gleye	ed Matrix	(F2)			edmont Floodplain	Soils (F19)
	d Layers (A5)		Depleted Ma					(MLRA 136, 147)	
	uck (A10) <b>(LRR N)</b>	00 (111)	Redox Dark					ry Shallow Dark S ner (Explain in Re	
	d Below Dark Surfac ark Surface (A12)	ce (ATT)	Depleted Da Redox Depre				0	iei (Expiaiii iii Re	marks)
	/lucky Mineral (S1)	LRR N,	Iron-Mangan			LRR N,			
MLR	A 147, 148)		MLRA 13						
	Gleyed Matrix (S4)		Umbric Surfa						tic vegetation and
-	Redox (S5)		Piedmont Flo					and hydrology mu	
	Matrix (S6)		Red Parent I	Material (I	-21) <b>(MLR</b>	RA 127, 14	7) unle	ss disturbed or pr	oblematic.
	Layer (if observed)								
• • • • • • • • • • • • • • • • • • • •	-l \.						Hardela Oall B		N . V
	ches):						Hydric Soil P	resent? Yes_	No
Remarks:									

Samn	lina	Point:	DP 2X
Jailib	III IU	ı Ollit.	

0.00	Absolute	Dominant		Dominance Test worksheet:			
Tree Stratum (Plot size: 3x8 ft )	% Cover	Species?	<u>Status</u>	Number of Dominant Species			
1				That Are OBL, FACW, or FAC: 1 (A)			
2				Total Number of Deminant			
3				Total Number of Dominant Species Across All Strata: 2 (B)			
4				Cpcolco / tol coco / till citata.			
			· ——	Percent of Dominant Species			
5				That Are OBL, FACW, or FAC: 50 (A/E	)		
6				Prevalence Index worksheet:			
7		·					
		= Total Cov					
50% of total cover:	20% of	total cover		OBE openies X 1			
Sapling/Shrub Stratum (Plot size: 3x8 ft )				FACW species $0 \times 2 = 0$			
1				FAC species 60 x 3 = 180			
2				FACU species <u>36</u> x 4 = <u>144</u>			
				UPL species $0   x 5 = 0$			
3			· <del></del>	Column Totals: 106 (A) 334 (B)			
4				Column Totals. (A)			
5				Prevalence Index = B/A = 3.15			
6				Hydrophytic Vegetation Indicators:			
7							
8				1 - Rapid Test for Hydrophytic Vegetation			
				2 - Dominance Test is >50%			
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>			
F00/ - f t-t-1	= Total Cover			4 - Morphological Adaptations <sup>1</sup> (Provide supporting			
50% of total cover:	20% of	total cover		data in Remarks or on a separate sheet)			
Herb Stratum (Plot size: 3x8 ft )				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)			
1. Microstegium vimineum	60		FAC	1 Toblematic Trydrophytic Vegetation (Explain)			
2. Poa pratensis	15		FACU	1			
3. Persicaria hydropiperoides	10		OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
Tsuga canadensis	10		FACU		_		
5. Asclepias syriaca	2		FACU	Definitions of Four Vegetation Strata:			
6 Senecio hieraciifolius	2		FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of	r		
	2			more in diameter at breast height (DBH), regardless o			
7. Solanum carolinense			FACU	height.			
8				Sanling/Shrub Woody plants evaluding vines loss			
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1			
10				m) tall.			
11.			·				
· · · · · · · · · · · · · · · · · · ·	101%	T-4-1 O-1	· <del></del>	Herb – All herbaceous (non-woody) plants, regardless	;		
500/ of total agreem 50 5		= Total Cov total cover:		of size, and woody plants less than 3.28 ft tall.			
50% of total cover: 50.5	20% 01	total cover	20.2	Woody vine – All woody vines greater than 3.28 ft in			
Woody Vine Stratum (Plot size: 3x8 ft )	_			height.			
<sub>1.</sub> Lonicera japonica	5		FACU				
2							
3							
4	<u> </u>						
F.				Hydrophytic			
5	E 0/			Vegetation Present? Yes No _✓			
2.5		= Total Cov		riesent: iesNo			
50% of total cover: 2.5	20% of	total cover	1.0				
Remarks: (Include photo numbers here or on a separate s	heet.)				_		

Project/Site: Dickerson Power Plant	City/County: Montgom	nery	Sampling Date: 2023-08-23		
Applicant/Owner: Soltsez			Sampling Point: DP-3X		
Investigator(s). JF, RS	Section, Township, Rang				
Landform (hillslope, terrace, etc.): Swale					
Subregion (LRR or MLRA): S 148 Lat: 39.2					
000 D					
Are climatic / hydrologic conditions on the site typical for this t	me of year? Yes No	(If no, explain in Re	marks.)		
Are Vegetation, Soil, or Hydrology sig	nificantly disturbed? Are "N	Iormal Circumstances" pr	esent? Yes No		
Are Vegetation, Soil, or Hydrology nat		eded, explain any answers			
SUMMARY OF FINDINGS – Attach site map sl					
Hydrophytic Vegetation Present? Yes No	v				
	Is the Sampled A		No 🗸		
Wetland Hydrology Present? Yes ✓ No	within a Wetland				
Remarks:					
None of the three wetland parameters (i.e., w satisfied at this data point, which characterize			•		
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicate	ors (minimum of two required)		
Primary Indicators (minimum of one is required; check all that	t apply)	Surface Soil C	cracks (B6)		
	quatic Plants (B14)		Sparsely Vegetated Concave Surface (B8)		
	gen Sulfide Odor (C1)	-	Drainage Patterns (B10)		
	ed Rhizospheres on Living Roots				
	nce of Reduced Iron (C4)	•	/ater Table (C2)		
	t Iron Reduction in Tilled Soils (C6				
	luck Surface (C7) (Explain in Remarks)		ible on Aerial Imagery (C9) essed Plants (D1)		
Iron Deposits (B5)	"Explain in Remarks)	Geomorphic P			
Inundation Visible on Aerial Imagery (B7)		Shallow Aquita			
Water-Stained Leaves (B9)		<del></del> .	phic Relief (D4)		
Aquatic Fauna (B13)		FAC-Neutral T			
Field Observations:					
Surface Water Present? Yes No Depth	(inches):				
Water Table Present? Yes No Depth	(inches):				
Saturation Present? Yes No Depth (includes capillary fringe)	(inches): Wetl	land Hydrology Present	? Yes <u> </u>		
Describe Recorded Data (stream gauge, monitoring well, ae	ial photos, previous inspections),	if available:			
Damarka					
Remarks:					

#### VEGETATION (Four Strata) - Use scientific names of plants

EGETATION (Four Strata) – Use scientific n		-	la dia dia	Sampling Point: DP-3X
ree Stratum (Plot size: 3 x 30 ft r )	% Cover	Dominant Species?	Status	Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
				Total Number of Dominant Species Across All Strata: 1 (B)
			·	Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
	· <del></del>			Prevalence Index worksheet:
	· ——	= Total Cov		Total % Cover of: Multiply by:
50% of total cover:				OBL species $0   x 1 = 0$
apling/Shrub Stratum (Plot size: 15 ft r		1010.		FACW species $0   x 2 = 0$
Elaeagnus umbellata	5	~	UPL	FAC species $\frac{1}{x^3} = \frac{3}{x^3}$
	· -			FACU species $1 \times 4 = 4$
		-	·	UPL species <u>5</u>
		-		Column Totals: <u>7</u> (A) <u>32</u> (B)
				Prevalence Index = B/A = 4.57
				Hydrophytic Vegetation Indicators:
	· <del></del>			1 - Rapid Test for Hydrophytic Vegetation
	· <del></del>		· -	2 - Dominance Test is >50%
	E 0/			3 - Prevalence Index is ≤3.0 <sup>1</sup>
500/ 51 1 25		= Total Cov		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: 2.5	20% of	total cover	1.0	data in Remarks or on a separate sheet)
erb Stratum (Plot size: 5 ft r ) Acer rubrum	1		FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Perilla frutescens	1		FACU	
r cilia il utescells	· <u>'</u>			<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
				Tree Mondy plants evaluating vince 2 in (7.6 cm) of
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
				height.
				Sapling/Shrub – Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1
)				m) tall.
l				Herb – All herbaceous (non-woody) plants, regardless
		= Total Cov		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 1.0	20% of	total cover	0.4	Woody vine – All woody vines greater than 3.28 ft in
/oody Vine Stratum (Plot size: 30 ft r )				height.
			·	
			·	
				Hydrophytic
				Vegetation
		= Total Cov		Present? Yes No
50% of total cover:	20% of	total cover		

SOIL Sampling Point: DP-3X

Profile Desc	cription: (Describe	to the dep	h needed to docun	nent the i	ndicator	or confirm	the abse	ence of indicat	ors.)	
Depth	Matrix			x Feature:						
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Textur</u>	<u>e</u>	Remarks	
0 - 5	10YR 3/2	100					Clay Lo	am		
-		- · ·			·			· ·		_
		· ——								
								<del></del>		
-										
		-								
-										
							-			
	oncentration, D=Dep	letion, RM=	Reduced Matrix, MS	S=Masked	Sand Gra	ains.		n: PL=Pore Lin		
Hydric Soil							Ir	ndicators for P		
Histosol			Dark Surface				_	2 cm Muck (	· , •	•
	pipedon (A2)		Polyvalue Be				148) _	Coast Prairi	, ,	
	istic (A3)		Thin Dark Su			47, 148)		(MLRA 1		
	en Sulfide (A4)		Loamy Gleye		F2)		_		oodplain Soils	(F19)
	d Layers (A5)		Depleted Ma	, ,				(MLRA 1		
	uck (A10) (LRR N)	(* ( )	Redox Dark S	•			_		w Dark Surface	
	d Below Dark Surfac	e (A11)	Depleted Dar				_	Other (Expla	ain in Remarks	)
	ark Surface (A12) ⁄lucky Mineral (S1) <b>(I</b>	DD N	Redox Depre			DD N				
	A 147, 148)	LKK N,	MLRA 13		es (F12) <b>(1</b>	LKK N,				
	Gleyed Matrix (S4)		Umbric Surfa		MI DA 13	6 122)		<sup>3</sup> Indicators of h	ovdrophytic ver	retation and
	Redox (S5)		Piedmont Flo				181		ology must be	
-	Matrix (S6)		Red Parent N						ped or problem	
	Layer (if observed):		rear arener	naterial (i	21) (IIII21C	. 127, 147	· /	arricoo diotari	oca or problem	auto.
Type: Ro		ı								
			<del></del>				l	0 11 5 40	.,	🗸
Depth (in	cnes): 3						Hydric	Soil Present?	Yes	No 🗸
Remarks:										

## WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Dickerson Power Plant	City/County: Montgomery	Sampling Date: 2023-09-06
Applicant/Owner: Soltesz		State: Maryland Sampling Point: DP4
Investigator(s):MF/HK	Section, Township, Range: Dick	kerson
Landform (hillslope, terrace, etc.): Terrace		
Subregion (LRR or MLRA): S 148 Lat: 39		5823707 Datum: NAD 83
Soil Map Unit Name: Brentsville sandy loam		
Are climatic / hydrologic conditions on the site typical for thi	s time of year? Yes No (If	no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologys		_
Are Vegetation, Soil, or Hydrology r	naturally problematic? (If needed, exp	olain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing sampling point location	s, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No	
Trydrophlytic vegetation i resent:	Is the Sampled Area	
Trydric doi: 1 resent:	within a Wetland?	Yes No
Remarks:		
All three wetland parameters (i.e., wetland		
at this data point, which characterizes a pa	lustrine forested wetland in the s	outhern portion of the study area.
HYDROLOGY		
Wetland Hydrology Indicators:	<u>S</u>	econdary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all	that apply)	_ Surface Soil Cracks (B6)
Surface Water (A1) True	e Aquatic Plants (B14)	_ Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hyd	rogen Sulfide Odor (C1)	_ Drainage Patterns (B10)
Saturation (A3)	dized Rhizospheres on Living Roots (C3)	_ Moss Trim Lines (B16)
Water Marks (B1) Pres	sence of Reduced Iron (C4)	_ Dry-Season Water Table (C2)
Sediment Deposits (B2) Rec	ent Iron Reduction in Tilled Soils (C6)	_ Crayfish Burrows (C8)
Drift Deposits (B3) Thir	n Muck Surface (C7)	_ Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Oth	er (Explain in Remarks)	_ Stunted or Stressed Plants (D1)
Iron Deposits (B5)	<u>.</u>	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)		_ Shallow Aquitard (D3)
Water-Stained Leaves (B9)	<del>-</del>	Microtopographic Relief (D4)
Aquatic Fauna (B13)	<u>-</u>	FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes No De		
Water Table Present? Yes No De	· · · · · · · · · · · · · · · · · · ·	
Saturation Present? Yes No De (includes capillary fringe)	pth (inches): 10 Wetland Hyd	drology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well,	aerial photos, previous inspections), if availa	ble:
Remarks:		
remand.		

Sam	olina	Point:	DP4
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20.4	Absolute	Dominant		Dominance Test worksheet:	
Tree Stratum (Plot size: 30 ft r		Species?		Number of Dominant Species	
1. Quercus palustris	15		FACW	That Are OBL, FACW, or FAC: 4	(A)
2. Acer rubrum	10		FAC	Total Number of Dominant	
3. Liriodendron tulipifera	5		FACU		(B)
4				D 4 (D 1 40 1	
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00	A/B)
6				mat Ale OBE, I AOW, OI I AO.	(7/0)
7.				Prevalence Index worksheet:	
	30	= Total Cov		Total % Cover of: Multiply by:	
50% of total cover: 15.00				OBL species 0 x 1 = 0	
Sapling/Shrub Stratum (Plot size: 15 ft r )	20 /0 01	total cover.		FACW species 27 x 2 = 54	
1. Quercus palustris	10	~	FACW	FAC species 17 x 3 = 51	
	5		FAC	FACU species $\frac{7}{28}$	
2. Acer rubrum			FAC	UPL species $0 \times 5 = 0$	
3. Elaeagnus umbellata	2			Column Totals: 51 (A) 133	<b>(D)</b>
4. Juniperus virginiana	2		FACU	Column Totals: 51 (A) 133	(B)
5. Quercus velutina	2			Prevalence Index = B/A = 2.61	
6					
7				Hydrophytic Vegetation Indicators:	
8				1 - Rapid Test for Hydrophytic Vegetation	
				2 - Dominance Test is >50%	
9	21 :			✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
50% of total cover: 10.50		= Total Cov		4 - Morphological Adaptations <sup>1</sup> (Provide suppo	orting
	20% 01	total cover.		data in Remarks or on a separate sheet)	
Herb Stratum (Plot size: 5 ft r )	2		FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	)
1. Agrostis capillaris	2 2				<i>'</i>
2. Phragmites australis	2		FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology mu	ıet
3				be present, unless disturbed or problematic.	131
4				Definitions of Four Vegetation Strata:	
5				Dominiono or rodi rogotation otratar	
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm	
7				more in diameter at breast height (DBH), regardles height.	ss of
				neight.	
8				Sapling/Shrub – Woody plants, excluding vines, le	ess
9				than 3 in. DBH and greater than or equal to 3.28 ft	(1
10				m) tall.	
11				Herb – All herbaceous (non-woody) plants, regard	less
		= Total Cov		of size, and woody plants less than 3.28 ft tall.	
50% of total cover: 2.00	20% of	total cover:	0.80	Woody vine – All woody vines greater than 3.28 ft	in
Woody Vine Stratum (Plot size: 30 ft r )				height.	
1					
2					
3					
4					
T				Hydrophytic	
5	0 .			Vegetation Present? Yes ✓ No	
500/ -54-4-1 0.00		= Total Cov		103 103	
50% of total cover: 0.00		total cover:	0.00		
Remarks: (Include photo numbers here or on a separate s	heet.)				

SOIL Sampling Point: DP4

Profile Desc	ription: (Describe	to the dep	th needed to docur	ment the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix			x Features			_	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0 - 2								Duff
2 - 5	10YR 4/4	100					Sandy Loam	
5 - 8	7.5YR 4/3	95	7.5YR 5/8	5	С	М	Silt Loam	
8 - 16	10YR 4/1	90	7.5YR 4/4	10	С	М	Silty Clay	
								·
					<u>,                                      </u>			
¹Type: C=Co	ncentration D=Den	letion RM:	=Reduced Matrix, M	S=Masked	Sand Gr	ains	<sup>2</sup> I ocation: P	L=Pore Lining, M=Matrix.
Hydric Soil I		iodon, raw	rteadea matrix, m	O WIGORCO	ound On	aii 10.		ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	e (S7)				cm Muck (A10) (MLRA 147)
	ipedon (A2)		Polyvalue Be		ce (S8) <b>(N</b>	ILRA 147,		coast Prairie Redox (A16)
Black His			Thin Dark Su			47, 148)		(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye		F2)		P	iedmont Floodplain Soils (F19)
	Layers (A5)		Depleted Ma		.0)			(MLRA 136, 147)
	ck (A10) <b>(LRR N)</b> I Below Dark Surface	- (Δ11)	Redox Dark Depleted Da		,			ery Shallow Dark Surface (TF12) other (Explain in Remarks)
	rk Surface (A12)	S (7 (1 1)	Redox Depre		. ,		_ ~	and (Explain in remains)
	lucky Mineral (S1) (L	RR N,	Iron-Mangan			LRR N,		
MLRA	147, 148)		MLRA 13	6)				
	leyed Matrix (S4)		Umbric Surfa					icators of hydrophytic vegetation and
	edox (S5)		Piedmont Flo					tland hydrology must be present,
	Matrix (S6)		Red Parent N	Material (F	21) <b>(MLR</b>	A 127, 147	7) un	less disturbed or problematic.
	ayer (if observed):							
Type:	.l \.						Usadala Osii	Present? Yes V No No
Depth (inc	cnes):						Hydric Soil	Present? Yes V No No
Remarks:								

## WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Dickerson Power Plant	City/County: Montgomery Sampling Date: 2023-09-0				
Applicant/Owner: Soltesz		State: Maryland	Sampling Point: DP5		
Investigator(s):MF/MK	Section, Township, Ra				
Landform (hillslope, terrace, etc.): Terrace			Slope (%): 3		
Subregion (LRR or MLRA): S 148 Lat: 39.	20532052 Lon	g: <u>-77.45842549</u>	Datum: NAD 83		
Soil Map Unit Name: Brentsville sandy loam		NWI classification	on: None		
Are climatic / hydrologic conditions on the site typical for this	s time of year? Yes No	(If no, explain in Rem	arks.)		
Are Vegetation, Soil, or Hydrologys	ignificantly disturbed? Are "	Normal Circumstances" pres	sent? Yes 🖍 No		
Are Vegetation, Soil, or Hydrologyn		eded, explain any answers i			
SUMMARY OF FINDINGS – Attach site map	showing sampling point l	ocations, transects, i	mportant features, etc.		
Hydric Soil Present? Yes N	Is the Sampled within a Wetlar		No 🗸		
Only one (i.e., wetland hydrology, hydrophy was satisfied at this data point, which chara area.			-		
HYDROLOGY					
High Water Table (A2) Hydi Saturation (A3) Oxid Water Marks (B1) Pres Sediment Deposits (B2) Rec Drift Deposits (B3) Thin Algal Mat or Crust (B4) Othe Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13)	hat apply) Aquatic Plants (B14) rogen Sulfide Odor (C1) lized Rhizospheres on Living Root ence of Reduced Iron (C4) ent Iron Reduction in Tilled Soils (Control of the Carlo o	Sparsely Vegeta Drainage Patter s (C3) Moss Trim Linea Dry-Season Wa C6) Crayfish Burrow Saturation Visib	ated Concave Surface (B8) ns (B10) s (B16) ter Table (C2) rs (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2) d (D3) ic Relief (D4)		
Field Observations:  Surface Water Present? Yes No Dep Water Table Present? Yes No Dep Saturation Present? Yes No Dep (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, a	oth (inches): We	tland Hydrology Present? ), if available:	Yes No		
Remarks:					

Samp	lina	Point:	DP5
Sallib	mu	r onn.	

00.6	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30 ft r )		Species?		Number of Dominant Species	
1. Quercus palustris	40		FACW	That Are OBL, FACW, or FAC: 3	(A)
2				Total Neverban of Dansin and	
3			·	Total Number of Dominant Species Across All Strata: 5 (	(B)
4				operico / Gross / Gros	(5)
				Percent of Dominant Species	
5				That Are OBL, FACW, or FAC: 60.00	(A/B)
6				Prevalence Index worksheet:	
7					
		= Total Cov		Total % Cover of: Multiply by:	
50% of total cover: 20.00	20% of	total cover:	8.00	OBL species $0 \times 1 = 0$	
Sapling/Shrub Stratum (Plot size: 15 ft r				FACW species $45$ $\times 2 = 90$	
1. Acer rubrum	15	<b>✓</b>	FAC	FAC species 15 x 3 = 45	
2. Juniperus virginiana	10		FACU	FACU species 32 x 4 = 128	
	2			UPL species 0 x 5 = 0	
3. Pinus virginiana	2		<u></u>	00 000	(D)
4. Sassafras albidum			FACU	Column Totals: 92 (A) 263	(B)
5				Prevalence Index = B/A = 2.86	
6					
7				Hydrophytic Vegetation Indicators:	
				1 - Rapid Test for Hydrophytic Vegetation	
8				✓ 2 - Dominance Test is >50%	
9	20			3 - Prevalence Index is ≤3.0 <sup>1</sup>	
		= Total Cov		4 - Morphological Adaptations <sup>1</sup> (Provide suppo	orting
50% of total cover: <u>14.50</u>	20% of	total cover:	5.60	data in Remarks or on a separate sheet)	
Herb Stratum (Plot size: 5 ft r				Problematic Hydrophytic Vegetation¹ (Explain)	,
1. Lolium perenne	20		FACU	Problematic Hydrophytic Vegetation (Explain)	)
2. Phragmites australis	5	<b>✓</b>	FACW		
3				<sup>1</sup> Indicators of hydric soil and wetland hydrology mu	ust
4				be present, unless disturbed or problematic.	
4				Definitions of Four Vegetation Strata:	
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cn	m) or
6				more in diameter at breast height (DBH), regardles	
7				height.	
8					
9				Sapling/Shrub – Woody plants, excluding vines, lethan 3 in. DBH and greater than or equal to 3.28 ft	ess
· · ·				m) tall.	. (1
10				Tri) tall.	
11				Herb – All herbaceous (non-woody) plants, regard	less
		= Total Cov		of size, and woody plants less than 3.28 ft tall.	
50% of total cover: <u>12.50</u>	20% of	total cover:	5.00	Woody vine – All woody vines greater than 3.28 ft	tin
Woody Vine Stratum (Plot size: 30 ft r )				height.	
1					
2					
3					
4				Hydrophytic	
5				Vegetation	
		= Total Cov		Present? Yes No	
50% of total cover: 0.00	20% of	total cover:	0.00		
Remarks: (Include photo numbers here or on a separate s	heet.)			<u>. L</u>	

SOIL Sampling Point: DP5

Profile Desc	ription: (Describe	to the dep	th needed to docur	nent the i	ndicator	or confirm	the absence of	indicators.)
Depth	Matrix			x Feature:				
(inches) 0 - 2	Color (moist) 10YR 5/6	<u>%</u> 100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture Silt Loam	Remarks
2-8			10VD F/6	20		<u></u>		
	10YR 4/4	70	10YR 5/6	30	<u>C</u>	M	Silt Loam	
8 - 15	10YR 4/4	90	10YR 5/6	10	С	<u>M</u>	Silt Loam	
15 - 17	7.5YR 5/3	70	7.5YR 5/6	20	<u>C</u>	M	Silty Clay Loam	
15 - 17			10YR 5/1	10	D	M	Silty Clay Loam	
-								
-								
	-							
1 <sub>Type:</sub> C=Ce	noontration D=Don	lotion DM	=Reduced Matrix, MS	=-Maakad	L Cond Cr		<sup>2</sup> Location: DL = D	Pore Lining, M=Matrix.
Hydric Soil I		ielion, Rivi	-Reduced Matrix, Mis	5-Masked	i Sariu Gra	ali 15.		rs for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(S7)				Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be		ce (S8) <b>(N</b>	ILRA 147,		st Prairie Redox (A16)
Black His	• •		Thin Dark Su			47, 148)		ILRA 147, 148)
	n Sulfide (A4)		Loamy Gleye	,	F2)			mont Floodplain Soils (F19)
	l Layers (A5) ck (A10) <b>(LRR N)</b>		Depleted Ma Redox Dark \$		:6)			ILRA 136, 147) Shallow Dark Surface (TF12)
	Below Dark Surface	e (A11)	Depleted Dai	•	,			er (Explain in Remarks)
	rk Surface (A12)	, ,	Redox Depre	essions (F	8)			,
-	lucky Mineral (S1) (L	.RR N,	Iron-Mangan		es (F12) <b>(</b>	LRR N,		
	147, 148)		MLRA 13		MI DA 42	e 422)	3 Indiant	tors of hydrophytic vegetation and
-	leyed Matrix (S4) edox (S5)		Umbric Surfa Piedmont Flo					tors of hydrophytic vegetation and nd hydrology must be present,
	Matrix (S6)		Red Parent N					s disturbed or problematic.
	_ayer (if observed):				, ,		,	'
Type:								
Depth (inc	ches):						Hydric Soil Pre	esent? Yes No 🗸
Remarks:							I	

## WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Dickerson Power Plant	City/County: Mo	ntgomery	Sampling Date: 2023-09-06
Applicant/Owner: Soltesz		State: Maryla	
Investigator(s):MF/MK	Section, Townsh	ip, Range: Dickerson	
	Local relief (concave	·	Slope (%): 3
Subregion (LRR or MLRA): S 148 Lat			Datum: NAD 83
Soil Map Unit Name: Brentsville sandy loam		NWI classific	
Are climatic / hydrologic conditions on the site typical f	or this time of year? Yes	No (If no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circumstances"	present? Yes No
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site n			
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?  Remarks:  Yes Yes Yes Yes	No Is the Sar No within a \	npled Area Vetland? Yes	No
Only two (i.e., wetland hydrology, hydrowere satisfied at this data point, which area.  HYDROLOGY			•
		Cocondon India	atora (minimum of two required)
Wetland Hydrology Indicators:	k all that apply)	Secondary Indicates	ators (minimum of two required)
Primary Indicators (minimum of one is required; chec Surface Water (A1)	True Aquatic Plants (B14)		getated Concave Surface (B8)
	Hydrogen Sulfide Odor (C1)		atterns (B10)
	Oxidized Rhizospheres on Living		
	Presence of Reduced Iron (C4)		Water Table (C2)
	Recent Iron Reduction in Tilled S		
	Thin Muck Surface (C7)		isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Stunted or S	Stressed Plants (D1)
Iron Deposits (B5)		Geomorphic	Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Aqu	uitard (D3)
Water-Stained Leaves (B9)		Microtopogr	aphic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutra	I Test (D5)
Field Observations:			
<u> </u>	Depth (inches):		
	Depth (inches):		
Saturation Present? Yes No	Depth (inches): 14	Wetland Hydrology Prese	nt? Yes No
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspe	ctions), if available:	
Remarks:			

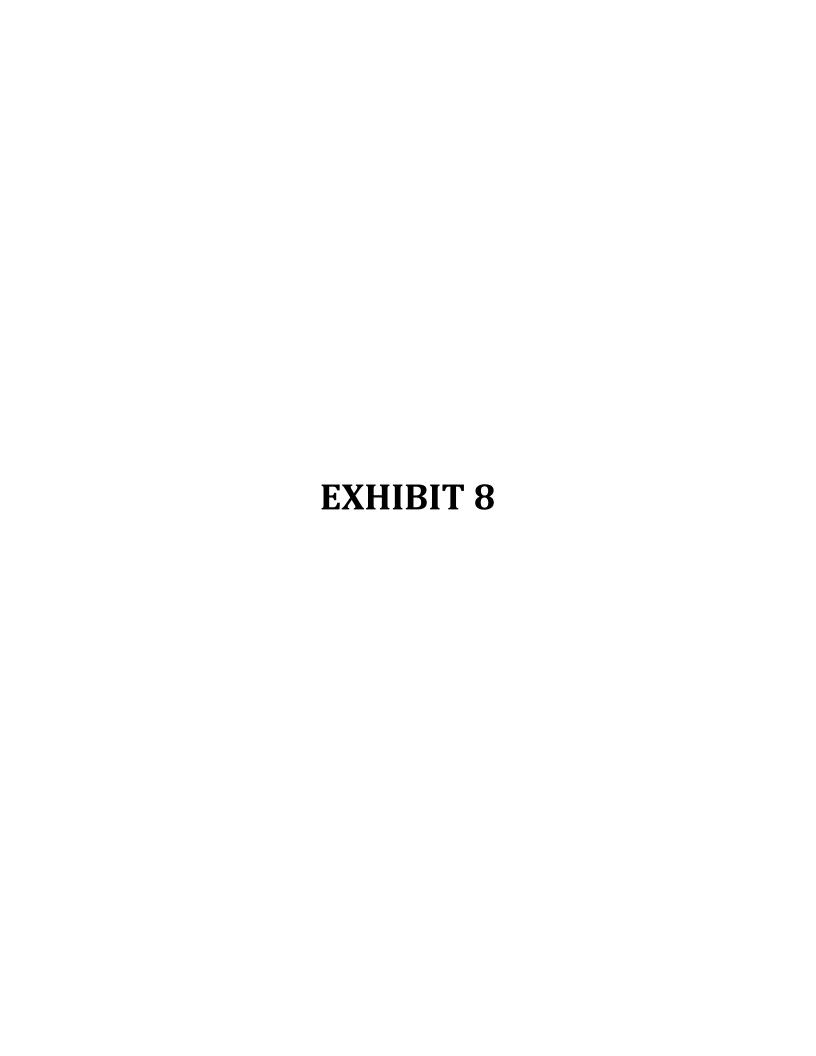
### **VEGETATION** (Four Strata) – Use scientific names of plants.

Sampling	Point:	DP6

Tree Stratum (Plot size: 30 ft r )	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft r )  1. Prunus serotina	10	Species? ✓	FACU	Number of Dominant Species That Are OBL_FACW_or FAC: 3 (A)
2. Diospyros virginiana	5		FAC	That Are OBL, FACW, or FAC: $3$ (A)
			IAC	Total Number of Dominant
				Species Across All Strata: 5 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 60.00 (A/B)
6				Prevalence Index worksheet:
7				
		= Total Cov		
50% of total cover: 7.50	20% of	total cover:	3.00	x :
Sapling/Shrub Stratum (Plot size: 15 ft r				FACW species $\frac{72}{200}$ x 2 = $\frac{144}{100}$
1. Diospyros virginiana	35		FAC	FAC species $60   x 3 = 180$
2. Prunus serotina	15		FACU	FACU species 47 x 4 = 188
3. Juniperus virginiana	10		FACU	UPL species <u>0</u>
4. Elaeagnus umbellata	5			Column Totals: <u>179</u> (A) <u>512</u> (B)
5				2.00
6				Prevalence Index = B/A = 2.86
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9	- CE			3 - Prevalence Index is ≤3.0 <sup>1</sup>
700/ 6/ 1 20 50		= Total Cov		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: <u>32.50</u>	20% of	total cover:	13.00	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft r )	0.5	,	E A O\A/	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. Phragmites australis	65		FACW	residuate riyaropriyae vegetateri (Explain)
2. Microstegium vimineum	15		FAC	Indicators of hydric soil and watland hydrology must
3. Potentilla indica	10		FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Acer rubrum	5		FAC	Definitions of Four Vegetation Strata:
5. Juncus effusus	5		FACW	John Mone of Four Togotation Guata.
6. Boehmeria cylindrica	2		FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7 Parthenocissus quinquefolia	2		FACU	more in diameter at breast height (DBH), regardless of height.
8				noight.
9				Sapling/Shrub – Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				m) tall
11	104			Herb – All herbaceous (non-woody) plants, regardless
50% of total cover: 52.00		= Total Cover:		of size, and woody plants less than 3.28 ft tall.
	20% 01	total cover.	20.00	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30 ft r )				height.
1,				
2				
3				
4				Hydrophytic
5				Vegetation
		= Total Cov		Present? Yes V No No
50% of total cover: 0.00	20% of	total cover:	0.00	
Remarks: (Include photo numbers here or on a separate s	heet.)			
Remarks: (Include photo numbers here or on a separate s	heet.)			

SOIL Sampling Point: DP6

Profile Desc	ription: (Describe	to the dep	th needed to docur	nent the i	ndicator	or confirn	n the absence	e of indicators.)
Depth	Matrix			x Feature				,
(inches)	Color (moist)	<u></u> %	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 11	7.5YR 4/4	90	5YR 5/8	10	С	М	Loam	
11 - 16	10G 4/1	90	7.5YR 4/4	10	С	М	Silt Loam	
			<u> </u>					
-								
<del></del>								
¹Type: C=Cd	oncentration D=Deni	letion RM:	=Reduced Matrix, MS	S=Masker	I Sand Gr	ains	<sup>2</sup> Location: F	PL=Pore Lining, M=Matrix.
Hydric Soil		iction, raw	-reduced Matrix, Mic	J-Washet	d Carla Cir	aii 13.	Indic	eators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(S7)				2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be		ce (S8) (N	ILRA 147.		Coast Prairie Redox (A16)
Black Hi			Thin Dark Su					(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye				F	Piedmont Floodplain Soils (F19)
Stratified	l Layers (A5)		Depleted Ma	trix (F3)				(MLRA 136, 147)
	ck (A10) (LRR N)		Redox Dark					Very Shallow Dark Surface (TF12)
	Below Dark Surface	e (A11)	Depleted Da				(	Other (Explain in Remarks)
	ark Surface (A12)	DD 11	Redox Depre			. DD M		
	lucky Mineral (S1) <b>(L</b> <b>\ 147, 148)</b>	.KK N,	Iron-Mangan MLRA 13		es (F12) (	LKK N,		
	Bleyed Matrix (S4)		Umbric Surfa		MIRA 13	6 122)	3Inc	dicators of hydrophytic vegetation and
-	ledox (S5)		Piedmont Flo					etland hydrology must be present,
-	Matrix (S6)		Red Parent N					nless disturbed or problematic.
	_ayer (if observed):				, <b>,</b>		1	p
Type:								
	ches):						Hydric Soi	I Present? Yes ✓ No
Remarks:							, ,	
rtemarks.								





1. View of soil profile at Data Point 1 (08/23/23).



2. View of vegetation at Data Point 1 (08/23/23).



3. View of soil profile at Data Point 2 (08/23/23).



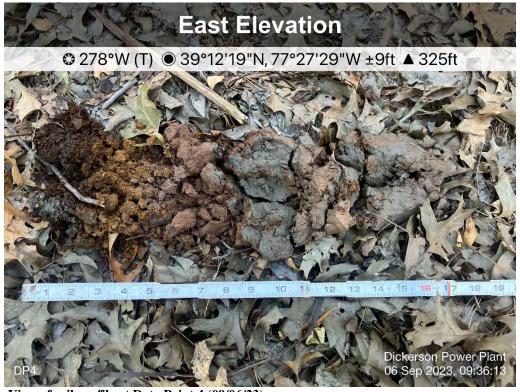
4. View of vegetation at Data Point 2 (08/23/23).



5. View of soil profile at Data Point 3 (08/23/23).



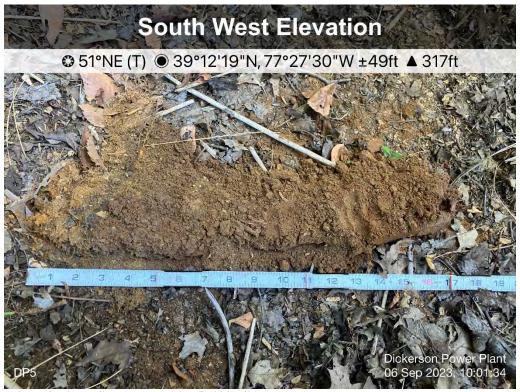
6. View of vegetation at Data Point 3 (08/23/23).



7. View of soil profile at Data Point 4 (09/06/23).



8. View of vegetation at Data Point 4 (09/06/23).



9. View of soil profile at Data Point 5 (09/06/23).



0. View of vegetation at Data Point 5 (09/06/23).





View of vegetation at Data Point 6 (09/06/23).



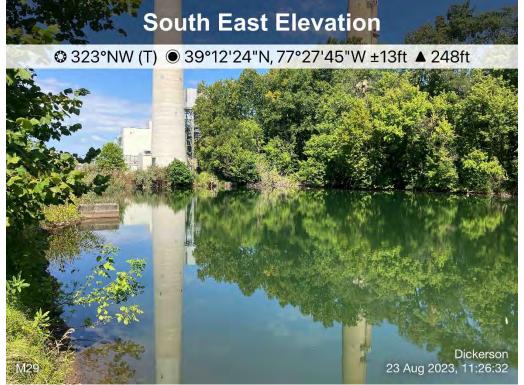
13. View of concrete-lined stormwater management basin (08/23/23).



14. View of perennial stream channel located in the northwestern portion of the site (08/23/23).



15. View of man-made, in-line pond near flag L-21 (08/23/23).



16. View of man-made, power plant water storage pond at flag M-29 (08/23/23).



17. View of lower man-made, power plant water storage pond at flag S5 (08/23/23).



18. View of man-made concrete lined water storage pond – not flagged (08/23/23).



19. View of off-line, man-made stormwater management pond with rip-rap outfall (08/23/23).



20. Downslope view of palustrine forested wetland near flag O32 (08/23/23).



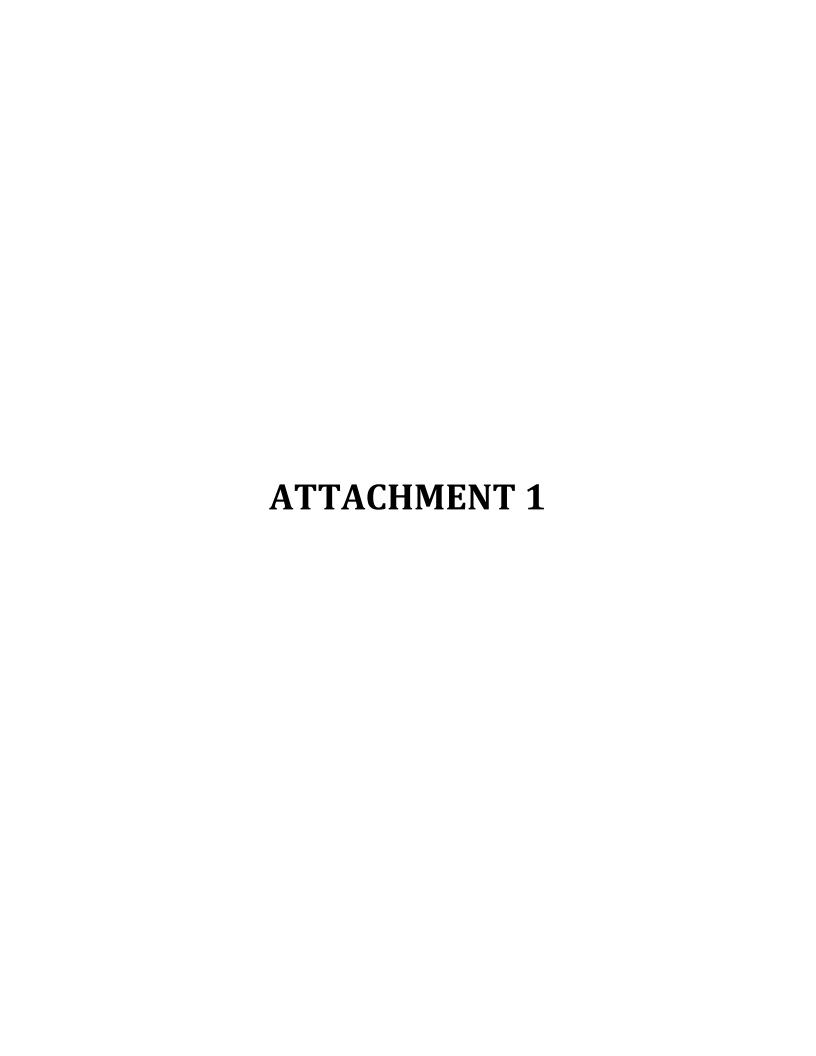
21. View of man-made stormwater management pond in the central, eastern portion of the site (08/23/23).

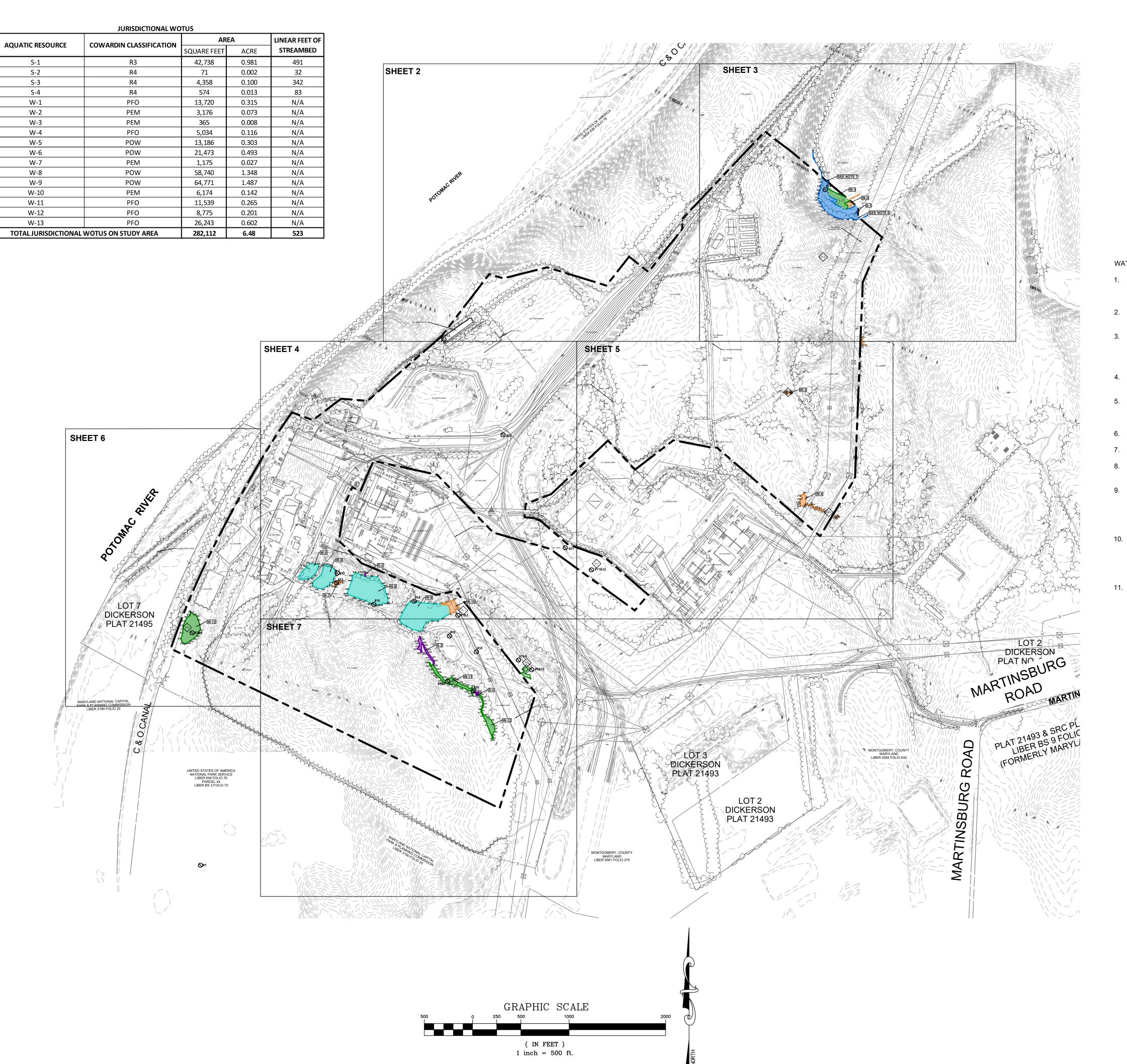


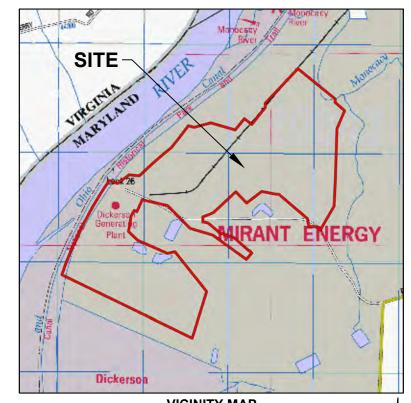
22. View of typical concrete-lined ditch in the central portion of the site (08/23/23).



23. View of palustrine emergent wetland (R flag series) in the southern portion of the site (08/23/23).







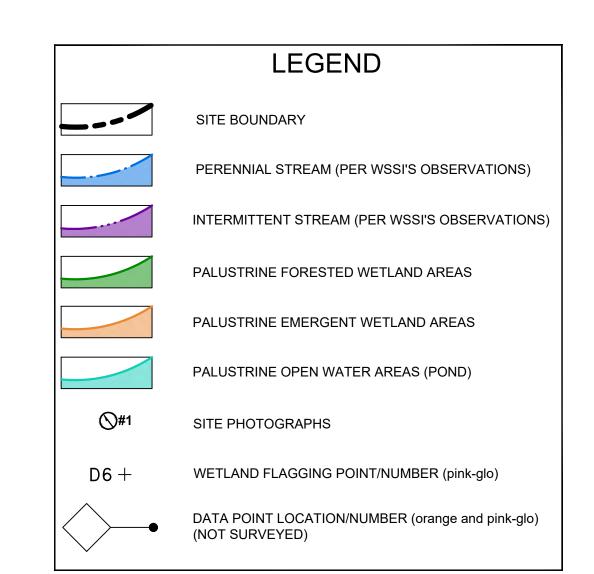
VICINITY MAP

SCALE: 1" = 2,000"

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PERMITTED USE NUMBER 20711184

## WATERS OF THE U.S. DELINEATION AND SURVEY NOTES:

- Periodic flag numbers are shown depicting the survey-located boundary of wetlands and other waters of the U.S. (i.e., streams, ponds, etc.). Waters of the U.S. flags are pink-glo in color. Data points are flagged with orange-glo and pink-glo flagging tied together.
- 2. Topo/boundary information obtained in digital format from Montgomery County digital data was used as a base for this Attachment.
- 3. This delineation was performed pursuant to the "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1 (1987 Manual) and subsequent guidance and modification by the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Version 2.0) dated April 2012.
- 4. Field work was performed on August 23, 2023 by Michael J. Klebasko, P.W.S., Jennifer M. Favela, P.W.S., Marius Flemmer, W.P.I.T., Tom Ballinger, and Dan Lekites.
- The site drains to the Little Monocacy River (8 DIGIT HUC 02070008) and an Unnamed Tributary to Potomac River (8 DIGIT HUC - 02070008) are classified as Use I-P waterways per the Code of Maryland Regulations (COMAR) 26.08.02.08.
- 6. This water of the U.S. (i.e., stream or wetland) originates outside of the study area, upslope.
- 7. This water of the U.S. (i.e., stream or wetland) continues outside of the study area, downslope.
- 8. Ponds, such as the three in the southern part of the site, that were created on-line in stream channels are generally considered jurisdictional waters of the U.S.
- 9. The terms "Intermittent" and "Perennial" used on this Attachment classify and describe the flow regime character of streams, are based on WSSI's field observations, and are only provided for state and local regulatory purposes. The flow regimes of streams are not verified by the COE; however, the geographic limits of these streams are all subject to COE jurisdiction, and the COE's approval of this delineation represents only the approval of the geographic limits of waters of the U.S.
- 10. WSSI has delineated and surveyed the outer limits of jurisdictional areas within the project site. Many of the jurisdictional areas on the site are composed of systems containing different wetland (i.e., PFO and PEM) and stream (i.e., R3 and R4) types. The approximate limits of the different wetland and stream types within the surveyed jurisdictional areas are depicted as a thin colored line of the associated wetland or
- 11. Total Site Area: 291.72 acres



# COWARDIN CLASSIFICATION

R3	RIVERINE UPPER PERENNIAL
R4	RIVERINE INTERMITTENT
PFO	PALUSTRINE FORESTED WETLAND
PEM	PALUSTRINE EMERGENT WETLAND
POW	PALUSTRINE OPEN WATER

Shudies and Solutions, Inc.

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WATEKS OF THE U.S. (INCLUDING WETLANDS) DELINEATI

MD2258.01

Prepared For: Soltesz

Dickerson Power Plant

Montgomery County, Maryland

Z	lo.	Date	No. Date Description		Rev. By	Rev. App. By By
D	AT	E: Sept	DATE: September 15, 2023	SCALE: 1" = 100' C.I.: 2'	2,	

Horizontal Datum: NAD83

Vertical Datum: NAVD89
Boundary and Topo Source:

Montgomery County GIS

Design Draft Approved

MF MF MJK

Sheet #

1 of 7

2023-09-11\_Dickerson\_Wet Del\_LOD ONLY.dwg

Computer File Name:

