

DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT 4155 EAST CLAY STREET VICKSBURG, MISSISSIPPI 39183

CEMVK-RD

29 May 2024

MEMORANDUM FOR RECORD

SUBJECT: US Army Corps of Engineers (Corps) Pre-2015 Regulatory Regime Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023),¹ MVK-2024-79

BACKGROUND. An Approved Jurisdictional Determination (AJD) is a Corps document stating the presence or absence of waters of the United States on a parcel or a written statement and map identifying the limits of waters of the United States on a parcel. AJDs are clearly designated appealable actions and will include a basis of JD with the document.² AJDs are case-specific and are typically made in response to a request. AJDs are valid for a period of five years unless new information warrants revision of the determination before the expiration date or a District Engineer has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.³ For the purposes of this AJD, we have relied on section 10 of the Rivers and Harbors Act of 1899 (RHA),⁴ the Clean Water Act (CWA) implementing regulations published by the Department of the Army in 1986 and amended in 1993 (references 2.a. and 2.b. respectively), the 2008 Rapanos-Carabell guidance (reference 2.c.), and other applicable guidance, relevant case law and longstanding practice, (collectively the pre-2015 regulatory regime), and the Sackett decision (reference 2.d.) in evaluating jurisdiction.

This Memorandum for Record (MFR) constitutes the basis of jurisdiction for a Corps AJD as defined in 33 CFR §331.2. The features addressed in this AJD were evaluated consistent with the definition of "waters of the United States" found in the pre-2015 regulatory regime and consistent with the Supreme Court's decision in *Sackett*. This AJD did not rely on the 2023 "Revised Definition of 'Waters of the United States,'" as amended on 8 September 2023 (Amended 2023 Rule) because, as of the date of this decision, the Amended 2023 Rule is not applicable in Mississippi due to litigation.

1. SUMMARY OF CONCLUSIONS.

¹ While the Supreme Court's decision in *Sackett* had no effect on some categories of waters covered under the CWA, and no effect on any waters covered under RHA, all categories are included in this Memorandum for Record for efficiency.

^{2 33} CFR 331.2.

³ Regulatory Guidance Letter 05-02.

⁴ USACE has authority under both Section 9 and Section 10 of the Rivers and Harbors Act of 1899 but for convenience, in this MFR, jurisdiction under RHA will be referred to as Section 10.

a. Provide a list of each individual feature within the review area and the jurisdictional status of each one (i.e., identify whether each feature is/is not a water of the United States and/or a navigable water of the United States

Waters Name	Туре	Amount	Units	Latitude	Longitude	Status
MVK-2024-79 Wetland 3	PEM	0.829327	Acres	34.69328	-89.983429	Non-Jurisdictional
MVK-2024-79 Other Waters 1	R6	382	Feet	34.69279	-89.990198	Non-Jurisdictional

2. REFERENCES.

- a. Final Rule for Regulatory Programs of the Corps of Engineers, 51 FR 41206 (November 13, 1986).
- b. Clean Water Act Regulatory Programs, 58 FR 45008 (August 25, 1993).
- c. U.S. EPA & U.S. Army Corps of Engineers, Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States & Carabell v. United States* (December 2, 2008)
- d. Sackett v. EPA, 598 U.S. _, 143 S. Ct. 1322 (2023)

3. REVIEW AREA.

The subject property is located along the north side of Central Avenue partially in the Town of Coldwater and partially in Tate County, Mississippi and consists of approximately 119.80 acres. More specifically, the property is situated in Section 36, Township 4 South, Range 8 West and Section 31, Township 4 South, Range 7 West, Tate County, Mississippi. The property consists of predominately agricultural fields on the eastern side of the property with a small portion of forested habitat along the western portion of the property.

4. NEAREST TRADITIONAL NAVIGABLE WATER (TNW), INTERSTATE WATER, OR THE TERRITORIAL SEAS TO WHICH THE AQUATIC RESOURCE IS CONNECTED. The Nearest downstream Section 10 TNW is the Coldwater River. CEMVK-RD SUBJECT: Pre-2015 Regulatory Regime Approved Jurisdictional Determination in Light of Sackett v. EPA, 143 S. Ct. 1322 (2023), MVK-2024-79

- 5. FLOWPATH FROM THE SUBJECT AQUATIC RESOURCES TO A TNW, INTERSTATE WATER, OR THE TERRITORIAL SEAS: The water flows offsite via an unnamed tributary of Arkabutla Lake for 450' before entering Arkabutla Lake. It then flows through Arkabutla lake for 4.8 mile before flowing out of Arkabutla Lake into the Coldwater River for approximately 29 miles before reaching the upper limit of Section 10 jurisdiction of the Coldwater River. (Section 10 TNW)
- SECTION 10 JURISDICTIONAL WATERS⁵: Describe aquatic resources or other features within the review area determined to be jurisdictional in accordance with Section 10 of the Rivers and Harbors Act of 1899. Include the size of each aquatic resource or other feature within the review area and how it was determined to be jurisdictional in accordance with Section 10.
- 7. SECTION 404 JURISDICTIONAL WATERS: Describe the aquatic resources within the review area that were found to meet the definition of waters of the United States in accordance with the pre-2015 regulatory regime and consistent with the Supreme Court's decision in *Sackett*. List each aquatic resource separately, by name, consistent with the naming convention used in section 1, above. Include a rationale for each aquatic resource, supporting that the aquatic resource meets the relevant category of "waters of the United States" in the pre-2015 regulatory regime. The rationale should also include a written description of, or reference to a map in the administrative record that shows, the lateral limits of jurisdiction for each aquatic resource, including how that limit was determined, and incorporate relevant references used. Include the size of each aquatic resource in acres or linear feet and attach and reference related figures as needed.
 - a. TNWs (a)(1):
 - b. Interstate Waters (a)(2):
 - c. Other Waters (a)(3):
 - d. Impoundments (a)(4
 - e. Tributaries (a)(5):

⁵ 33 CFR 329.9(a) A waterbody which was navigable in its natural or improved state, or which was susceptible of reasonable improvement (as discussed in § 329.8(b) of this part) retains its character as "navigable in law" even though it is not presently used for commerce, or is presently incapable of such use because of changed conditions or the presence of obstructions.

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- f. The territorial seas (a)(6):
- g. Adjacent wetlands (a)(7):

8. NON-JURISDICTIONAL AQUATIC RESOURCES AND FEATURES

- a. Describe aquatic resources and other features within the review area identified as "generally non-jurisdictional" in the preamble to the 1986 regulations (referred to as "preamble waters").⁶ Include size of the aquatic resource or feature within the review area and describe how it was determined to be non-jurisdictional under the CWA as a preamble water.
- b. Describe aquatic resources and features within the review area identified as "generally not jurisdictional" in the *Rapanos* guidance. Include size of the aquatic resource or feature within the review area and describe how it was determined to be non-jurisdictional under the CWA based on the criteria listed in the guidance.
- c. Describe aquatic resources and features identified within the review area as waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA. Include the size of the waste treatment system within the review area and describe how it was determined to be a waste treatment system.
- d. Describe aquatic resources and features within the review area determined to be prior converted cropland in accordance with the 1993 regulations (reference 2.b.). Include the size of the aquatic resource or feature within the review area and describe how it was determined to be prior converted cropland.
- e. Describe aquatic resources (i.e. lakes and ponds) within the review area, which do not have a nexus to interstate or foreign commerce, and prior to the January 2001 Supreme Court decision in "*SWANCC*," would have been jurisdictional based solely on the "Migratory Bird Rule." Include the size of the aquatic resource or feature, and how it was determined to be an "isolated water" in accordance with *SWANCC*. [N/A or enter rationale/discussion here.]
- f. Describe aquatic resources and features within the review area that were determined to be non-jurisdictional because they do not meet one or more

⁶ 51 FR 41217, November 13, 1986.

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categories of waters of the United States under the pre-2015 regulatory regime consistent with the Supreme Court's decision in *Sackett* (e.g., tributaries that are non-relatively permanent waters; non-tidal wetlands that do not have a continuous surface connection to a jurisdictional water).

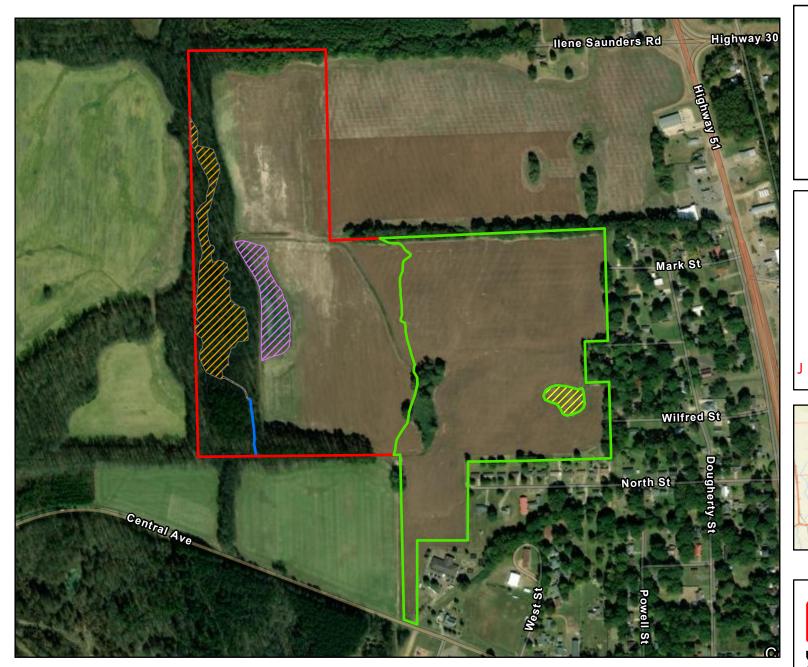
MVK-2024-79 Wetland 3 (0.82 acre PEM) is considered non-jurisdictional as it is isolated and has no CSC to any requisite water. This wetland is characterized as a closed depressional area within the Ag. Field. It collects precipitation and does not drain.

MVK-2024-79 Other Waters 1 is a 382' Non-RPW (R6 Ephemeral) that does not satisfy the Relatively Permanent Standard, thus it is Non-Jurisdictional. It is characterized by low, infrequent flow that is only in response to precipitation events.

- 9. DATA SOURCES. List sources of data/information used in making determination. Include titles and dates of sources used and ensure that information referenced is available in the administrative record.
 - a. Office determination based on consultant delineation. (Attached)
 - b. GIS Database
 - c. Aerial Photos Multiple Years/All Available Photos (Google Earth)
 - d. NHD
 - e. LiDAR
 - f. NWI
 - g. Web Soil Survey

10. OTHER SUPPORTING INFORMATION.

11.NOTE: The structure and format of this MFR were developed in coordination with the EPA and Department of the Army. The MFR's structure and format may be subject to future modification or may be rescinded as needed to implement additional guidance from the agencies; however, the approved jurisdictional determination described herein is a final agency action.



Project Files

- Boundary Inside of USACE Flowage Easement (242'MSL)
- Boundary Outside of USACE Flowage Easement (242'MSL)
- $\overline{}$ Pre JD-Potentially Jurisdictional Scrb-Shrub Wetland (2.7 Acres)
- $\overline{}$ Pre JD-Potentially Jurisdictional Forestged Wetland (5.4 Acres)
- AJD-Non-Jurisdictional Isolated Emergent Wetland (0.82 Acre)
- AJD-Non-Jurisdictional Ephemeral/NRPW (382')

Scale: 1:7,500

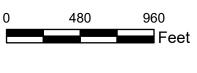


Tate County, MS





REGULATORY DIVISION MISSISSIPPI BRANCH





TRANSMITTAL

To: Jerry Bourne Department of the Army Vicksburg District, Corps of Engineers 4155 Clay Street Vicksburg, Mississippi 39183-3435

RE: Slocum Parcels Tate County, Mississippi Wetland and Other Waters Assessment Report

Copies	Description
1	Wetland and Other Waters Assessment Report

 For your signature	2	For your files	 Return as delivered
 For your use		Approved as submitted	 For review and comment
 As requested	_x_	For approval	 Remit for payment

Remarks:

After you have reviewed this letter and attachments, we would request that your office provide written concurrence with our findings that the site contains the previously mentioned jurisdictional "waters of the United States" as well as the non-jurisdictional waters or features. Specifically, we request an Approved Jurisdictional Determination on the project site for the non-jurisdictional waters or features under the pre-2015 regime with the Sackett decision and a Preliminary Jurisdictional Determination for all waters on the site that are jurisdictional and remain subject to Section 404 permitting requirements.

Thank you.

ulle Dendy

DATE: <u>2/6/2024</u>

SIGNED:

Cullen Dendy

BATON ROUGE, LA BRANCH: 17534 Old Jefferson Hwy, Ste. 2A Prairieville, LA 70769 CORPORATE OFFICE: P.O. Box 2836 Ridgeland, MS 39158 (601) 634-0097 (O) | (601) 630-9778 (F) www.headwaters-inc.com TUPELO, MS BRANCH: P.O. Box 3658 Tupelo, MS 38803



August 28, 2023

Brent Barfield VP of Operations & Business Development Mendrop Engineering Resources, LLC

Submitted via email: bbarfield@mendrop.net

RE: Slocum Parcels Tate County, Mississippi Wetland Assessment

Dear Mr. Barfield:

As per your request, Headwaters, Inc. has completed a wetland assessment on a parcel of land on the above-referenced property located within the Town of Coldwater and Tate County, Mississippi. Headwaters, Inc. completed the site review and assessment of the subject property on August 1, 2023.

Our assessment is based upon the property boundaries as depicted on the project site map provided to us by your office and by our field assessment of the property boundaries. The subject property is located along the north side of Central Avenue partially in the Town of Coldwater and partially in Tate County, Mississippi and consists of approximately 119.80 acres. More specifically, the property is situated in Section 36, Township 4 South, Range 8 West and Section 31, Township 4 South, Range 7 West, Tate County, Mississippi. The project site may also be referenced by Global Positioning System (GPS) coordinates 34.694827, -89.98759.

The initial phase of this project included the assimilation of all available information related to the subject property that would help establish a historical perspective of the property and highlight the physical attributes of the property, the primary drainage patterns, and the physical location of any suspected wetland areas present on the property. An integral component of this phase was the review of the 2021 USDA National Agricultural Imagery Program (NAIP) color photography and the USGS 1982 Coldwater, Mississippi 7.5-Minute Topographic Quadrangle Maps. A review of the Tate County, Mississippi soil survey maps was also included as part of this assessment as well as the United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps, National Hydrography Dataset (NHD) maps, and the USGS LiDAR Elevation Dataset map.

Primary access to the property can be gained via Central Avenue from the south. Secondary access to the subject property can be gained via Mark Street, Morris Street, Wilfred Street and North Street from the east. Surface water drainage on the site can be considered somewhat poorly drained across most of the tract, with drainage being primarily to the north towards the Coldwater River and Arkabutla Lake.

The initial review revealed that the preponderance of the subject property could best be currently described as cropland utilized for soybean production. Additionally, smaller portions of the property are forested and utilized for timber production.

Soils found on the property are Calloway silt loam, 2 to 5 percent slopes, moderately eroded (CaB2), Collins silt loam, local alluvium, 0 to 2 percent slopes, occasionally flooded, brief duration (Co), Falaya silt loam (Fa), Grenada silt loam, 5 to 8 percent slopes, severely eroded (GrC3), Loring-Grenada silt loams, 2 to 5 percent slopes, eroded (LgB2), Memphis silt loam, 2 to 5 percent slopes, moderately eroded, northern phase (MeB2), and Memphis silt loam, 2 to 5 percent slopes, severely eroded (MeB3). The USDA NRCS classifies Co, LgB2, MeB2, and MeB3 as 0 percent hydric and CaB2, Fa, and GrC3 as 1 to 32 percent hydric.

Once the initial map and historical review were completed, a field assessment was conducted to verify the primary habitat features and, specifically, the presence of any jurisdictional waters on the subject property, if any. Within the property boundary, the field assessment revealed the presence of one (1) ephemeral feature, one (1) forested wetland, one (1) scrub/shrub wetland, and one (1) emergent wetland.

Ephemeral Feature:

One (1) ephemeral feature was observed within the subject property. This channel carries only stormwater in direct response to precipitation, with water flowing only during and shortly after large precipitation events. Based upon our observations, the ephemeral feature does not have a well-defined channel, the aquatic bed is always above the water table, and stormwater runoff is the primary source of water. At the time of the site visit, there was no visible water in the channel. The channel observed during the site visit typically lacks the biological, hydrological, and physical characteristics commonly associated with the continuous or intermittent conveyance of water. The presence of the ephemeral feature identified within the property would be considered as non-jurisdictional because it is not a relatively permanent, standing or continuously flowing body of water. The ephemeral feature is depicted on the wetland location maps found in Attachment B.

Forested Wetland:

One (1) forested wetland was identified within the subject property. Primary hydrology indicators observed within the forested wetland include sediment deposits, drift deposits, and water-stained leaves. Secondary indicators include moss trim lines.

Vegetative components within the forested wetland include sweetgum (*Liquidambar styraciflua*), black willow (*Salix nigra*), green ash (*Fraxinus pennsylvanica*), red maple (*Acer rubrum*), American sycamore (*Platanus occidentalis*), American elm (*Ulmus americana*), and trumpet creeper (*Campsis radicans*). The soil matrix color within the forested wetland was observed as a 5/2 (grayish brown) and 5/1 (gray) on the 10YR Munsell Soil Color chart. Additionally, distinct, or prominent redox concentrations were present (~10-25%) with a soil color of 4/6 (dark yellowish brown) on the 10YR chart. The forested wetland is depicted on the wetland location maps found in Attachment B. It appears that Wetland 1 has a continuous surface connection to a relatively permanent water. Therefore Wetland 1 would most likely be jurisdictional.

Scrub/Shrub Wetland:

One (1) scrub/shrub wetland was identified within the subject property. Primary hydrology indicators observed within the scrub/shrub wetland include inundation visible on aerial imagery and oxidized rhizospheres along living roots. Secondary indicators include saturation visible on aerial imagery. Vegetative components within the scrub/shrub wetland include green ash (*Fraxinus pennsylvanica*) and sedge (*Carex spp.*). The soil matrix color within the scrub/shrub wetland was observed as a 4/2 (dark grayish brown) on the 10YR Munsell Soil Color chart. Additionally, distinct, or prominent redox concentrations were present (~10-25%) with a soil color of 4/6 (dark yellowish brown) on the 10YR chart. The scrub/shrub wetland is depicted on the wetland location maps found in Attachment B. Wetland 2 is separated from Wetland 1 by a berm/dike/levee. Therefore, Wetland 2 would most likely be considered non-jurisdictional because it does not have a continuous surface connection to bodies of water that are "waters of the Unite States".

Emergent Wetland:

One (1) emergent wetland was identified within the subject property. Primary hydrology indicators observed within the emergent wetland includes surface water and saturation. Vegetative components within the emergent wetland include sedge (*Carex spp*). The soil matrix color within the emergent wetlands was observed as a 5/2 (grayish brown) on the 10YR Munsell Soil Color chart. Additionally, distinct, or prominent redox concentrations were present (~20%) with a soil color of 4/6 (dark yellowish brown) on the 10YR chart. The emergent wetland is depicted on the wetland location maps found in Attachment B. Wetland 3 is a geographically isolated wetland with no hydrologic surface connection to a tributary. Therefore, Wetland 3 is not jurisdictional.

The remaining portions of the property are contained within forested upland habitat. Vegetative components within the uplands include loblolly pine (*Pinus taeda*), sweetgum (*Liquidambar styraciflua*), poison ivy (*Toxicodendron radicans*), cherry bark oak (*Quercus pagoda*), privet (*Ligustrum sinense*), muscadine (*Vitis rotundifolia*), Virginia creeper (*Parthenocissus quinquefolia*), trumpet creeper (*Campsis radicans*), silver maple (*Acer saccharinum*), American elm (*Ulmus americana*), roundleaf greenbrier (*Smilax*)

rotundifolia), green ash (*Fraxinus pennsylvanica*), eastern hophornbeam (*Ostrya virginiana*), red maple (*Acer rubrum*), sugarberry (*Celtis laevigata*), Johnson grass (*Sorghum halepense*), and water oak (*Quercus nigra*). Further, no wetland hydrology indicators were observed within these areas. The soil matrix color throughout the upland habitat areas was observed as a 4/3 (brown), 5/3 (brown), and 5/4 (yellowish brown) on the 10YR Munsell Soil Color Chart. In most cases, no soil mottling was observed.

Given the predominately upland nature of the property and the relatively moderate topographical relief, systematic transect lines were not employed in the field delineation methodology. Rather, a mapping system was employed, whereby the wetland habitats/boundaries and "other waters of the U.S." were mapped on a property site map utilizing the Global Positioning System (GPS) waypoints. Wetland delineation data points were established using a systematic approach based upon observations of vegetative and topographic features and transitions that were encountered in the field. These wetland delineation points are identified utilizing the GPS and their location within the property. In addition, supplemental points were established between the delineation points to provide data on soils, vegetation, and hydrology.

Based upon field investigations and careful review of all available information, it has been determined that 110.90 acres of the property are classified as upland (non-wetland) habitat. It has further been determined that 0.04 Acres (382.11 Linear Feet) are contained within the ephemeral feature, 5.42 acres are contained within the forested wetland, 2.71 acres are contained within the scrub/shrub wetland, and 0.73 acres are contained within the emergent wetland.

The following is a breakdown of the different habitat types that were found to be present on the subject property:

Total	119.80 Acres
Emergent Wetland	0.73 Acres
Scrub/Shrub Wetland	2.71 Acres
Forested Wetland	5.42 Acres
Ephemeral Feature	0.04 Acres (382.11 LF)
Non-Wetland Uplands	110.90 Acres

Included as Attachment A, you will find copies of the USGS 1982 Coldwater, MS Quadrangle maps covering the property, and 2021 NAIP Aerial Photography. In

Attachment B, you will find the GPS/Wetland Location Maps and the Routine Wetland Determination Data Forms for the plots taken in the subject property. Attachment C includes the Custom Soil Resource Report of Tate County, Mississippi, and Attachment D includes photo documentation of the site.

As always, we really appreciate the opportunity to be of assistance to you in this matter. If you have any questions or need any additional information, please do not hesitate to contact us.

Sincerely,

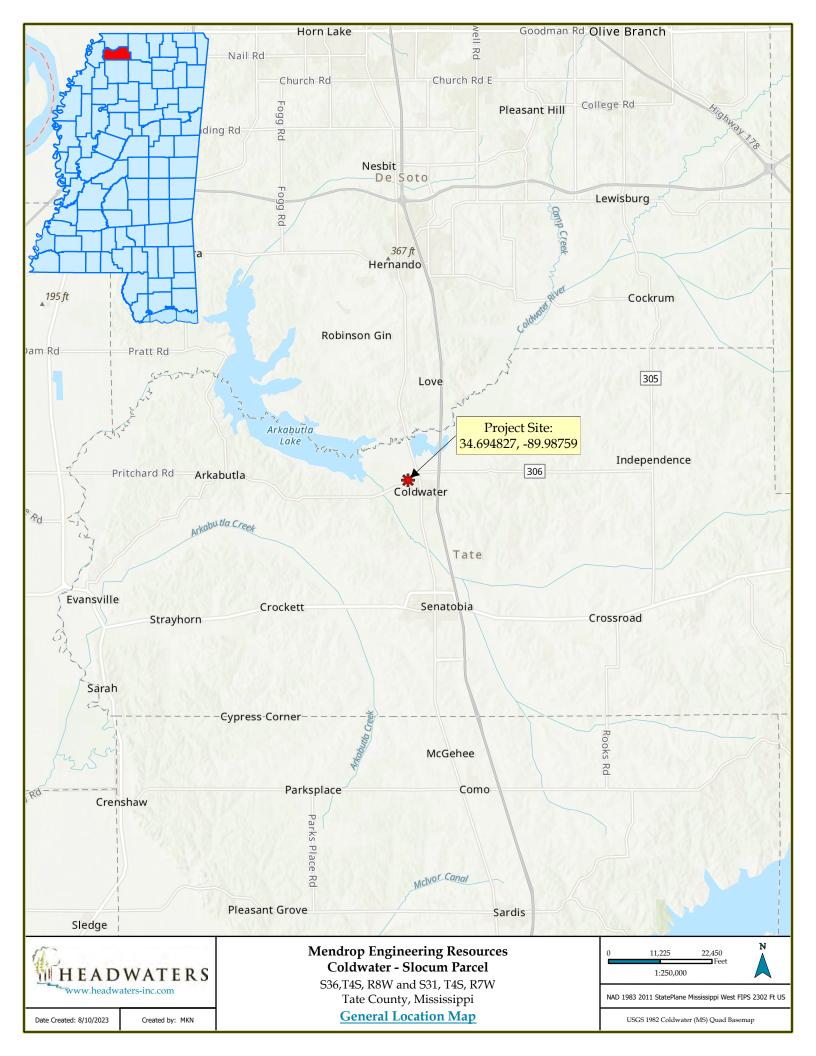
Dillon Easley Environmental Specialist

Attachments

ATTACHMENT A

PROJECT MAPS

SITE MAPS



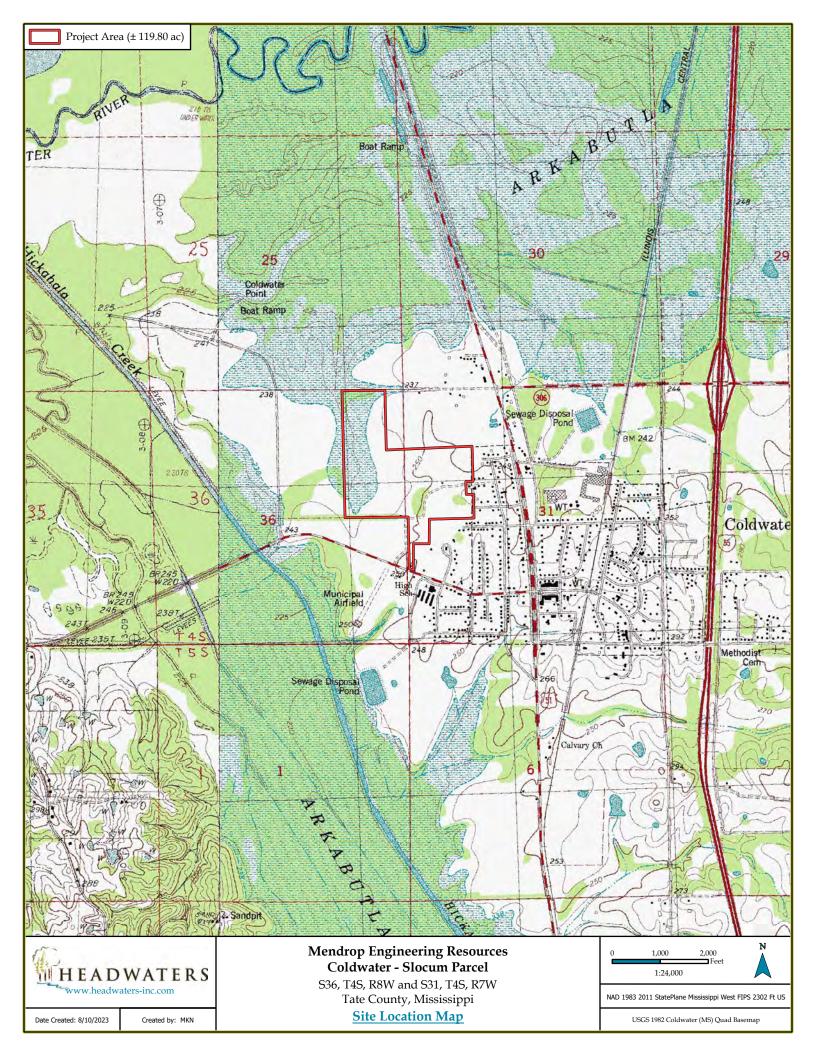




Mendrop Engineering Resources Coldwater - Slocum Parcel S36, T4S, R8W and S31, T4S, R7W Tate County, Mississippi Site Location Map

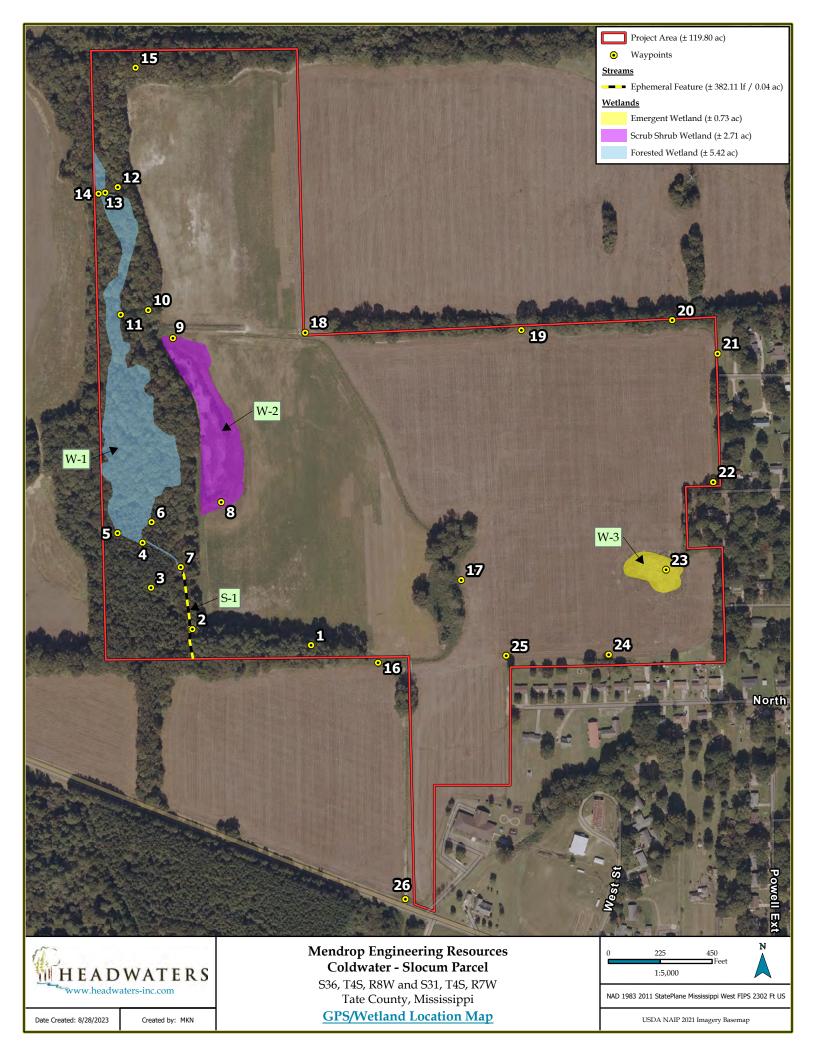
1:24,000 NAD 1983 2011 StatePlane Mississippi West FIPS 2302 Ft US

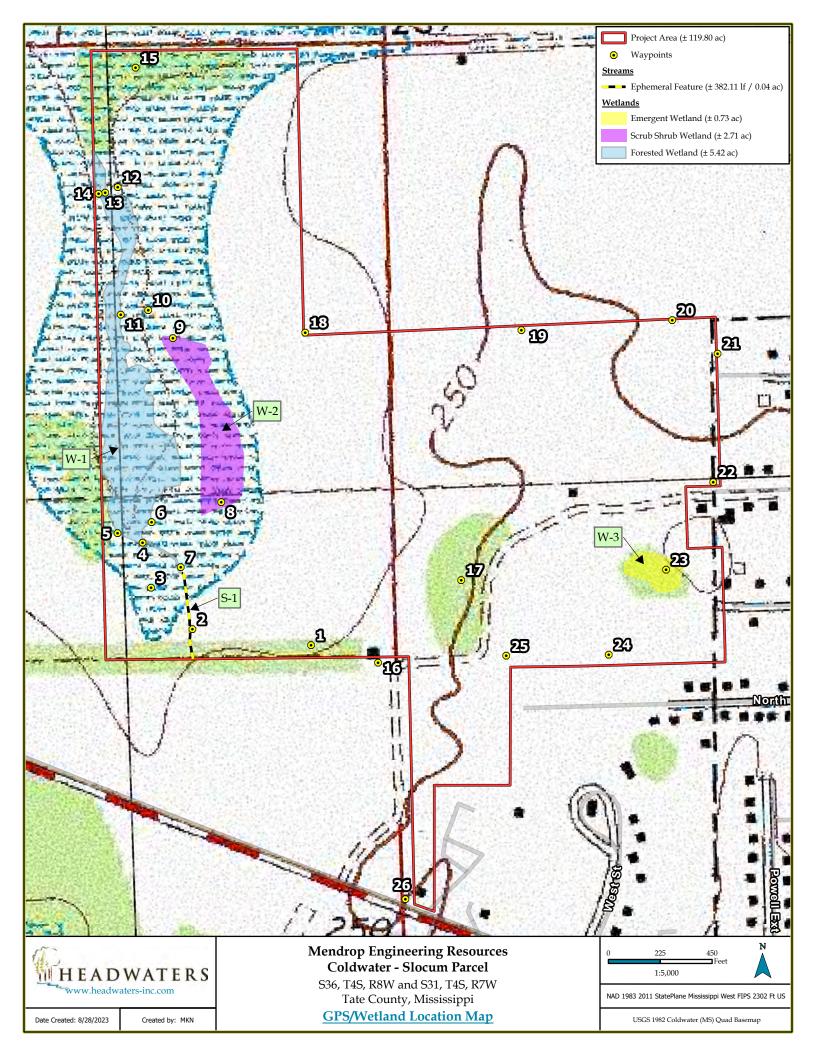
USDA NAIP 2021 Imagery Basemap



ATTACHMENT B

GPS/WETLAND LOCATION MAPS WETLAND DETERMINATION DATA FORMS





U.S. Army WETLAND DETERMINATION DATA See ERDC/EL TR-10-20; t	OMB Control #: 0710-0024, Exp Requirement Control Symbo (Authority: AR 335-15, parag	I EXEMPT:			
Project/Site: Coldwater - Slocum Parcel		City/County: Tate County	Sampling Da	te: 8/1/23	
Applicant/Owner: Tate County Board of	Supervisors		State: MS Sampling Po	int: WP1	
Investigator(s): Headwaters, Inc.	Se	ction, Township, Range: S3	5, T4S, R8W		
Landform (hillside, terrace, etc.): Flood plai	ns Loca	relief (concave, convex, non	e): none Slope (9	%): 0-2	
Subregion (LRR or MLRA): LRR P, MLRA 1	34 Lat: 34.69243	Long: -89.9	38437 Datum	: WGS84	
Soil Map Unit Name: Fa - Falaya silt loam			NWI classification: UPL		
Are climatic / hydrologic conditions on the site	e typical for this time of year	Yes X I	No (If no, explain in Rem	arks.)	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydro				X No	
Are Vegetation N , Soil N , or Hydro			any answers in Remarks.)		
			-		
SUMMARY OF FINDINGS – Attach	site map showing sa	mpling point locations	s, transects, important fea	atures, etc.	
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X No Yes No X Yes No X	Is the Sampled Area within a Wetland?	Yes		
Upland sample point HYDROLOGY					
Wetland Hydrology Indicators:		See	condary Indicators (minimum of ty	vo required)	
Primary Indicators (minimum of one is requi	red; check all that apply)		Surface Soil Cracks (B6)	• <u> </u>	
Surface Water (A1)	Aquatic Fauna (B13)		Sparsely Vegetated Concave Su	urface (B8)	
High Water Table (A2)	Marl Deposits (B15) (L		Drainage Patterns (B10)		
Saturation (A3)	Hydrogen Sulfide Odor		Moss Trim Lines (B16)		
Water Marks (B1) Sediment Deposits (B2)	Oxidized Rhizospheres Presence of Reduced		Dry-Season Water Table (C2)		
Drift Deposits (B3)	Recent Iron Reduction		Crayfish Burrows (C8) Saturation Visible on Aerial Imag	nery (C9)	
Algal Mat or Crust (B4)	Thin Muck Surface (C7				
Iron Deposits (B5)	Other (Explain in Rema				
Inundation Visible on Aerial Imagery (B	7)	FAC-Neutral Test (D5)			
Water-Stained Leaves (B9)			Sphagnum Moss (D8) (LRR T, I	l)	
Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, model)	No X Depth (inches) No X Depth (inches) No X Depth (inches) No X Depth (inches) pointoring well, aerial photos, pointoring well, aerial photos, pointoring Depth (inches)	: Wetland Hyd	rology Present? Yes	NoX	
Remarks:					

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

	Absolute	Dominant	Indicator	
<u>Tree Stratum</u> (Plot size: <u>30 ft.</u>)	% Cover	Species?	Status	Dominance Test worksheet:
1. Pinus taeda	15	Yes	FAC	Number of Dominant Species
2. Liquidambar styraciflua	15	Yes	FAC	That Are OBL, FACW, or FAC: (A)
 <u>Quercus pagoda</u> 4. 	15	Yes	FAC	Total Number of Dominant Species Across All Strata: 8 (B)
5.				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: 87.5% (A/B)
7.				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
	45 =	=Total Cover		OBL species 0 x 1 = 0
50% of total cover:2	20%	of total cover:	9	FACW species 0 x 2 = 0
Sapling/Shrub Stratum (Plot size: 30 ft.)				FAC species 90 x 3 = 270
1. Ligustrum sinense	15	Yes	FAC	FACU species 10 x 4 = 40
2.				UPL species 0 x 5 = 0
3.				Column Totals: 100 (A) 310 (B)
4.				Prevalence Index = B/A = 3.10
5.				Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7.				X 2 - Dominance Test is >50%
8.				3 - Prevalence Index is ≤3.0 ¹
	15 =	=Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 8	8 20%	of total cover:	3	
Herb Stratum (Plot size: 30 ft.)				
1.				¹ Indicators of hydric soil and wetland hydrology must be
2.				present, unless disturbed or problematic.
3.				Definitions of Four Vegetation Strata:
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5.				more in diameter at breast height (DBH), regardless of
6.				height.
7.				
8.				Sapling/Shrub – Woody plants, excluding vines, less
9.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
9 10				
11.				Herb – All herbaceous (non-woody) plants, regardless
12.				of size, and woody plants less than 3.28 ft tall.
12.		=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover:		of total cover:		height.
Woody Vine Stratum (Plot size: 30 ft.)				
1. Toxicodendron radicans	10	Yes	FAC	
2. Vitis rotundifolia	10	Yes	FAC	
3. Parthenocissus quinquefolia	10	Yes	FACU	
4. Campsis radicans	10	Yes	FAC	
5.				Hydrophytic
	40 =	=Total Cover		Vegetation
50% of total cover: 2	20%	of total cover:	8	Present? Yes X No
Remarks: (If observed, list morphological adaptation	ns below.)			

SOIL

	ription: (Describe	to the dep				tor or co	onfirm th	e absence o	f indicators.)		
Depth	Matrix			x Featu		. 2	_				
inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Те	xture		Remarks	
0-12	10YR 5/3	100				<u> </u>	Loam	y/Clayey			
						<u> </u>		·			
						·					
						<u> </u>					
Type: C=Co	ncentration, D=Dep	letion, RM=	Reduced Matrix, N	/IS=Mas	ked Sand	Grains.		² Location: P	L=Pore Lining	, M=Matrix.	
Hydric Soil I	ndicators: (Applica	able to all I	RRs, unless othe	erwise r	noted.)			Indicators for	or Problemat	ic Hydric Soil	l s ³ :
Histosol ((A1)		Thin Dark S	urface (S	59) (LRR	S, T, U)		1 cm Mu	uck (A9) (LRR	0)	
Histic Epi	ipedon (A2)		Barrier Islands 1 cm Muck (S12)				2 cm Muck (A10) (LRR S)				
Black His	tic (A3)		(MLRA 153B, 153D)				Coast Pr	rairie Redox (/	416)		
Hydroger	n Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR O)				(outside MLRA 150A)				
Stratified	Layers (A5)		Loamy Gleyed Matrix (F2)				Reduced Vertic (F18)				
Organic E	Bodies (A6) (LRR P ,	, T, U)	Depleted Ma	trix (F3))			(outside MLRA 150A, 150B)			
5 cm Muo	cky Mineral (A7) (LR	RR P, T, U)	Redox Dark	Surface	(F6)			Piedmont Floodplain Soils (F19) (LRR P, T			
Muck Pre	esence (A8) (LRR U)	Depleted Da	rk Surfa	ice (F7)			Anomalous Bright Floodplain Soils (F20)			F20)
1 cm Muo	ck (A9) (LRR P, T)		Redox Depr	essions	(F8)			(MLRA 153B)			
Depleted	Below Dark Surface	e (A11)	Marl (F10) (I	.RR U)				Red Parent Material (F21)			
Thick Da	rk Surface (A12)		Depleted Oc	hric (F1	1) (MLRA	151)		Very Shallow Dark Surface (F22)			
Coast Pra	airie Redox (A16) (N	ILRA 150A) Iron-Mangar	iese Ma	sses (F12	2) (LRR C), P, T)	(outsi	de MLRA 138	, 152A in FL,	154)
Sandy M	ucky Mineral (S1) (L	.RR O, S)	Umbric Surfa	ace (F13	B) (LRR P	, T, U)		Barrier Is	slands Low Cł	nroma Matrix (TS7)
Sandy Gl	eyed Matrix (S4)		Delta Ochric	(F17) (MLRA 15	1)		(MLRA	A 153B, 153D))	
Sandy Re	edox (S5)		Reduced Ve	rtic (F18	B) (MLRA	150A, 15	50B) Other (Explain in Remarks)				
Stripped	Matrix (S6)		Piedmont Fl	oodplain	n Soils (F	9) (MLR	A 149A)				
Dark Sur	face (S7) (LRR P, S	i, T, U)	Anomalous	Bright Fl	oodplain	Soils (F2	0)				
Polyvalue	e Below Surface (S8	3)	(MLRA 14	9A, 153	C, 153D)			³ Indicato	ors of hydroph	ytic vegetation	and
(LRR S	S, T, U)		Very Shallow	v Dark S	Surface (F	22)		wetlar	nd hydrology r	nust be presei	nt,
			(MLRA 13	8, 152A	in FL, 1	54)		unless	s disturbed or	problematic.	
Restrictive L	ayer (if observed):										
Type:											
Depth (in	ches):						Hydrid	c Soil Preser	nt? Yes	s No_	Х
Remarks:											

Remarks:

U.S. Arm WETLAND DETERMINATION DATA See ERDC/EL TR-10-20;	Requirement Cor	10-0024, Exp: 11/30/2024 htrol Symbol EXEMPT: 35-15, paragraph 5-2a)			
Project/Site: Coldwater - Slocum Parcel		City/County: Tate County	Sa	ampling Date: 8/1/23	
Applicant/Owner: Tate County Board of	Supervisors		State: MS Sa	ampling Point: WP2	
Investigator(s): Headwaters, Inc.		ction, Township, Range: S36			
Landform (hillside, terrace, etc.): Flood pla		relief (concave, convex, none		Slope (%): 0-2	
Subregion (LRR or MLRA): LRR P, MLRA		Long: <u>-89.9</u>		Datum: WGS84	
Soil Map Unit Name: Co - Collins silt loam, loc			_		
Are climatic / hydrologic conditions on the si	te typical for this time of year?	Yes <u>X</u>	lo (lf no, expl	ain in Remarks.)	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydr	ology N significantly distu	rbed? Are "Normal Circur	mstances" present?	Yes X No	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydr	ology <u>N</u> naturally problem	atic? (If needed, explain	any answers in Rema	ırks.)	
SUMMARY OF FINDINGS – Attac	h site map showing sai	mpling point locations	, transects, impo	ortant features, etc.	
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled Area			
Hydric Soil Present?	Yes No X	within a Wetland?	Yes N	o <u>X</u>	
Wetland Hydrology Present?	Yes No X				
Remarks: Upland top bank of ephemeral feature					
Wetland Hydrology Indicators:	ired, check all that apply)	Sec		nimum of two required)	
Primary Indicators (minimum of one is requ Surface Water (A1)	Aquatic Fauna (B13)		Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)	Marl Deposits (B15) (LF	RR U)	Drainage Patterns (B10)		
Saturation (A3)	Hydrogen Sulfide Odor		Moss Trim Lines (B16)		
Water Marks (B1)	Oxidized Rhizospheres		Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Presence of Reduced Ir		Crayfish Burrows (C8)		
Drift Deposits (B3)	Recent Iron Reduction i	n Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Thin Muck Surface (C7))	Geomorphic Position (D2)		
Iron Deposits (B5)	Other (Explain in Rema	rks)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (E	37)		FAC-Neutral Test (D5)		
Water-Stained Leaves (B9)			Sphagnum Moss (D8) (LRR T, U)	
Field Observations:					
Surface Water Present? Yes	No X Depth (inches)				
Water Table Present? Yes Saturation Present? Yes	NoXDepth (inches)NoXDepth (inches)		rology Present?	Yes No X	
Saturation Present? Yes (includes capillary fringe)	NO <u>A</u> Deptil (inches)		ology Present?	Yes <u>No X</u>	
Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, p	revious inspections), if availa	ble:		
	, F				
Remarks:					

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

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 ft.)	% Cover	Species?	Status	Dominance Test worksheet:
1. Pinus taeda	25	Yes	FAC	Number of Dominant Species
2. Acer saccharinum	20	Yes	FAC	That Are OBL, FACW, or FAC: 5 (A)
3. Ulmus americana	15	Yes	FAC	Total Number of Dominant
4. Liquidambar styraciflua	10	No	FAC	Species Across All Strata: 5 (B)
5.				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: 100.0% (A/B)
7.				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
	70	=Total Cover		OBL species 0 x 1 = 0
50% of total cover: 35	20%	of total cover:	14	FACW species $0 x 2 = 0$
Sapling/Shrub Stratum (Plot size: 30 ft.)				FAC species 100 x 3 = 300
1				FACU species $0 x 4 = 0$
·				UPL species $0 x 5 = 0$
2				Column Totals: 100 (A) 300 (B)
·				$\frac{1}{2} \frac{1}{2} \frac{1}$
				Hydrophytic Vegetation Indicators:
5				
				1 - Rapid Test for Hydrophytic Vegetation
7		. <u></u>		X 2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
		=Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20%	of total cover:		
Herb Stratum (Plot size: 30 ft.)				
1				¹ Indicators of hydric soil and wetland hydrology must be
2				present, unless disturbed or problematic.
3				Definitions of Four Vegetation Strata:
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5				more in diameter at breast height (DBH), regardless of
6				height.
7.				
8.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
9.				
10.				
11.				Herb – All herbaceous (non-woody) plants, regardless
12.				of size, and woody plants less than 3.28 ft tall.
		=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover:	20%	of total cover:		height.
Woody Vine Stratum (Plot size: 30 ft.)				
1. Smilax rotundifolia	15	Yes	FAC	
2. Toxicodendron radicans	15	Yes	FAC	
	15	Tes	FAC	
3		<u> </u>		
4				
5				Hydrophytic
	30	=Total Cover		Vegetation
50% of total cover: 15	20%	of total cover:	6	Present? Yes X No
Remarks: (If observed, list morphological adaptations	s below.)			

SOIL

Depth	ription: (Describe			x Featu			///////////////////////////////////////		maleators.)	
inches)	Color (moist)	%	Color (moist)	% N 1 Calu	Type ¹	Loc ²	Те	xture	Re	marks
,				70	1990	200				inanio
0-12	10YR 5/3	100					Loam	y/Clayey		
		<u> </u>								
		<u> </u>								
		<u> </u>								
Type: C=Co	oncentration, D=Depl	letion, RM=F	Reduced Matrix, I	MS=Mas	ked San	d Grains.		² Location: PL	_=Pore Lining, M	=Matrix.
lydric Soil I	Indicators: (Applica	ble to all Ll	RRs, unless oth	erwise r	noted.)				r Problematic H	0
Histosol	(A1)		Thin Dark S	urface (S	69) (LRR	S, T, U)		1 cm Muc	ck (A9) (LRR O)	
Histic Ep	oipedon (A2)		Barrier Islan	ds 1 cm	Muck (S	12)		2 cm Muck (A10) (LRR S)		
Black His	stic (A3)		(MLRA 153B, 153D)					Coast Pra	airie Redox (A16)
Hydroge	n Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR O)					(outside MLRA 150A)		
Stratified	Layers (A5)		Loamy Gleyed Matrix (F2)					Reduced Vertic (F18)		
Organic	Bodies (A6) (LRR P,	T, U)	Depleted Ma	atrix (F3)				(outside MLRA 150A, 150B)		
	icky Mineral (A7) (LR	-	Redox Dark	Surface	(F6)			Piedmont Floodplain Soils (F19) (LRR P,		
Muck Pre	esence (A8) (LRR U))	Depleted Da	irk Surfa	ce (F7)		Anomalous Bright Floodplain Soils (F20)			
	ick (A9) (LRR P, T)		Redox Depr	essions	(F8)		(MLRA 153B)			
Depleted	Below Dark Surface	e (A11)	Marl (F10) (LRR U)				Red Parent Material (F21)		
Thick Da	ark Surface (A12)	. ,	Depleted Oc	hric (F1	1) (MLRA	A 151)		Very Shallow Dark Surface (F22)		
Coast Pr	rairie Redox (A16) (N	ILRA 150A)	Iron-Mangar	nese Ma	sses (F1)	2) (LRR C), P, T)	(outsid	e MLRA 138, 15	2A in FL, 154)
	lucky Mineral (S1) (L	-	Umbric Surf			<i>,</i> .	Barrier Islands Low Chroma Matrix (7			
Sandy G	leyed Matrix (S4)	-	Delta Ochric	(F17) (I	MLRA 15	1)	(MLRA 153B, 153D)			
Sandy R	edox (S5)		Reduced Ve							s)
Stripped	Matrix (S6)		Piedmont Fl	oodplair	Soils (F	19) (MLR	A 149A)			
Dark Sur	rface (S7) (LRR P, S	, T, U)	Anomalous	Bright Fl	oodplain	Soils (F2	0)			
Polyvalu	face (S7) (LRR P, S, T, U) Anomalous Bright Floodplain Soils (F20 e Below Surface (S8) (MLRA 149A, 153C, 153D)						³ Indicator	s of hydrophytic	vegetation and	
(LRR S	RR S, T, U)Very Shallow Dark Surface (F22)					22)		wetland	d hydrology mus	t be present,
			(MLRA 13	8, 152A	in FL, 1	54)		unless	disturbed or prol	blematic.
Restrictive L	Layer (if observed):									
Type:										
Depth (ir	nches):						Hydri	c Soil Presen	t? Yes	<u>No X</u>
Remarks:										

Remarks:

U.S. Army Co WETLAND DETERMINATION DATA SHEE See ERDC/EL TR-10-20; the p	Requirement Cont	0-0024, Exp: 11/30/2024 trol Symbol EXEMPT: 5-15, paragraph 5-2a)					
Project/Site: Coldwater - Slocum Parcel	t/Site: Coldwater - Slocum Parcel City/County: Tate County Sampling Date:						
Applicant/Owner: Tate County Board of Supe	rvisors		State: MS Sa	mpling Point: WP3			
Investigator(s): Headwaters, Inc.		ection, Township, Range: S36					
Landform (hillside, terrace, etc.): Shoulder		I relief (concave, convex, none		Slope (%): 2-5			
Subregion (LRR or MLRA): LRR P, MLRA 134		Long: -89.99		Datum: WGS84			
Soil Map Unit Name: LgB2 - Loring-Grenada silt I			NWI classification:				
Are climatic / hydrologic conditions on the site typi	-			ain in Remarks.)			
Are Vegetation N, Soil N, or Hydrology			mstances" present?	Yes X No			
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology	N naturally problem	natic? (If needed, explain	any answers in Remai	rks.)			
SUMMARY OF FINDINGS – Attach site	e map showing sa	mpling point locations	, transects, impo	rtant features, etc.			
Hydrophytic Vegetation Present?YesHydric Soil Present?YesWetland Hydrology Present?YesRemarks:Upland sample point	X No No X No X	Is the Sampled Area within a Wetland?	Yes No	<u>x</u>			
HYDROLOGY							
Wetland Hydrology Indicators:		Sec	condary Indicators (min	imum of two required)			
Primary Indicators (minimum of one is required; c	check all that apply)		Surface Soil Cracks (E	36)			
Surface Water (A1)	Aquatic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)	Marl Deposits (B15) (L		Drainage Patterns (B10)				
Saturation (A3)	Hydrogen Sulfide Odor		Moss Trim Lines (B16)				
Water Marks (B1)	Oxidized Rhizospheres		Dry-Season Water Table (C2)				
Sediment Deposits (B2) Drift Deposits (B3)	Presence of Reduced Recent Iron Reduction		Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Thin Muck Surface (C7		Geomorphic Position (D2)				
Iron Deposits (B5)	Other (Explain in Rema		Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)		·	FAC-Neutral Test (D5)				
Water-Stained Leaves (B9)			Sphagnum Moss (D8)	(LRR T, U)			
Field Observations:			_				
Surface Water Present? Yes No	X Depth (inches):					
	X Depth (inches						
	X Depth (inches): Wetland Hydr	rology Present?	Yes <u>No X</u>			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitor	ing wall, agric photos		blor				
Describe Recorded Data (stream gauge, monitor	ing well, aenai priotos,	previous inspections), il availa	Die.				
Remarks:							

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

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 ft.)	% Cover	Species?	Status	Dominance Test worksheet:
1. Pinus taeda	60	Yes	FAC	Number of Dominant Species
2. Liquidambar styraciflua	20	Yes	FAC	That Are OBL, FACW, or FAC: (A)
3				Total Number of Dominant
4				Species Across All Strata: 4 (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 100.0% (A/B)
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
		=Total Cover		OBL species 0 x 1 = 0
50% of total cover: 40	20%	of total cover:	16	FACW species 0 x 2 = 0
Sapling/Shrub Stratum (Plot size: 30 ft.)				FAC species 100 x 3 = 300
1				FACU species 0 x 4 = 0
2				UPL species 0 x 5 = 0
3				Column Totals: 100 (A) 300 (B)
4				Prevalence Index = B/A = 3.00
5				Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7.				X 2 - Dominance Test is >50%
8.				3 - Prevalence Index is ≤3.0 ¹
		=Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20%	of total cover:		
Herb Stratum (Plot size: 30 ft.)				
1,				¹ Indicators of hydric soil and wetland hydrology must be
2				present, unless disturbed or problematic.
3.				Definitions of Four Vegetation Strata:
4.		·		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5.		·		more in diameter at breast height (DBH), regardless of
6				height.
7.				
8.				Sapling/Shrub – Woody plants, excluding vines, less
9.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
10				
11.				Herb – All herbaceous (non-woody) plants, regardless
				of size, and woody plants less than 3.28 ft tall.
12		=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
E0% of total onvert				height.
50% of total cover:	2070	of total cover:		The gritter
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u>)	10	Vee	540	
1. Smilax rotundifolia	10	Yes	FAC	
2. <u>Toxicodendron radicans</u>	10	Yes	FAC	
3				
4				
5				Hydrophytic
		=Total Cover		Vegetation
50% of total cover: 10	20%	of total cover:	4	Present? Yes X No
Remarks: (If observed, list morphological adaptations	s below.)			

SOIL

Depth	Matrix		Redo	x Featu	res					
inches) Colo	r (moist)	% C	olor (moist)	%	Type ¹	Loc ²	Te	xture	Re	emarks
0-12 10	YR 5/3 1	00					Loamy	y/Clayey		
Type: C=Concentrati						Grains.			PL=Pore Lining, N	
Hydric Soil Indicator	s: (Applicable	to all LRR	•						for Problematic I	•
Histosol (A1)		Thin Dark Su		, .			1 cm Muck (A9) (LRR O)			
Histic Epipedon (A	Barrier Islan	ds 1 cm	Muck (S	12)		2 cm M	uck (A10) (LRR S	5)		
Black Histic (A3)	(MLRA 153B, 153D)					Coast F	Prairie Redox (A16	6)		
Hydrogen Sulfide	Loamy Mucky Mineral (F1) (LRR O)					(outside MLRA 150A)				
Stratified Layers (Loamy Gley	ed Matri	x (F2)			Reduced Vertic (F18)			
Organic Bodies (A	\6) (LRR P, T, U	J)	Depleted Ma	trix (F3)				(outs	ide MLRA 150A,	150B)
5 cm Mucky Mine	ral (A7) (LRR P	, T, U)	Redox Dark	Surface	(F6)			Piedmont Floodplain Soils (F19) (LRR P, T		
Muck Presence (A	\8) (LRR U)		_ Depleted Da	rk Surfa	ce (F7)			Anomal	ous Bright Floodp	lain Soils (F20)
1 cm Muck (A9) (I	LRR P, T)		Redox Depressions (F8)					(MLR	A 153B)	
Depleted Below D	ark Surface (A1	1)	Marl (F10) (LRR U)					Red Parent Material (F21)		
Thick Dark Surfac	e (A12)		Depleted Ochric (F11) (MLRA 151)					Very Sh	nallow Dark Surfac	ce (F22)
Coast Prairie Red	ox (A16) (MLR	A 150A)	Iron-Mangar	ron-Manganese Masses (F12) (LRR O, P, T)					ide MLRA 138, 1	52A in FL, 154)
Sandy Mucky Min	eral (S1) (LRR (0, S)	Umbric Surface (F13) (LRR P, T, U)					Barrier	Islands Low Chro	ma Matrix (TS7)
Sandy Gleyed Ma	trix (S4)		Delta Ochric (F17) (MLRA 151)					(MLR	A 153B, 153D)	
Sandy Redox (S5)		Reduced Ve	rtic (F18	B) (MLRA	150A, 15	50B)	Other (E	Explain in Remark	s)
Stripped Matrix (S	6)		Piedmont Fle	oodplain	Soils (F	9) (MLR	A 149A)			
Dark Surface (S7)	(LRR P, S, T, I	U)	Anomalous I	Bright Fl	oodplain	Soils (F2	0)			
Polyvalue Below	-	- <u>-</u>		9A, 153	C, 153D)			³ Indicate	ors of hydrophytic	vegetation and
(LRR S, T, U)			Very Shallow Dark Surface (F22)					wetland hydrology must be present,		
· · · · · · · · · · · · · · · · · · ·			(MLRA 13		`	,			s disturbed or pro	•
Restrictive Layer (if	observed):									
Туре:										
Depth (inches):							Hydrid	c Soil Prese	ent? Yes	No X
Remarks:										

Remarks:

WETLAND DETERMINATION DATA	y Corps of Engineers SHEET – Atlantic and Gulf Coastal Plain Reg the proponent agency is CECW-CO-R	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
Project/Site: Coldwater - Slocum Parcel	City/County: Tate Cou	nty Sampling Date: 8/1/23
Applicant/Owner: Tate County Board of		State: MS Sampling Point: WP4
Investigator(s): Headwaters, Inc.	Section, Township, Range:	, , ,
• • • •		
Landform (hillside, terrace, etc.): Shoulder Subregion (LRR or MLRA): LRR P, MLRA		none): none Slope (%): 2-5 89.990864 Datum: WGS84
Soil Map Unit Name: LgB2 - Loring-Grenad		NWI classification: PFO
Are climatic / hydrologic conditions on the si		No (If no, explain in Remarks.)
Are Vegetation N, Soil N, or Hydr		Circumstances" present? Yes X No
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydr		plain any answers in Remarks.)
SUMMARY OF FINDINGS – Attac	h site map showing sampling point locati	ons, transects, important features, etc.
Hydrophytic Vegetation Present?	Yes X No Is the Sampled Area	
Hydric Soil Present?	Yes X No within a Wetland?	Yes <u>X</u> No
Wetland Hydrology Present?	Yes X No	
Remarks: Forested wetland		
HYDROLOGY		
Wetland Hydrology Indicators: Primary Indicators (minimum of one is requinant of the second	Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) 37) No Depth (inches):	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) X Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) X FAC-Neutral Test (D5) Sphagnum Moss (D8) (LRR T, U) Hydrology Present? Yes X No vailable:

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

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 ft.)	% Cover	Species?	Status	Dominance Test worksheet:
1. Liquidambar styraciflua	60	Yes	FAC	Number of Dominant Species
2. <u>Salix nigra</u>	20	Yes	OBL	That Are OBL, FACW, or FAC: <u>3</u> (A)
3. Fraxinus pennsylvanica	10	No	FACW	Total Number of Dominant
4				Species Across All Strata: <u>3</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 100.0% (A/B)
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	-	=Total Cover		OBL species 20 x 1 =20
	5 20%	of total cover:	18	FACW species 10 x 2 = 20
Sapling/Shrub Stratum (Plot size: 30 ft.)	1			FAC species 70 x 3 = 210
1				FACU species 0 x 4 = 0
2				UPL species 0 x 5 = 0
3				Column Totals: 100 (A) 250 (B)
4				Prevalence Index = B/A = 2.50
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				X 2 - Dominance Test is >50%
8.				X 3 - Prevalence Index is $\leq 3.0^1$
		=Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20%	of total cover:		
Herb Stratum (Plot size: 30 ft.)				
1.				¹ Indicators of hydric soil and wetland hydrology must be
2.				present, unless disturbed or problematic.
3.				Definitions of Four Vegetation Strata:
				-
4.				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4 5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
4. 5. 6.				 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
4. 5. 6. 7.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
4. 5. 6. 7. 8.				 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 3.28 ft (1 m) tall.
4. 5. 6. 7. 8. 9. 10.				 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 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
4. 5. 6. 7. 8. 9. 10. 11.				 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 3.28 ft (1 m) tall.
4. 5. 6. 7. 8. 9. 10.				 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 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
4. 5. 6. 7. 8. 9. 10. 11. 12.		=Total Cover		 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 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
4		=Total Cover		 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 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
4	20%	of total cover:		 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 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
4				 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 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
4	20%	of total cover:	FAC	 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 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
4. 5. 6. 7. 8. 9. 10. 11. 12. 50% of total cover: <u>Woody Vine Stratum</u> (Plot size:30 ft) 1. <u>Smilax rotundifolia</u> 2. 3.	20%	of total cover:		 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 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
4. 5. 6. 7. 8. 9. 10. 11. 12. 50% of total cover: <u>Woody Vine Stratum</u> (Plot size:30 ft) 1. <u>Smilax rotundifolia</u> 2. 3. 4.	20%	of total cover:	FAC	 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 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
4. 5. 6. 7. 8. 9. 10. 11. 12. 50% of total cover: <u>Woody Vine Stratum</u> (Plot size:30 ft) 1. <u>Smilax rotundifolia</u> 2. 3.	20%	Yes		 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 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height. Hydrophytic
4.	20% 10 10	Yes =Total Cover		 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 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
4. 5. 6. 7. 8. 9. 10. 11. 12. 50% of total cover: Woody Vine Stratum (Plot size:30 ft) 1. Smilax rotundifolia 2. 3. 4. 5. 50% of total cover:	20% 10 	Yes		 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 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height. Hydrophytic
4.	20% 10 	Yes =Total Cover		 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 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
4. 5. 6. 7. 8. 9. 10. 11. 12. 50% of total cover: Woody Vine Stratum (Plot size:30 ft) 1. Smilax rotundifolia 2. 3. 4. 5. 50% of total cover:	20% 10 	Yes =Total Cover		 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 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
4.	20% 10 	Yes =Total Cover		 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 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
4.	20% 10 	Yes =Total Cover		 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 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation

	cription: (Describe t	to the dep				ator or co	ninin th	e ausence c	or multators.	
Depth inches)	Matrix Color (moist)	%	Color (moist)	x Featur %	Type ¹	Loc ²	To	xture	Remarks	
· · · ·		•								
0-12 10YR 5/2 80		10YR 4/6	20	C	PL/M	Loamy	//Clayey	Prominent redox concentrations		
						·				
						·				
		<u> </u>				<u> </u>				
Туре: С=Со	oncentration, D=Depl	etion, RM	=Reduced Matrix, I	/IS=Mas	ked San	d Grains.		² Location: F	PL=Pore Lining, M=Matrix.	
•		ble to all		RRs, unless otherwise noted.)					for Problematic Hydric Soils ³ :	
Histosol			Thin Dark Surface (S9) (LRR S, T, U)					1 cm Muck (A9) (LRR O)		
Histic Ep	pipedon (A2)		Barrier Islan	ds 1 cm	Muck (S	12)		2 cm Muck (A10) (LRR S)		
Black His	(MLRA 15	(MLRA 153B, 153D)					Coast Prairie Redox (A16)			
Hydroge	Loamy Mucl	Loamy Mucky Mineral (F1) (LRR O)					(outside MLRA 150A)			
Stratified	d Layers (A5)		Loamy Gleyed Matrix (F2)					Reduced Vertic (F18)		
Organic	Bodies (A6) (LRR P,	T, U)	X Depleted Matrix (F3)					(outside MLRA 150A, 150B)		
5 cm Mu	icky Mineral (A7) (LR	R P, T, U)	Redox Dark Surface (F6)					Piedmont Floodplain Soils (F19) (LRR P, T		
Muck Pr	esence (A8) (LRR U))	Depleted Dark Surface (F7)					Anomalous Bright Floodplain Soils (F20)		
1 cm Mu	ick (A9) (LRR P, T)		Redox Depressions (F8)					(MLRA 153B)		
Depleted	d Below Dark Surface	e (A11)	Marl (F10) (LRR U)					Red Pa	rent Material (F21)	
Thick Da	ark Surface (A12)		Depleted Ochric (F11) (MLRA 151)					Very Shallow Dark Surface (F22)		
Coast Pr	rairie Redox (A16) (M	ILRA 150	A) Iron-Mangar	sses (F1	2) (LRR C	D, P, T) (outside MLRA 138, 152A in FL, 15				
Sandy M	lucky Mineral (S1) (L	RR O, S)	Umbric Surfa	B) (LRR F	P, T, U)	Barrier Islands Low Chroma Matrix				
Sandy G	leyed Matrix (S4)		Delta Ochric	MLRA 15	51)	(MLRA 153B, 153D)				
Sandy R	edox (S5)		Reduced Ve	rtic (F18) (MLRA	150A, 15	50B)	Other (E	Explain in Remarks)	
Stripped	Matrix (S6)		Piedmont FI	oodplain	Soils (F	19) (MLR	A 149A)		. ,	
Stripped Matrix (S6)Piedmont Floodplain Soils (F19) (ML Dark Surface (S7) (LRR P, S, T, U) Anomalous Bright Floodplain Soils (F						Soils (F2	0)			
	e Below Surface (S8		(MLRA 14	-	•			³ Indicate	ors of hydrophytic vegetation and	
_ `	S, T, U)	,	Very Shallov	•			wetland hydrology must be present,			
			(MLRA 13						ss disturbed or problematic.	
	Layer (if observed):									
Type: Depth (ir	nches).						Hydrid	: Soil Prese	ent? Yes X No	
Dehiii (II	ioneoj.						inyunt	SOULLIESE		

Remarks:

U.S. Army WETLAND DETERMINATION DATA S See ERDC/EL TR-10-20; th		-	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)					
Project/Site: Coldwater - Slocum Parcel		City/County: Tate County	Sampling Date: 8/1/23					
Applicant/Owner: Tate County Board of S	Supervisors	State: MS Sampling Point: WP5						
Investigator(s): Headwaters, Inc.		ction, Township, Range: S36	` °					
		relief (concave, convex, none						
Landform (hillside, terrace, etc.): Shoulder								
	Long: <u>-89.9</u>							
Soil Map Unit Name: LgB2 - Loring-Grenada			NWI classification: PFO					
Are climatic / hydrologic conditions on the site	e typical for this time of year?	Yes <u>X</u>	No (If no, explain in Remarks.)					
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydro	logy <u>N</u> significantly distu	rbed? Are "Normal Circu	mstances" present? Yes X No					
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydro	logy <u>N</u> naturally problem	natic? (If needed, explain	any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach	site map showing sa	mpling point locations	, transects, important features, etc.					
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled Area						
Hydric Soil Present?	Yes X No	within a Wetland?	Yes <u>X</u> No					
Wetland Hydrology Present?	Yes X No							
Forested wetland								
HYDROLOGY		0.2						
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required)	rad: chack all that apply)	500	condary Indicators (minimum of two required) Surface Soil Cracks (B6)					
X Surface Water (A1)	Aquatic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)					
High Water Table (A2)	Marl Deposits (B15) (L	RR U)	Drainage Patterns (B10)					
Saturation (A3)	Hydrogen Sulfide Odor		Moss Trim Lines (B16)					
Water Marks (B1)	Oxidized Rhizospheres	es on Living Roots (C3) Dry-Season Water Table (C2)						
X Sediment Deposits (B2)	Presence of Reduced I	I Iron (C4) Crayfish Burrows (C8)						
X Drift Deposits (B3)	Recent Iron Reduction							
Algal Mat or Crust (B4)	Thin Muck Surface (C7	· · · · · · · · · · · · · · · · · · ·						
Iron Deposits (B5)	Other (Explain in Rema							
Inundation Visible on Aerial Imagery (B7 X Water-Stained Leaves (B9)	()	X FAC-Neutral Test (D5) Sphagnum Moss (D8) (LRR T, U)						
Field Observations:								
Surface Water Present? Yes X	No Depth (inches)	: 2						
Water Table Present? Yes	No X Depth (inches)							
Saturation Present? Yes X	No Depth (inches)		rology Present? Yes X No					
(includes capillary fringe)								
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos, p	previous inspections), if availa	ble:					
Remarks:								

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

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 ft.)	% Cover	Species?	Status	Dominance Test worksheet:
1. Liquidambar styraciflua	60	Yes	FAC	Number of Dominant Species
2. <u>Salix nigra</u>	30	Yes	OBL	That Are OBL, FACW, or FAC: 2 (A)
 Fraxinus pennsylvanica 4. 	10	No	FACW	Total Number of Dominant Species Across All Strata: 2 (B)
5.				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 100.0% (A/B)
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	100	=Total Cover		OBL species 30 x 1 = 30
50% of total cover: 50) 20%	of total cover:	20	FACW species 10 x 2 = 20
Sapling/Shrub Stratum (Plot size: 30 ft.)				FAC species 60 x 3 = 180
1				FACU species 0 x 4 = 0
2				UPL species 0 x 5 = 0
3.				Column Totals: 100 (A) 230 (B)
4.				Prevalence Index = $B/A = 2.30$
5.				Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7.				X 2 - Dominance Test is >50%
8.				X 3 - Prevalence Index is $\leq 3.0^{1}$
·		=Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:		of total cover:		
Herb Stratum (Plot size: 30 ft.)	2070			
· · · · · · · · · · · · · · · · · · ·				
1		<u> </u>		¹ Indicators of hydric soil and wetland hydrology must be
2.		. <u></u>		present, unless disturbed or problematic.
3.				Definitions of Four Vegetation Strata:
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5				more in diameter at breast height (DBH), regardless of height.
6				neight.
7				Sapling/Shrub – Woody plants, excluding vines, less
8				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
9.				3 (()
10				
11.				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
12.				
		=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover:	20%	of total cover:		height.
Woody Vine Stratum (Plot size: 30 ft.)				
1				
3.				
4.				
5				Hydrophytic
		=Total Cover		Vegetation
50% of total cover:	20%	of total cover:		Present? Yes X No
Remarks: (If observed, list morphological adaptation	s below.)			

	cription: (Describe f	to the dep				ator or co	onfirm th	e absence c	of indicators.)			
Depth	Matrix			x Featu		. 2	-		_			
inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Te	xture	Remarks			
0-12 10YR 5/2 8		80	10YR 4/6	20	С	PL/M	Loamy	//Clayey	Prominent redo	ox concentrations		
		·			_							
71	oncentration, D=Depl					d Grains.			PL=Pore Lining, M=			
•	Indicators: (Applica	ble to all							or Problematic H	ydric Soils ³ :		
Histosol			Thin Dark Surface (S9) (LRR S, T, U)					1 cm Muck (A9) (LRR O)				
Histic Epipedon (A2) Barrier Islands 1					`	12)			uck (A10) (LRR S)			
Black Histic (A3) (MLRA 1				153B, 153D)				Coast Prairie Redox (A16)				
Hydrogen Sulfide (A4)				Loamy Mucky Mineral (F1) (LRR O)					(outside MLRA 150A)			
	l Layers (A5)		Loamy Gleyed Matrix (F2)					Reduced Vertic (F18)				
	Bodies (A6) (LRR P,		X Depleted Matrix (F3)					(outside MLRA 150A, 150B)				
	icky Mineral (A7) (LR			Redox Dark Surface (F6)					Piedmont Floodplain Soils (F19) (LRR P, T			
	esence (A8) (LRR U)		Depleted Dark Surface (F7)					Anomalous Bright Floodplain Soils (F20)				
	ick (A9) (LRR P, T)		Redox Depressions (F8)					(MLRA 153B)				
·	d Below Dark Surface	e (A11)	Marl (F10) (LRR U)					Red Parent Material (F21)				
	ark Surface (A12)		Depleted Ochric (F11) (MLRA 151)					Very Shallow Dark Surface (F22)				
	rairie Redox (A16) (M		, <u> </u>	•	<i>,</i> ,							
	lucky Mineral (S1) (L	RR O, S)	Umbric Surface (F13) (LRR P, T, U)					Barrier Islands Low Chroma Matrix (TS7)				
	ileyed Matrix (S4)			_Delta Ochric (F17) (MLRA 151)			(MLRA 153B, 153D)					
	edox (S5)		Reduced Ve		<i>,</i> ,			Other (E	Explain in Remarks	5)		
	Matrix (S6)		Piedmont Fl	•		<i>,</i> ,						
	rface (S7) (LRR P, S		Anomalous	0	•	``	0)	2				
Polyvalue Below Surface (S8) (MLRA 149								³ Indicators of hydrophytic vegetation and				
(LRR \$	S, T, U)		`	_Very Shallow Dark Surface (F22) (MLRA 138, 152A in FL, 154)					wetland hydrology must be present, unless disturbed or problematic.			
Restrictive I	Layer (if observed):			, IJZP	· // I⁻⊑, I	J-7)		unies				
Type:												
Depth (ir	nches):						Hydrid	: Soil Prese	nt? Yes	K No		
Remarks	· .						-					

Remarks:

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Regi See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
Project/Site: Coldwater - Slocum Parcel City/County: Tate Cou	nty Sampling Date: 8/1/23
Applicant/Owner: Tate County Board of Supervisors	State: MS Sampling Point: WP6
Investigator(s): Headwaters, Inc. Section, Township, Range:	
Landform (hillside, terrace, etc.): Shoulder Local relief (concave, convex,	
	39.990734 Datum: WGS84
	NWI classification: PFO
Soil Map Unit Name: LgB2 - Loring-Grenada silt loams, 2 to 5 percent slopes, eroded	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X	No (If no, explain in Remarks.)
	Fircumstances" present? Yes X No
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic? (If needed, ex	plain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locati	ons, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No Is the Sampled Area Hydric Soil Present? Yes X No within a Wetland? Wetland Hydrology Present? Yes X No No	Yes <u>X</u> No
Remarks: Forested wetland	
HYDROLOGY	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) X Surface Water (A1) High Water Table (A2) Marl Deposits (B15) (LRR U) Saturation (A3) Hydrogen Sulfide Odor (C1) Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) X Sediment Deposits (B2) Presence of Reduced Iron (C4) X Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Thin Muck Surface (C7) Iron Deposits (B5) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) X X Water Table Present? Yes Saturation Present? Yes No Depth (inches): 2 Water Table Present? Yes No Depth (inches): 2 Wetland (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) X Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) X FAC-Neutral Test (D5) Sphagnum Moss (D8) (LRR T, U)
Remarks:	

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

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 ft.)	% Cover	Species?	Status	Dominance Test worksheet:
1. Liquidambar styraciflua	60	Yes	FAC	Number of Dominant Species
2. <u>Salix nigra</u>	25	Yes	OBL	That Are OBL, FACW, or FAC:(A)
 Fraxinus pennsylvanica 4. 	15	No	FACW	Total Number of Dominant Species Across All Strata: 2 (B)
5.				Percent of Dominant Species
6 7.				That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet:
8.				
o	100	=Total Cover		$\begin{array}{c c} \hline Total \% Cover of: \\ \hline OBL species 25 \\ \hline x 1 = 25 \end{array}$
50% of total cover: 5	-	of total cover:	20	FACW species $15 \times 2 = 30$
Sapling/Shrub Stratum (Plot size: 30 ft.)	2070		20	FAC species $60 \times 3 = 180$
1				
2.				· · · · · · · · · · · · · · · · · · ·
				· · · · · · · · · · · · · · · · · · ·
3.				Column Totals: 100 (A) 235 (B)
4				Prevalence Index = $B/A = 2.35$
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				X 2 - Dominance Test is >50%
8				X 3 - Prevalence Index is $\leq 3.0^1$
		=Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20%	of total cover:		
Herb Stratum (Plot size: 30 ft.)				
1				¹ Indicators of hydric soil and wetland hydrology must be
2.				present, unless disturbed or problematic.
3.				Definitions of Four Vegetation Strata:
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5.				more in diameter at breast height (DBH), regardless of
6.				height.
7.				
8.				Sapling/Shrub – Woody plants, excluding vines, less
9.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
10				
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12		Tatal Causer		We addy Vince All we addy since any start there 2.00 ft in
		=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in height.
50% of total cover:	20%	of total cover:		
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u>)				
1				
2				
3				
4				
5				Hydrophytic
		=Total Cover		Vegetation
50% of total cover:	20%	of total cover:		Present? Yes X No
Remarks: (If observed, list morphological adaptation	ns below.)			

	ription: (Describe f	the dep					/	e absence (of mulcators.
Depth	Matrix			x Featur					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Te	xture	Remarks
0-12	10YR 5/2	80	10YR 4/6	20	С	PL/M	Loam	y/Clayey	Prominent redox concentration
		·		_		·			
		·		_		·		2	
	oncentration, D=Depl Indicators: (Applica					d Grains.			PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
Histosol Histic Ep Black His Hydroge Stratified Organic 5 cm Mu Muck Pro 1 cm Mu Depleted Thick Da Coast Pr Sandy M Sandy G	(A1) bipedon (A2)	T, U) R P, T, U) (A11) ILRA 1504	Thin Dark S Barrier Islan (MLRA 15 Loamy Mucl Loamy Gley X Depleted Ma Redox Dark Depleted Da Redox Depr Marl (F10) (I Depleted Oc J Iron-Mangar Umbric Surf Delta Ochric Reduced Ve	urface (S ds 1 cm 53B, 153 ky Miner ed Matri atrix (F3) Surface ark Surfa essions LRR U) chric (F1 nese Ma ace (F13 c (F17) (I ertic (F18	S9) (LRR Muck (S D) al (F1) (L x (F2) (F6) (F6) (F6) (F8) 1) (MLR/ SSES (F1) 3) (LRR F MLRA 15 3) (MLRA	12) RR O) A 151) 2) (LRR C 2, T, U) (1) 150A, 15	50B)	1 cm M 2 cm M Coast F (outs Reduce (outs Piedmo Anomal (MLR Red Pa Very Sh (outs Barrier (MLR	uck (A9) (LRR O) uck (A10) (LRR S) Prairie Redox (A16) ide MLRA 150A) ed Vertic (F18) ide MLRA 150A, 150B) ont Floodplain Soils (F19) (LRR P, lous Bright Floodplain Soils (F20) A 153B) rrent Material (F21) nallow Dark Surface (F22) ide MLRA 138, 152A in FL, 154) Islands Low Chroma Matrix (TS7) A 153B, 153D) Explain in Remarks)
Dark Sur Polyvalu	Matrix (S6) rface (S7) (LRR P, S e Below Surface (S8 S, T, U)	-	Piedmont FI Anomalous (MLRA 14 Very Shallov (MLRA 13	Bright Fl 19A, 153 w Dark S	oodplain C, 153D Surface (F	Soils (F20) 522)	-	wetla	ors of hydrophytic vegetation and and hydrology must be present, ss disturbed or problematic.
Type:	Layer (if observed):								
Depth (ir	nches):						Hydri	c Soil Prese	ent? Yes <u>X</u> No

WETLAND DETERMINAT		-	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)				
See ERDC/EL	1R-10-20, the	e proponent agency is			, , , , , , , , , , , , , , , , , , ,		
Project/Site: Coldwater - Sloc	um Parcel		City/County: Tate County	Sa	mpling Date: 8/1/23		
Applicant/Owner: Tate Cou	unty Board of Su	ipervisors		State: MS Sa	mpling Point: WP7		
Investigator(s): Headwaters, Inc. Section, Township, Range: S36, T4S, R8W							
Landform (hillside, terrace, etc.			I relief (concave, convex, none		Slope (%): 2-5		
Subregion (LRR or MLRA): LRR P, MLRA 134 Lat: 34.693365 Long: -89.990314 Datum: WGS84							
Soil Map Unit Name: LgB2 - L				NWI classification:			
Are climatic / hydrologic conditi					ain in Remarks.)		
Are Vegetation N, Soil				mstances" present?	Yes X No		
Are Vegetation N, Soil	N_, or Hydrolog	gy N naturally problem	natic? (If needed, explain	any answers in Rema	rks.)		
SUMMARY OF FINDING	S – Attach s	site map showing sa	mpling point locations	, transects, impo	rtant features, etc.		
Hydrophytic Vegetation Prese	nt? Ye	es X No	Is the Sampled Area				
Hydric Soil Present?		es No X	within a Wetland?	Yes N	o_X_		
Wetland Hydrology Present?		es No X					
Remarks:							
Upland top bank of ephemeral	l feature						
HYDROLOGY							
Wetland Hydrology Indicato			Sec		nimum of two required)		
Primary Indicators (minimum o	of one is required			Surface Soil Cracks (,		
Surface Water (A1)	—	Aquatic Fauna (B13)		Sparsely Vegetated C			
High Water Table (A2)	—	Marl Deposits (B15) (L		Drainage Patterns (B	,		
Saturation (A3)	—	Hydrogen Sulfide Odor		Moss Trim Lines (B16	,		
Water Marks (B1)	_	Oxidized Rhizospheres Presence of Reduced I		Dry-Season Water Ta			
Sediment Deposits (B2) Drift Deposits (B3)		Recent Iron Reduction	. ,	Crayfish Burrows (C8)			
Algal Mat or Crust (B4)	—	Thin Muck Surface (C7		Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)			
Iron Deposits (B5)		Other (Explain in Rema		Shallow Aquitard (D3)			
Inundation Visible on Aeri	al Imagery (B7)			FAC-Neutral Test (D5			
Water-Stained Leaves (BS	••••			Sphagnum Moss (D8)	,		
Field Observations:							
	res N	No X Depth (inches)):				
Water Table Present?	res N	No X Depth (inches)):				
Saturation Present?	res N	No X Depth (inches)): Wetland Hydr	rology Present?	Yes No X		
(includes capillary fringe)							
Describe Recorded Data (stre	am gauge, moni [,]	itoring well, aerial photos, p	previous inspections), if availa	ble:			
Remarks:							

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 ft.)	% Cover	Species?	Status	Dominance Test worksheet:
1. Liquidambar styraciflua	60	Yes	FAC	Number of Dominant Species
2. Salix nigra	20	Yes	OBL	That Are OBL, FACW, or FAC: <u>3</u> (A)
3. Fraxinus pennsylvanica	10	No	FACW	Total Number of Dominant
4.				Species Across All Strata: <u>3</u> (B)
5.				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: 100.0% (A/B)
7.				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
	90	=Total Cover		OBL species 20 x 1 = 20
50% of total cover: 45	5 20%	of total cover:	18	FACW species 10 x 2 = 20
Sapling/Shrub Stratum (Plot size: 30 ft.)				FAC species 70 x 3 = 210
1				FACU species 0 x 4 = 0
2.				UPL species 0 x 5 = 0
3.				Column Totals: 100 (A) 250 (B)
4.				Prevalence Index = $B/A = 2.50$
5.				Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7.				X 2 - Dominance Test is >50%
8.				3 - Prevalence Index is ≤3.0 ¹
·		=Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:		6 of total cover:		
Herb Stratum (Plot size: 30 ft.)				
2				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.				Definitions of Four Vegetation Strata:
				-
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5 6.				height.
7.				
8.				Sapling/Shrub – Woody plants, excluding vines, less
o				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
9 10				
11.				Herb – All herbaceous (non-woody) plants, regardless
12.				of size, and woody plants less than 3.28 ft tall.
12		Total Covor		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover:		=Total Cover		height.
50% of total cover:	2070	of total cover.		10.9
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u>)	40	Vaa	540	
1. <u>Smilax rotundifolia</u>	10	Yes	FAC	
2				
3				
4.				
5				Hydrophytic
		=Total Cover	-	Vegetation
50% of total cover: 5	20%	of total cover:	2	Present? Yes X No
50% of total cover: <u>5</u> Remarks: (If observed, list morphological adaptations		of total cover:	2	

SOIL

Depth	Matrix	Redo	x Features						
	(moist) %	Color (moist)	<u>%</u> Ty	ype ¹	Loc ²	Tex	ture	Remarks	
0-12 10Y	R 5/3 100					Loamy	/Clayey		
					·		·		
					·				
					·				
Type: C=Concentratio	on, D=Depletion, R	M=Reduced Matrix, I	NS=Masked	I Sanc	l Grains.	2	² Location: P	PL=Pore Lining, M=Matri	х.
ydric Soil Indicators	a: (Applicable to a	II LRRs, unless othe	erwise note	ed.)		I	Indicators for	or Problematic Hydric	Soils ³ :
Histosol (A1)	Thin Dark S	Thin Dark Surface (S9) (LRR S, T, U)					1 cm Muck (A9) (LRR O)		
Histic Epipedon (A	2)	Barrier Islan	Barrier Islands 1 cm Muck (S12)			_	2 cm Mu	uck (A10) (LRR S)	
Black Histic (A3)	Black Histic (A3) (MLRA 153B, 153D)				_	Coast P	rairie Redox (A16)		
Hydrogen Sulfide (A4)	Loamy Muck	ky Mineral (F	F1) (L l	RR O)		(outside MLRA 150A)		
Stratified Layers (A	A5)	Loamy Gley	amy Gleyed Matrix (F2)					d Vertic (F18)	
Organic Bodies (A	6) (LRR P, T, U)	Depleted Ma	atrix (F3)				(outsi	ide MLRA 150A, 150B)	
5 cm Mucky Minera	al (A7) (LRR P, T,	U) Redox Dark	Surface (F6	6)			Piedmor	nt Floodplain Soils (F19)	(LRR P, T
Muck Presence (A	8) (LRR U)	Depleted Da	ark Surface ((F7)			Anomalo	ous Bright Floodplain So	oils (F20)
1 cm Muck (A9) (L	RR P, T)	Redox Depr	essions (F8))			(MLRA	A 153B)	
Depleted Below Da	ark Surface (A11)	Marl (F10) (I	LRR U)				Red Par	rent Material (F21)	
Thick Dark Surface	e (A12)	Depleted Oc	hric (F11) (I	MLRA	151)	-	Very Sha	allow Dark Surface (F22	2)
Coast Prairie Redo	ox (A16) (MLRA 15	0A) Iron-Mangar	nese Masses	s (F12) (LRR C), P, T)	(outsi	ide MLRA 138, 152A in	FL, 154)
Sandy Mucky Mine	eral (S1) (LRR O, S) Umbric Surf	ace (F13) (L		, T, U)		Barrier Is	Islands Low Chroma Mat	trix (TS7)
Sandy Gleyed Mat	rix (S4)	Delta Ochric	· · ·			-		A 153B, 153D)	()
Sandy Redox (S5)		Reduced Ve	ertic (F18) (N	/LRA	, 150A, 15	50B)	Other (E	Explain in Remarks)	
Stripped Matrix (Se		Piedmont Fl				-		. ,	
Dark Surface (S7)	,	Anomalous	•	•	<i>,</i> .				
Polyvalue Below S	-		I9A, 153C, 1	•	- 、 -	,	³ Indicato	ors of hydrophytic vegeta	ation and
(LRR S, T, U)	()	Very Shallov			22)			nd hydrology must be pr	
, -, -, -,			88, 152A in	•	,			s disturbed or problemat	
Restrictive Layer (if o	bserved):								
Туре:									
Depth (inches):						Hydric	Soil Preser	nt? Yes	No_X_
Remarks:									

U.S. Army WETLAND DETERMINATION DATA S See ERDC/EL TR-10-20; th	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)		
Project/Site: Coldwater - Slocum Parcel	Cit	y/County: <u>Tate County</u>	Sampling Date: 8/1/23
Applicant/Owner: Tate County Board of	Supervisors		State: MS Sampling Point: WP8
Investigator(s): Headwaters, Inc.	Section	, Township, Range: S36	5, T4S, R8W
Landform (hillside, terrace, etc.): Loess hills	s Local relie	f (concave, convex, none	e): none Slope (%): 2-5
Subregion (LRR or MLRA): LRR P, MLRA 1	34 Lat: <u>34.694139</u>	Long: -89.9	39726 Datum: WGS84
Soil Map Unit Name: CaB2 - Calloway silt lo	am, 2 to 5 percent slopes, modera	ately eroded	NWI classification: PSS
Are climatic / hydrologic conditions on the site	e typical for this time of year?	Yes <u>X</u>	No (If no, explain in Remarks.)
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydro	logy <u>N</u> significantly disturbed	? Are "Normal Circu	mstances" present? Yes X No
Are Vegetation N, Soil N, or Hydro	logy N naturally problematic?	(If needed, explain	any answers in Remarks.)
SUMMARY OF FINDINGS – Attach	site map showing sampl	ing point locations	s, transects, important features, etc
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?		he Sampled Area hin a Wetland?	Yes_X_No
Remarks: Scrub shrub wetland			
HYDROLOGY			
Wetland Hydrology Indicators:		Sec	condary Indicators (minimum of two required)
Primary Indicators (minimum of one is required)			Surface Soil Cracks (B6)
X Surface Water (A1) High Water Table (A2)	Aquatic Fauna (B13) Marl Deposits (B15) (LRR U	·	Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)
X Saturation (A3)	Hydrogen Sulfide Odor (C1)		Moss Trim Lines (B16)
Water Marks (B1)	Oxidized Rhizospheres on L		Dry-Season Water Table (C2)
Sediment Deposits (B2)	Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3)	Recent Iron Reduction in Til	led Soils (C6)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Surface (C7)		Geomorphic Position (D2)
Iron Deposits (B5)	Other (Explain in Remarks)	<u> </u>	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7	()	<u></u> X	FAC-Neutral Test (D5) Sphagnum Moss (D8) (LRR T, U)
Water-Stained Leaves (B9)			
Field Observations: Surface Water Present? Yes X	No Depth (inches):	2	
Surface Water Present? Yes X Water Table Present? Yes	No X Depth (inches):	2	
Saturation Present? Yes X			rology Present? Yes X No
(includes capillary fringe)			
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos, previo	ous inspections), if availa	ble:
Remarks:			

Г

Sampling Point: WP8

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. Fraxinus pennsylvanica	60	Yes	FACW	
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.	·			Percent of Dominant Species
7.				That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
o	60	=Total Cover		$\begin{array}{c c c c c c c c c c c c c c c c c c c $
E0% of total accurate			10	
50% of total cover: 30	<u> </u>	of total cover:	12	FACW species 60 $x 2 =$ 120 FAC species 40 $x 2$ 400
Sapling/Shrub Stratum (Plot size: 30 ft.)				FAC species40 $x 3 =$ 120FACULARIZED0 $x 4 =$ 0
1			<u> </u>	FACU species $0 x 4 = 0$
2.				UPL species $0 \times 5 = 0$
3.				Column Totals: 100 (A) 240 (B)
4				Prevalence Index = B/A =2.40
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				X 2 - Dominance Test is >50%
8				X 3 - Prevalence Index is $\leq 3.0^1$
	:	=Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20%	of total cover:		
Herb Stratum (Plot size: 30 ft.)				
1. Carex spp.	40	Yes	FAC	¹ Indicators of hydric soil and wetland hydrology must be
2				present, unless disturbed or problematic.
3.				Definitions of Four Vegetation Strata:
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5.				more in diameter at breast height (DBH), regardless of
6.				height.
7.				
8.				Sapling/Shrub – Woody plants, excluding vines, less
9.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
10.				
11				Herb – All herbaceous (non-woody) plants, regardless
12.				of size, and woody plants less than 3.28 ft tall.
12.	40	=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 20		of total cover:	8	height.
	<u> </u>	or total cover.	0	
Woody Vine Stratum (Plot size: 30 ft.)				
1				
2.				
3.				
4				
5				Hydrophytic
	:	=Total Cover		Vegetation
50% of total cover:	20%	of total cover:		Present? Yes X No
Remarks: (If observed, list morphological adaptation	ns below.)			

	ription: (Describe	to the dep				ator or co	onfirm th	e absence o	of indicators.)		
Depth	Matrix			x Featur	4	2	_				
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc ²	Te	xture	Remarks		
0-12	10YR 4/2	75	10YR 4/6	25	С	PL/M	Loam	y/Clayey	Prominent redox concentrations		
				_							
<i>,</i> ,	oncentration, D=Depl	•				d Grains.			PL=Pore Lining, M=Matrix.		
•	Indicators: (Applica	ble to all	•			o =			for Problematic Hydric Soils ³ :		
Histosol	,		Thin Dark S	`	, ,				uck (A9) (LRR O)		
	bipedon (A2)		Barrier Islands 1 cm Muck (S12)						uck (A10) (LRR S)		
Black His	()		(MLRA 153B, 153D)						Prairie Redox (A16)		
, 0	n Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR O)					•	ide MLRA 150A)		
	Layers (A5)		Loamy Gley		. ,			Reduced Vertic (F18)			
	Bodies (A6) (LRR P,	•••	X Depleted Ma	. ,				•	ide MLRA 150A, 150B)		
	cky Mineral (A7) (LR				```				nt Floodplain Soils (F19) (LRR P, T)		
	esence (A8) (LRR U)		Depleted Da		. ,				ous Bright Floodplain Soils (F20)		
	ck (A9) (LRR P, T)		Redox Depr		(F8)			•	A 153B)		
	Below Dark Surface	e (A11)	Marl (F10) (Red Parent Material (F21)				
	ark Surface (A12)		Depleted Oc	•	<i>,</i> .			Very Shallow Dark Surface (F22)			
	airie Redox (A16) (M		· <u> </u>			, 、	D, P, T)	•	ide MLRA 138, 152A in FL, 154)		
	lucky Mineral (S1) (L	RR O, S)	Umbric Surf	ace (F13	B) (LRR F	P, T, U)		Barrier	Islands Low Chroma Matrix (TS7)		
Sandy G	leyed Matrix (S4)		Delta Ochric	: (F17) (I	MLRA 15	51)		(MLR	A 153B, 153D)		
Sandy R	edox (S5)		Reduced Ve	ertic (F18	8) (MLRA	150A, 15	50B)	Other (I	Explain in Remarks)		
Stripped	Matrix (S6)		Piedmont Fl	oodplain	Soils (F	19) (MLR	A 149A)				
Dark Sur	rface (S7) (LRR P, S	, T, U)	Anomalous	Bright Fl	oodplain	Soils (F2	0)				
Polyvalu	e Below Surface (S8)	(MLRA 14	19A , 153	C, 153D))		³ Indicat	ors of hydrophytic vegetation and		
(LRR S	S, T, U)		Very Shallov	w Dark S	Surface (F	-22)		wetla	nd hydrology must be present,		
			(MLRA 13	38, 152A	in FL, 1	54)		unles	ss disturbed or problematic.		
Restrictive L	_ayer (if observed):										
Type:											
Depth (in	nches):						Hydri	c Soil Prese	nt? Yes X No		
Remarks:											

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Atlantic and G See ERDC/EL TR-10-20; the proponent agency	Gulf Coastal Plain Region	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
Project/Site: Coldwater - Slocum Parcel	City/County: Tate County	Sampling Date: 8/1/23
Applicant/Owner: Tate County Board of Supervisors		State: MS Sampling Point: WP9
Investigator(s): Headwaters, Inc.	Section, Township, Range: S36	
Landform (hillside, terrace, etc.): Flood plains Loc	al relief (concave, convex, none	e): none Slope (%): 0-2
Subregion (LRR or MLRA): LRR P, MLRA 134 Lat: 34.696097	Long: -89.99	Datum: WGS84
Soil Map Unit Name: Co - Collins silt loam, local alluvium, 0 to 2 percent slopes	s, occasionally flooded, brief duration	NWI classification: PSS
Are climatic / hydrologic conditions on the site typical for this time of yea	-	No (If no, explain in Remarks.)
Are Vegetation N , Soil N , or Hydrology N significantly dis		nstances" present? Yes X No
Are Vegetation N , Soil N , or Hydrology N naturally proble		any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing s		, transects, important reatures, etc.
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No Wetland Hydrology Present? Yes X No	Is the Sampled Area within a Wetland?	Yes <u>X</u> No
Remarks: Scrub shrub wetland		
HYDROLOGY		
Wetland Hydrology Indicators:	Sec	condary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil Cracks (B6)
X Surface Water (A1) Aquatic Fauna (B13) High Water Table (A2) Marl Deposits (B15) (LRR U)	Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)
X Saturation (A3) Hydrogen Sulfide Odd		Moss Trim Lines (B16)
	es on Living Roots (C3)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced	I Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction		Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C		Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Ren	,	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	<u></u>	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)		Sphagnum Moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes X No Depth (inche	s): 2	
Surface Water Present? Yes No Depth (inche Water Table Present? Yes No X Depth (inche	·	
Saturation Present? Yes X No Depth (inche		rology Present? Yes X No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	, previous inspections), if availa	ble:
Remarks:		

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WP9 Sampling Point:

	Absolute	Dominant	Indicator	Deminence Test workshoet
<u>Tree Stratum</u> (Plot size: <u>30 ft.</u>)	% Cover	Species?	Status	Dominance Test worksheet:
 Fraxinus pennsylvanica 2. 	60	Yes	FACW	Number of Dominant SpeciesThat Are OBL, FACW, or FAC:2(A)
3				Total Number of Dominant
4 5				Species Across All Strata: 2 (B)
6.				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
7.				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
		=Total Cover		OBL species 0 x 1 = 0
50% of total cover: 30) 20%	of total cover:	12	FACW species 60 x 2 = 120
Sapling/Shrub Stratum (Plot size: 30 ft.)				FAC species 40 x 3 = 120
1				FACU species 0 x 4 = 0
2.				UPL species 0 x 5 = 0
3				Column Totals: 100 (A) 240 (B)
4.		·		Prevalence Index = B/A = 2.40
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				X 2 - Dominance Test is >50%
8				X 3 - Prevalence Index is $\leq 3.0^1$
		=Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20%	of total cover:		
Herb Stratum (Plot size: 30 ft.)				
1. Carex spp.	40	Yes	FAC	¹ Indicators of hydric soil and wetland hydrology must be
2				present, unless disturbed or problematic.
3.				Definitions of Four Vegetation Strata:
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5.				more in diameter at breast height (DBH), regardless of
6.				height.
7.				
8.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 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.
12.				
	40	=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover:20	20%	of total cover:	8	height.
Woody Vine Stratum (Plot size: 30 ft.)				
1				
2.				
3.				
4.				
5.				
		=Total Cover		Hydrophytic Vegetation
50% of total cover:	20%	of total cover:		Present? Yes X No
Remarks: (If observed, list morphological adaptation	is below.)			

	cription: (Describe t	o the dep				ator or co	onfirm the	e absence c	of indicators.)	
Depth	Matrix			x Featu		. 2	-		- .	
inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Te	xture	Remarks	
0-12	10YR 5/2	75	10YR 4/6	25	<u> </u>	PL/M	Loamy	//Clayey	Prominent redox concentration	
						·				
						·				
71	oncentration, D=Depl					d Grains.			PL=Pore Lining, M=Matrix.	
•	Indicators: (Applica	ble to all	•						for Problematic Hydric Soils ³ :	
Histosol (A1) Thin Dark Surface (S9) (LRR S, T, U)						-		uck (A9) (LRR O)		
Histic Ep	pipedon (A2)		Barrier Islands 1 cm Muck (S12) 2 cm Muck (A10) (LRR S					uck (A10) (LRR S)		
Black Hi	()		(MLRA 153B, 153D)					Coast P	Prairie Redox (A16)	
Hydroge	n Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR O) (outside I					ide MLRA 150A)		
	d Layers (A5)		Loamy Gley	ed Matri	x (F2)		Reduced Vertic (F18)			
	Bodies (A6) (LRR P,		X Depleted Ma	. ,				•	ide MLRA 150A, 150B)	
	icky Mineral (A7) (LR				. ,		-		nt Floodplain Soils (F19) (LRR P,	
Muck Pr	esence (A8) (LRR U)		Depleted Da	irk Surfa	ce (F7)		-		ous Bright Floodplain Soils (F20)	
1 cm Mu	ick (A9) (LRR P, T)		Redox Depr	essions	(F8)			•	A 153B)	
Depleted	d Below Dark Surface	e (A11)	Marl (F10) (LRR U)			-	Red Pa	rent Material (F21)	
Thick Da	ark Surface (A12)		Depleted Oc	hric (F1	1) (MLR	A 151)	-	Very Sh	allow Dark Surface (F22)	
Coast Pr	rairie Redox (A16) (M	LRA 150	A) Iron-Mangar	nese Ma	sses (F1	2) (LRR C	D, P, T)	(outsi	ide MLRA 138, 152A in FL, 154)	
Sandy N	lucky Mineral (S1) (L	RR O, S)	Umbric Surf	ace (F13	B) (LRR F	P, T, U)	-	Barrier I	Islands Low Chroma Matrix (TS7)	
Sandy G	eleyed Matrix (S4)		Delta Ochric	: (F17) (I	MLRA 15	51)		(MLR	A 153B, 153D)	
Sandy R	edox (S5)		Reduced Ve	rtic (F18	B) (MLRA	150A, 15	50B)	Other (E	Explain in Remarks)	
Stripped	Matrix (S6)		Piedmont Fl	oodplair	Soils (F	19) (MLR	A 149A)			
Dark Su	rface (S7) (LRR P, S ,	, T, U)	Anomalous	Bright Fl	oodplain	Soils (F2	0)			
Polyvalu	e Below Surface (S8))	(MLRA 14	9A, 153	C, 153D))		³ Indicate	ors of hydrophytic vegetation and	
(LRR	S, T, U)		Very Shallov	v Dark S	Surface (F	22)		wetla	nd hydrology must be present,	
			(MLRA 13	8, 152A	in FL, 1	54)		unles	s disturbed or problematic.	
	Layer (if observed):									
Type:							- ایران در ا	Soil Press	nta Vac V Na	
Depth (ir	iches).						nyaria	: Soil Prese	nt? Yes <u>X</u> No	

U.S. Arm WETLAND DETERMINATION DATA See ERDC/EL TR-10-20;			Requirement Con	0-0024, Exp: 11/30/2024 trol Symbol EXEMPT: 5-15, paragraph 5-2a)
Project/Site: Coldwater - Slocum Parcel		City/County: Tate County	Sa	mpling Date: 8/1/23
Applicant/Owner: Tate County Board o	f Supervisors	_ ` ` <u></u>		mpling Point: WP10
Investigator(s): Headwaters, Inc.	•	ection, Township, Range: S36		
Landform (hillside, terrace, etc.): Flood pl		l relief (concave, convex, none		Slope (%): 0-2
		•		
Subregion (LRR or MLRA): LRR P, MLRA		Long: <u>-89.9</u>		Datum: WGS84
Soil Map Unit Name: Co - Collins silt loam, loo		-	_	
Are climatic / hydrologic conditions on the s			No (If no, expla	ain in Remarks.)
Are Vegetation N, Soil N, or Hyd	rology N significantly dist	urbed? Are "Normal Circui	mstances" present?	Yes X No
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hyd	rology <u>N</u> naturally problem	natic? (If needed, explain	any answers in Rema	rks.)
SUMMARY OF FINDINGS – Attac	h site map showing sa	mpling point locations	, transects, impo	rtant features, etc.
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled Area		
Hydric Soil Present?	Yes No X	within a Wetland?	Yes No	o <u>X</u>
Wetland Hydrology Present?	Yes No X			
Remarks: Upland sample point				
HYDROLOGY				
Wetland Hydrology Indicators:		Sec	condary Indicators (min	nimum of two required)
Primary Indicators (minimum of one is requ			Surface Soil Cracks (I	,
Surface Water (A1)	Aquatic Fauna (B13)		Sparsely Vegetated C	
High Water Table (A2) Saturation (A3)	Marl Deposits (B15) (L Hydrogen Sulfide Odor		Drainage Patterns (B1	
Water Marks (B1)	Oxidized Rhizospheres		Moss Trim Lines (B16 Dry-Season Water Ta	
Sediment Deposits (B2)	Presence of Reduced		Crayfish Burrows (C8)	. ,
Drift Deposits (B3)	Recent Iron Reduction		Saturation Visible on	
Algal Mat or Crust (B4)	Thin Muck Surface (C7		Geomorphic Position	••••
Iron Deposits (B5)	Other (Explain in Rema	arks)	Shallow Aquitard (D3)	
Inundation Visible on Aerial Imagery (I	B7)		FAC-Neutral Test (D5	i)
Water-Stained Leaves (B9)			Sphagnum Moss (D8)	(LRR T, U)
Field Observations:				
Surface Water Present? Yes	No X Depth (inches			
Water Table Present? Yes	No X Depth (inches			
Saturation Present? Yes	No X Depth (inches): Wetland Hyd	rology Present?	Yes NoX
(includes capillary fringe) Describe Recorded Data (stream gauge, n	opitoring well periol photos	previous inspections) if availa	ble:	
Describe Recorded Data (Stream gauge, in	nonitoring well, aerial protos,		DIE.	
Remarks:				

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	Absolute	Dominant	Indicator	During Test workshot
<u>Tree Stratum</u> (Plot size: <u>30 ft.</u>)	% Cover	Species?	Status FAC	Dominance Test worksheet:
 Liquidambar styraciflua Ulmus americana 	<u>40</u> 30	Yes Yes	FAC FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
	20	Yes	FAC	
4.	20		FAGVV	Total Number of Dominant Species Across All Strata:4 (B)
5 6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
7.				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
	90	=Total Cover		OBL species 0 x 1 = 0
50% of total cover:4	5 20%	of total cover:	18	FACW species 20 x 2 = 40
Sapling/Shrub Stratum (Plot size: 30 ft.)				FAC species 80 x 3 = 240
1				FACU species 0 x 4 = 0
2.				UPL species 0 x 5 = 0
3.				Column Totals: 100 (A) 280 (B)
4.				Prevalence Index = B/A = 2.80
5.				Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7.				X 2 - Dominance Test is >50%
8.				3 - Prevalence Index is ≤3.0 ¹
		=Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20%	of total cover:		
Herb Stratum (Plot size: 30 ft.)				
1				¹ Indicators of hydric soil and wetland hydrology must be
2.				present, unless disturbed or problematic.
3.				Definitions of Four Vegetation Strata:
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5.				more in diameter at breast height (DBH), regardless of
6.				height.
7.				
8.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 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.
12.				
		=Total Cover		Woody Vine - All woody vines greater than 3.28 ft in
50% of total cover:	20%	of total cover:		height.
Woody Vine Stratum (Plot size: 30 ft.)				
1. Campsis radicans	10	Yes	FAC	
2.				
3.				
4.				
5.				It deamhadia
	10	=Total Cover		Hydrophytic Vegetation
50% of total cover:	5 20%	of total cover:	2	Present? Yes X No
Remarks: (If observed, list morphological adaptation	ns below.)			

SOIL

	ription: (Describe			x Featu					or more		
Depth (inches)	Color (moist)	%	Color (moist)	x realui %	Type ¹	Loc ²	Te	xture		Re	marks
· · · ·				70	190					110	inano
0-12	10YR 5/4	100				<u> </u>	Loamy	//Clayey	·		
						<u> </u>					
									<u> </u>		
						<u> </u>			. <u> </u>		
Type: C=Co	oncentration, D=Depl	etion, RM=F	Reduced Matrix, I	/IS=Mas	ked Sand	Grains.		² Location:	PL=Po	re Lining, M	=Matrix.
•	Indicators: (Applica	ble to all LF			,						lydric Soils ³ :
Histosol	· · ·		Thin Dark S			-	-			9) (LRR O)	
Histic Epipedon (A2)			Barrier Islan	ds 1 cm	Muck (S	2)	-	2 cm l	Muck (A	10) (LRR S))
Black Histic (A3)			(MLRA 15	3B, 153	D)		-	Coast	Prairie	Redox (A16)
Hydrogen Sulfide (A4)			Loamy Muck	ky Miner	al (F1) (L	RR O)		(out	side ML	_RA 150A)	
Stratified Layers (A5)			Loamy Gley	ed Matri	x (F2)		-	Reduc	ced Vert	ic (F18)	
Organic	Bodies (A6) (LRR P,	T, U)	Depleted Matrix (F3)					(out	side ML	RA 150A, 1	150B)
5 cm Mu	cky Mineral (A7) (LR	R P, T, U)	Redox Dark Surface (F6)					Piedmont Floodplain Soils (F19) (LRR P, 1			
Muck Pre	esence (A8) (LRR U))	Depleted Dark Surface (F7)					Anomalous Bright Floodplain Soils (F20)			
1 cm Mu	ck (A9) (LRR P, T)		Redox Depr	essions	(F8)			(ML	RA 153	В)	
Depleted	Below Dark Surface	e (A11)	Marl (F10) (I	_RR U)				Red P	arent M	aterial (F21))
Thick Da	ark Surface (A12)		Depleted Oc	hric (F1	1) (MLRA	151)		Very Shallow Dark Surface (F22)			
Coast Pr	airie Redox (A16) (N	ILRA 150A)	Iron-Mangar	nese Ma	sses (F12	2) (LRR C), P, T)) (outside MLRA 138, 152A in FL, 154)			
Sandy M	lucky Mineral (S1) (L	RR O, S)	Umbric Surf	ace (F13	B) (LRR P	, T, U)		Barrier Islands Low Chroma Matrix (TS7)			
Sandy G	ileyed Matrix (S4)		Delta Ochric	(F17) (MLRA 15	1)	-	(MLRA 153B, 153D)			
Sandy R	edox (S5)		Reduced Ve	rtic (F18	B) (MLRA	150A, 15	50B)	Other	(Explair	n in Remark	s)
Stripped	Matrix (S6)		Piedmont Fl	oodplain	Soils (F1	9) (MLR	A 149A)				
Dark Sur	Anomalous	Bright Fl	oodplain	Soils (F20	0)						
			(MLRA 14	9A, 153	C, 153D)			³ Indica	ators of	hydrophytic	vegetation and
(LRR S, T, U)			Very Shallov	v Dark S	, Surface (F	22)		wetland hydrology must be present,			
	-		(MLRA 13	8, 152A	in FL, 1	54)		unle	ess distu	urbed or pro	blematic.
Restrictive I	_ayer (if observed):										
Type:											
Depth (ir	nches):						Hydric	: Soil Pres	ent?	Yes	<u>No X</u>
Remarks:			_								

U.S. Army Corps of WETLAND DETERMINATION DATA SHEET – At See ERDC/EL TR-10-20; the propone	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)					
Project/Site: Coldwater - Slocum Parcel	City/County: Tate County	Sampling Date: 8/1/23				
Applicant/Owner: Tate County Board of Supervisors		State: MS Sampling Point: W11				
Investigator(s): Headwaters, Inc.	Section, Township, Range: S36	5, T4S, R8W				
Landform (hillside, terrace, etc.): Shoulder	Local relief (concave, convex, none	e): none Slope (%): 2-5				
Subregion (LRR or MLRA): LRR P, MLRA 134 Lat: 34	1.69638 Long: -89.99	9117 Datum: WGS84				
Soil Map Unit Name: LgB2 - Loring-Grenada silt loams, 2		NWI classification: PFO				
Are climatic / hydrologic conditions on the site typical for th		No (If no, explain in Remarks.)				
Are Vegetation N , Soil N , or Hydrology N si		mstances" present? Yes X No				
Are Vegetation N , Soil N , or Hydrology N na		any answers in Remarks.)				
SUMMARY OF FINDINGS – Attach site map	snowing sampling point locations	s, transects, Important features, etc.				
Hydric Soil Present? Yes X	No Is the Sampled Area No within a Wetland?	Yes <u>X</u> No				
Remarks: Forested wetland						
HYDROLOGY						
Wetland Hydrology Indicators:	Sec	condary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all		Surface Soil Cracks (B6)				
	Fauna (B13)	Sparsely Vegetated Concave Surface (B8)				
	posits (B15) (LRR U)					
	d Rhizospheres on Living Roots (C3)	Dry-Season Water Table (C2)				
	e of Reduced Iron (C4)	Crayfish Burrows (C8)				
	ron Reduction in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4) Thin Mu	ck Surface (C7)	Geomorphic Position (D2)				
Iron Deposits (B5) Other (E	xplain in Remarks)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)		FAC-Neutral Test (D5)				
X Water-Stained Leaves (B9)		Sphagnum Moss (D8) (LRR T, U)				
Field Observations:						
Surface Water Present? Yes X No	Depth (inches): 2					
Water Table Present? Yes No X Saturation Present? Yes X No	Depth (inches): Depth (inches): 2 Wetland Hvd	rology Present? Yes X No				
(includes capillary fringe)	Depth (inches): 2 Wetland Hyd	rology Present? Yes X No				
Describe Recorded Data (stream gauge, monitoring well,	aerial photos, previous inspections), if availa	ble:				
Remarks:						
Nomento.						

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	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 ft.)	% Cover	Species?	Status	Dominance Test worksheet:
1. Platanus occidentalis	40	Yes	FACW	Number of Dominant Species
2. Ulmus americana	30	Yes	FAC	That Are OBL, FACW, or FAC:3 (A)
3. <u>Salix nigra</u>	20	Yes	OBL	Total Number of Dominant
4. Acer rubrum	10	No	FAC	Species Across All Strata: <u>3</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 100.0% (A/B)
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	100	=Total Cover		OBL species 20 x 1 = 20
50% of total cover:	50 20%	of total cover	20	FACW species 40 x 2 = 80
Sapling/Shrub Stratum (Plot size: 30 ft.)			FAC species 40 x 3 = 120
1				FACU species 0 x 4 = 0
2				UPL species 0 x 5 = 0
3				Column Totals: 100 (A) 220 (B)
4.				Prevalence Index = B/A = 2.20
5.				Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7.				X 2 - Dominance Test is >50%
8.				X 3 - Prevalence Index is $\leq 3.0^{1}$
		=Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:		of total cover		
Herb Stratum (Plot size: 30 ft.)				
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3				Definitions of Four Vegetation Strata:
				-
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5 6.				height.
7				Sapling/Shrub – Woody plants, excluding vines, less
8				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
9				
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12				
		=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover:	20%	of total cover		height.
Woody Vine Stratum (Plot size: 30 ft.)				
1				
2				
3				
4				
5.				Hydrophytic
		=Total Cover		Vegetation
50% of total cover:	20%	of total cover	:	Present? Yes X No
Remarks: (If observed, list morphological adaptation	ons below.)			

	ription: (Describe	to the dep				ator or co	onfirm the	e absence c	of indicators.)		
Depth	Matrix			x Featu	4						
inches)	Color (moist)	%	Color (moist)	%	Type'	Loc ²	Tex	kture	Re	emarks	
0-12	10YR 5/1	80	10YR 4/6	20	C	PL/M	Loamy	/Clayey	Prominent red	lox concentrations	
		·				·					
		·									
Type: C=Co	ncentration, D=Depl	etion, RM	=Reduced Matrix, I	MS=Mas	ked San	d Grains.		² Location: F	PL=Pore Lining, M	=Matrix.	
lydric Soil I	ndicators: (Applica	ble to all	LRRs, unless othe	erwise r	noted.)			Indicators f	or Problematic H	lydric Soils ³ :	
Histosol (A1) Thin Dark Surface (S9) (LRR S,					S, T, U)	_	1 cm Mu	uck (A9) (LRR O)			
Histic Epi	Histic Epipedon (A2) Barrier Islands 1 cm Muck (S12)					12)	_	2 cm M	uck (A10) (LRR S))	
Black Histic (A3) (MLRA 153B, 153D)						_	Coast P	rairie Redox (A16)		
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR O)					.RR O)		(outsi	ide MLRA 150A)			
Stratified Layers (A5) Loamy Gleyed Matrix (F2)						_	Reduce	d Vertic (F18)			
Organic E	Bodies (A6) (LRR P,	T, U)	X Depleted Ma	atrix (F3))			(outsi	ide MLRA 150A, [,]	150B)	
5 cm Muo	cky Mineral (A7) (LR	R P, T, U)	Redox Dark	Surface	(F6)		_	Piedmo	nt Floodplain Soils	s (F19) (LRR P, T	
Muck Pre	esence (A8) (LRR U))	Depleted Da	Depleted Dark Surface (F7)					Anomalous Bright Floodplain Soils (F20)		
1 cm Muo	ck (A9) (LRR P, T)		Redox Depr	essions	(F8)		-	(MLR	A 153B)		
Depleted	Below Dark Surface	e (A11)	Marl (F10) (I	LRR U)				Red Pa	rent Material (F21))	
Thick Da	rk Surface (A12)		Depleted Oc	hric (F1	1) (MLR/	A 151)	-	Very Sh	allow Dark Surfac	e (F22)	
Coast Pra	airie Redox (A16) (M	ILRA 150/	A) Iron-Mangar	nese Ma	sses (F1	2) (LRR C), P, T)	(outsi	ide MLRA 138, 15	52A in FL, 154)	
Sandy M	ucky Mineral (S1) (L	RR O, S)	Umbric Surf	ace (F13	B) (LRR F	P, T, U)	-	Barrier I	Islands Low Chror	ma Matrix (TS7)	
Sandy Gl	leyed Matrix (S4)		Delta Ochric	(F17) (MLRA 15	51)	-	(MLR	A 153B, 153D)		
Sandy Re	edox (S5)		Reduced Ve	rtic (F18	B) (MLRA	150A, 15	50B)	Other (E	Explain in Remark	s)	
Stripped	Matrix (S6)		Piedmont Fl				-				
	face (S7) (LRR P, S										
	e Below Surface (S8		(MLRA 14			³ Indicate	ors of hydrophytic	vegetation and			
(LRR S	S, T, U)	,	Very Shallov						nd hydrology mus	•	
· ·			(MLRA 13			,			s disturbed or pro	•	
Restrictive L	ayer (if observed):										
Type:											
Depth (in	ches):						Hydric	Soil Prese	nt? Yes_	X No	
Remarks:											

U.S. Arm WETLAND DETERMINATION DAT/ See ERDC/EL TR-10-20	Requirement Co	10-0024, Exp: 11/30/2024 ntrol Symbol EXEMPT: 35-15, paragraph 5-2a)			
Project/Site: Coldwater - Slocum Parcel		City/County: Tate County	S	ampling Date: 8/1/23	
Applicant/Owner: Tate County Board	of Supervisors			ampling Point: W12	
Investigator(s): Headwaters, Inc.	•	ection, Township, Range: S36			
Landform (hillside, terrace, etc.): Flood p		l relief (concave, convex, none		Slope (%): 0-2	
		•	·		
Subregion (LRR or MLRA): LRR P, MLRA		Long: -89.9		Datum: WGS84	
Soil Map Unit Name: Co - Collins silt loam, Ic		-			
Are climatic / hydrologic conditions on the				lain in Remarks.)	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hyd	drology N significantly dist	urbed? Are "Normal Circu	mstances" present?	Yes X No	
Are Vegetation N, Soil N, or Hyd	drology <u>N</u> naturally problem	natic? (If needed, explain	any answers in Remain	arks.)	
SUMMARY OF FINDINGS – Attac	ch site map showing sa	mpling point locations	s, transects, impo	ortant features, etc.	
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled Area			
Hydric Soil Present?	within a Wetland?	Yes N	lo <u>X</u>		
Wetland Hydrology Present?	Yes No X				
Remarks: Upland sample point					
HYDROLOGY					
Wetland Hydrology Indicators:		Sec	condary Indicators (mi	nimum of two required)	
Primary Indicators (minimum of one is rec			Surface Soil Cracks (B6)		
Surface Water (A1)	Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B			
High Water Table (A2)	Marl Deposits (B15) (L				
Saturation (A3) Water Marks (B1)	Hydrogen Sulfide Odo				
Sediment Deposits (B2)	Presence of Reduced	on Living Roots (C3) Dry-Season Water Table (C2) ron (C4) Crayfish Burrows (C8)			
Drift Deposits (B3)	Recent Iron Reduction		Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Thin Muck Surface (C7	. ,	Geomorphic Position		
Iron Deposits (B5)	Other (Explain in Rema	,			
Inundation Visible on Aerial Imagery	(B7)	FAC-Neutral Test (D5)			
Water-Stained Leaves (B9)			Sphagnum Moss (D8	3) (LRR T, U)	
Field Observations:					
Surface Water Present? Yes	No X Depth (inches):			
Water Table Present? Yes	No X Depth (inches				
Saturation Present? Yes	No X Depth (inches): Wetland Hyd	rology Present?	Yes No_X	
(includes capillary fringe) Describe Recorded Data (stream gauge,	monitoring well serial photos	previous inspections) if availa	ble:		
Describe Recorded Data (Sirearin gauge,	monitoring weil, aenai photos,				
Remarks:					
Komuno.					

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	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 ft.)	% Cover	Species?	Status	Dominance Test worksheet:
1. <u>Acer rubrum</u>	40	Yes	FAC	Number of Dominant Species
2. Liquidambar styraciflua	30	Yes	FAC	That Are OBL, FACW, or FAC:4 (A)
 Fraxinus pennsylvanica 4. 	20	Yes	FACW	Total Number of Dominant Species Across All Strata: 4 (B)
5.				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 100.0% (A/B)
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
		=Total Cover		OBL species 0 x 1 = 0
50% of total cover: 45	20%	of total cover:	18	FACW species 20 x 2 = 40
Sapling/Shrub Stratum (Plot size: 30 ft.)				FAC species 80 x 3 = 240
1				FACU species 0 x 4 = 0
2				UPL species 0 x 5 = 0
3				Column Totals: 100 (A) 280 (B)
4				Prevalence Index = B/A = 2.80
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7.				X 2 - Dominance Test is >50%
8.				3 - Prevalence Index is ≤3.0 ¹
		=Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20%	of total cover:		
Herb Stratum (Plot size: 30 ft.)				
1.				¹ Indicators of hydric soil and wetland hydrology must be
2.				present, unless disturbed or problematic.
3.				Definitions of Four Vegetation Strata:
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5				more in diameter at breast height (DBH), regardless of
6.				height.
7.				
8.				Sapling/Shrub – Woody plants, excluding vines, less
o				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
9				
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12				
		=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in height.
50% of total cover:	20%	of total cover:		neight.
Woody Vine Stratum (Plot size: 30 ft.)				
1. Campsis radicans	10	Yes	FAC	
2				
3				
4				
5				Hydrophytic
	10	=Total Cover		Vegetation
50% of total cover: 5	20%	of total cover:	2	Present? Yes X No
Remarks: (If observed, list morphological adaptations	; below.)			·

SOIL

	ription: (Describe										
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Featur %	res Type ¹	Loc ²	Te	xture		Rem	arks
<u>, , , , , , , , , , , , , , , , , , , </u>		·		70	1990				. . <u></u>	Rom	unto
0-12	10YR 4/3	100				:	Loamy	//Clayey	·		
						<u> </u>			·		
						·			·		
Type: C=Co	oncentration, D=Dep	letion, RM=F	Reduced Matrix,	MS=Mas	ked San	d Grains.		² Location:	PL=Pore	e Lining, M=N	Matrix.
lydric Soil I	Indicators: (Applica	ble to all LF	RRs, unless oth	erwise r	noted.)			Indicators	s for Prob	plematic Hy	dric Soils ³ :
Histosol	(A1)		Thin Dark S	urface (S	39) (LRR	S, T, U)		1 cm	Muck (A9)	(LRR O)	
Histic Epipedon (A2)			Barrier Islar	Barrier Islands 1 cm Muck (S12)					2 cm Muck (A10) (LRR S)		
Black Histic (A3)			(MLRA 1	53B, 153	BD)			Coast	Prairie R	edox (A16)	
Hydrogen Sulfide (A4)			Loamy Muc	ky Miner	al (F1) (L	RR O)		(out	side MLF	RA 150A)	
Stratified Layers (A5)			Loamy Gley	ed Matri	x (F2)			Reduc	ced Vertic	(F18)	
Organic	Bodies (A6) (LRR P,	, T, U)	Depleted Matrix (F3)					(out	side MLF	RA 150A, 15	0B)
5 cm Mu	cky Mineral (A7) (LR	R P, T, U)	Redox Dark Surface (F6)					Piedmont Floodplain Soils (F19) (LRR P, T			
Muck Pre	esence (A8) (LRR U)	Depleted Dark Surface (F7)					Anomalous Bright Floodplain Soils (F20)			
1 cm Mu	ck (A9) (LRR P, T)		Redox Depr	essions	(F8)			(ML	RA 153B))	
Depleted	Below Dark Surface	e (A11)	Marl (F10) (LRR U)				Red F	Parent Mat	terial (F21)	
Thick Da	ark Surface (A12)		Depleted O	chric (F1	1) (MLRA	A 151)		Very S	Shallow D	ark Surface	(F22)
Coast Pr	airie Redox (A16) (N	ILRA 150A)	Iron-Manga	nese Ma	sses (F12	2) (LRR C), P, T)				
Sandy M	lucky Mineral (S1) (L	.RR O, S)	Umbric Surf	ace (F13	B) (LRR F	P, T, U)		Barrier Islands Low Chroma Matrix (TS7)			
Sandy G	leyed Matrix (S4)		Delta Ochrid	; (F17) (I	MLRA 15	1)		(MLRA 153B, 153D)			
Sandy R	edox (S5)		Reduced Ve	ertic (F18	B) (MLRA	150A, 15	50B)	Other	(Explain i	n Remarks)	
Stripped	Matrix (S6)		Piedmont F	oodplair	n Soils (F	19) (MLR	A 149A)				
Dark Surface (S7) (LRR P, S, T, U) Anomalous Br					loodplain	Soils (F2	0)				
			(MLRA 14	49A, 153	SC, 153D))		³ Indica	ators of hy	/drophytic ve	egetation and
(LRR S, T, U)			Very Shallo	w Dark S	Surface (F	22)		wetland hydrology must be present,			
-			(MLRA 1					unle	ess distur	bed or proble	ematic.
Restrictive L	_ayer (if observed):										
Type:											
Depth (ir	nches):						Hydrid	c Soil Pres	sent?	Yes	No X
Remarks:											

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Atlantic and See ERDC/EL TR-10-20; the proponent agency	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)		
Project/Site: Coldwater - Slocum Parcel	City/County: Tate County	Sampling Date: 8/1/23	
Applicant/Owner: Tate County Board of Supervisors		State: MS Sampling Point: W13	
Investigator(s): Headwaters, Inc.	Section, Township, Range: S3	5, T4S, R8W	
Landform (hillside, terrace, etc.): Shoulder Low	cal relief (concave, convex, non	e): none Slope (%): 2-5	
Subregion (LRR or MLRA): LRR P, MLRA 134 Lat: 34.697835	Long: -89.9		
Soil Map Unit Name: LgB2 - Loring-Grenada silt loams, 2 to 5 percent		NWI classification: PFO	
Are climatic / hydrologic conditions on the site typical for this time of year	ar? Yes X I	No (If no, explain in Remarks.)	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> significantly dia		mstances" present? Yes X No	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally probl		any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing s		-	
C		, transects, important reatures, etc.	
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No Wetland Hydrology Present? Yes X No	Is the Sampled Area within a Wetland?	Yes <u>X</u> No	
Remarks: Forested wetland			
HYDROLOGY			
Wetland Hydrology Indicators:	Se	condary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil Cracks (B6)	
X Surface Water (A1) Aquatic Fauna (B13))	Sparsely Vegetated Concave Surface (B8)	
High Water Table (A2) Marl Deposits (B15)	(LRR U)	Drainage Patterns (B10)	
X Saturation (A3) Hydrogen Sulfide Oc		Moss Trim Lines (B16)	
	res on Living Roots (C3)	Dry-Season Water Table (C2)	
Sediment Deposits (B2) Presence of Reduce		Crayfish Burrows (C8)	
Drift Deposits (B3) Algal Mat or Crust (B4) Recent Iron Reduction	on in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)	
Iron Deposits (B5) Other (Explain in Re	· · · · · · · · · · · · · · · · · · ·	Shallow Aquitard (D3)	
Inundation Visible on Aerial Imagery (B7)		FAC-Neutral Test (D5)	
Water-Stained Leaves (B9)		Sphagnum Moss (D8) (LRR T, U)	
Field Observations:			
Surface Water Present? Yes X No Depth (inche	es): 2		
Water Table Present? Yes No X Depth (inche	es):		
Saturation Present? Yes X No Depth (inche	es): 2 Wetland Hyd	rology Present? Yes X No	
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos	s, previous inspections), if availa	ble:	
Remarks:			

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	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 ft.)	% Cover	Species?	Status	Dominance Test worksheet:
1. Acer rubrum	40	Yes	FAC	Number of Dominant Species
2. Liquidambar styraciflua	30	Yes	FAC	That Are OBL, FACW, or FAC: (A)
3. Fraxinus pennsylvanica	20	Yes	FACW	Total Number of Dominant
4.				Species Across All Strata: 4 (B)
5.				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: 100.0% (A/B)
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
		=Total Cover		OBL species 0 x 1 = 0
50% of total cover: 45	5 20%	6 of total cover:	18	FACW species 20 x 2 = 40
Sapling/Shrub Stratum (Plot size: 30 ft.)				FAC species 80 x 3 = 240
1				FACU species 0 x 4 = 0
2.				UPL species 0 x 5 = 0
3				Column Totals: 100 (A) 280 (B)
4.				Prevalence Index = B/A = 2.80
5.				Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7.				X 2 - Dominance Test is >50%
8.				X 3 - Prevalence Index is $\leq 3.0^{1}$
o		=Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)
E0% of total action				
50% of total cover:	2070	of total cover:		
Herb Stratum (Plot size: 30 ft.)				
1		·		¹ Indicators of hydric soil and wetland hydrology must be
2				present, unless disturbed or problematic.
3				Definitions of Four Vegetation Strata:
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5				more in diameter at breast height (DBH), regardless of
6.				height.
7.				
8.				Sapling/Shrub – Woody plants, excluding vines, less
9.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
10				
11				Herb – All herbaceous (non-woody) plants, regardless
				of size, and woody plants less than 3.28 ft tall.
12				
		=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in height.
50% of total cover:	20%	of total cover:		neight.
Woody Vine Stratum (Plot size: 30 ft.)				
1. Campsis radicans	10	Yes	FAC	
2		<u></u>		
3				
4.				
5.				Heaters had a
	10	=Total Cover		Hydrophytic Vegetation
50% of total cover: 5	20%	of total cover:	2	Present? Yes X No
Remarks: (If observed, list morphological adaptation	is delow.)			

	ription: (Describe	to the dep				ator or co	onfirm the	e absence o	of indicators.)		
Depth	Matrix			x Featur							
inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Tex	ture	Remarks		
0-12	10YR 5/2	80	10YR 4/6	20	<u> </u>	PL/M	Loamy	/Clayey	Prominent redox conc	entrations	
		·				·					
Туре: С=Сс	Dincentration, D=Depl	etion, RM	Reduced Matrix, N	//S=Mas		d Grains.		² Location: F	PL=Pore Lining, M=Matrix.		
lydric Soil I	Indicators: (Applica	ble to all	_RRs, unless othe	erwise r	oted.)			Indicators f	for Problematic Hydric S	oils³:	
Histosol	Thin Dark S	Thin Dark Surface (S9) (LRR S, T, U)					1 cm Muck (A9) (LRR O)				
Histic Ep	stic Epipedon (A2) Barrier Islands 1 cm Muck (S12)					12)	_	2 cm M	uck (A10) (LRR S)		
Black His	Black Histic (A3) (MLRA 153B, 153D)						_	Coast P	Prairie Redox (A16)		
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR O					.RR O)	_	(outsi	ide MLRA 150A)			
Stratified Layers (A5) Loamy				ed Matri	x (F2)			Reduce	d Vertic (F18)		
Organic	Bodies (A6) (LRR P,	T, U)	X Depleted Ma	Depleted Matrix (F3)					ide MLRA 150A, 150B)		
5 cm Mu	icky Mineral (A7) (LR	R P, T, U)	Redox Dark Surface (F6)					Piedmont Floodplain Soils (F19) (LRR P, T			
Muck Pre	esence (A8) (LRR U))	Depleted Dark Surface (F7)					Anomalous Bright Floodplain Soils (F20)			
1 cm Mu	ick (A9) (LRR P, T)		Redox Depressions (F8)					(MLRA 153B)			
Depleted	Below Dark Surface	e (A11)	Marl (F10) (LRR U)					Red Parent Material (F21)			
	ark Surface (A12)	· · /	Depleted Ochric (F11) (MLRA 151)					Very Shallow Dark Surface (F22)			
	rairie Redox (A16) (M	ILRA 1504	·	Iron-Manganese Masses (F12) (LRR O, P, T							
	lucky Mineral (S1) (L		, <u> </u>		•	<i>,</i> ,	, , ,	Barrier Islands Low Chroma Matrix (TS7)			
	leyed Matrix (S4)	-,-,		_Umbric Surface (F13) (LRR P, T, U) Delta Ochric (F17) (MLRA 151)				(MLRA 153B, 153D)			
	edox (S5)		Reduced Ve	· / ·		•	50B)	•	Explain in Remarks)		
	()			•	, .		-				
	Stripped Matrix (S6) Piedmont Floodplain Soils (F19) (MI Dark Surface (S7) (LRR P, S, T, U) Anomalous Bright Floodplain Soils (I										
	e Below Surface (S8	-	(MLRA 14	•	``	•)	³ Indicate	ors of hydrophytic vegetati	ion and		
	S, T, U)	/	Very Shallov			•			and hydrology must be pres		
(-, -, -, -,		(MLRA 13						s disturbed or problematic	-	
Restrictive I	Layer (if observed):		•		•						
Туре:											
Depth (ir	nches):						Hydric	Soil Prese	nt? Yes X N	0	
Remarks:	· · · · · · · · · · · · · · · · · · ·						-				

U.S. Army Corps WETLAND DETERMINATION DATA SHEET See ERDC/EL TR-10-20; the prop	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)					
Project/Site: Coldwater - Slocum Parcel	City/County: Tate County	Sampling Date: 8/1/23				
Applicant/Owner: Tate County Board of Supervise	ors	State: MS Sampling Point: W14				
Investigator(s): Headwaters, Inc.	Section, Township, Range: S3	6, T4S, R8W				
Landform (hillside, terrace, etc.): Shoulder	Local relief (concave, convex, nor	ne): none Slope (%): 2-5				
Subregion (LRR or MLRA): LRR P, MLRA 134 La	at: <u>34.697823</u> Long: <u>-89.9</u>	991484 Datum: WGS84				
Soil Map Unit Name: LgB2 - Loring-Grenada silt loar	ns, 2 to 5 percent slopes, eroded	NWI classification: PFO				
Are climatic / hydrologic conditions on the site typical	for this time of year? Yes X	No (If no, explain in Remarks.)				
Are Vegetation N , Soil N , or Hydrology	N significantly disturbed? Are "Normal Circu	umstances" present? Yes X No				
Are Vegetation N , Soil N , or Hydrology		n any answers in Remarks.)				
SUMMARY OF FINDINGS – Attach site n						
		s, transects, important reatures, etc.				
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes Wetland Hydrology Present? Yes	No within a Wetland?	Yes <u>X</u> No				
Remarks: Forested wetland						
HYDROLOGY						
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; che		condary Indicators (minimum of two required) Surface Soil Cracks (B6)				
	uatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)				
	arl Deposits (B15) (LRR U)	Drainage Patterns (B10)				
X Saturation (A3)	drogen Sulfide Odor (C1)	Moss Trim Lines (B16)				
Water Marks (B1) Ox	idized Rhizospheres on Living Roots (C3)	Dry-Season Water Table (C2)				
	esence of Reduced Iron (C4)	Crayfish Burrows (C8)				
	cent Iron Reduction in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)				
	in Muck Surface (C7)	Geomorphic Position (D2)				
	her (Explain in Remarks)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	—	_FAC-Neutral Test (D5) Sphagnum Moss (D8) (LRR T, U)				
	<u>_</u>					
Field Observations: Surface Water Present? Yes X No	Depth (inches): 2					
Surface Water Present? Yes No Water Table Present? Yes No						
Saturation Present? Yes X No		Irology Present? Yes X No				
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspections), if avail	able:				
Remarks:						

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	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 ft.)	% Cover	Species?	Status	Dominance Test worksheet:
1. Acer rubrum	40	Yes	FAC	Number of Dominant Species
2. Liquidambar styraciflua	30	Yes	FAC	That Are OBL, FACW, or FAC: 4 (A)
3. Fraxinus pennsylvanica	20	Yes	FACW	Total Number of Dominant
4.				Species Across All Strata: 4 (B)
5.				
6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
		=Total Cover		OBL species 0 x 1 = 0
50% of total cover: 4	5 20%	of total cover:	18	FACW species 20 x 2 = 40
Sapling/Shrub Stratum (Plot size: 30 ft.)				FAC species 80 x 3 = 240
1				FACU species 0 x 4 = 0
2.				UPL species 0 x 5 = 0
3.				Column Totals: 100 (A) 280 (B)
4.				Prevalence Index = $B/A = 2.80$
5.				Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7.			·	X 2 - Dominance Test is >50%
8				X 3 - Prevalence Index is $\leq 3.0^{1}$
		=Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20%	of total cover:		
Herb Stratum (Plot size: 30 ft.)				
1				¹ Indicators of hydric soil and wetland hydrology must be
2.				present, unless disturbed or problematic.
3.				Definitions of Four Vegetation Strata:
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5.				more in diameter at breast height (DBH), regardless of
6.				height.
7.				
				Sapling/Shrub - Woody plants, excluding vines, less
8				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
9				
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12				
		=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover:	20%	of total cover:		height.
Woody Vine Stratum (Plot size: 30 ft.)				
1. Campsis radicans	10	Yes	FAC	
2				
4.				
5				Hydrophytic
	10	=Total Cover		Vegetation
50% of total cover: 5	20%	of total cover:	2	Present? Yes X No
Remarks: (If observed, list morphological adaptation	ns below.)			

Depth	Matrix		Redo	x Featu	res						
inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Tex	cture	Remarks		
0-12	10YR 5/2	80	10YR 4/6	20	C	PL/M	Loamy	/Clayey	Prominent redox concentration		
						·					
			Deduced Metric			·		21			
	oncentration, D=Depl Indicators: (Application)					d Grains.			PL=Pore Lining, M=Matrix.		
Histosol Histic Ep Black His Hydroger Stratified Organic	Barrier Islan (MLRA 15 Loamy Much	Thin Dark Surface (S9) (LRR S, T, U) Barrier Islands 1 cm Muck (S12) (MLRA 153B, 153D) Loamy Mucky Mineral (F1) (LRR O) Loamy Gleyed Matrix (F2) X Depleted Matrix (F3)					1 cm Muck (A9) (LRR O) 2 cm Muck (A10) (LRR S) Coast Prairie Redox (A16) (outside MLRA 150A) Reduced Vertic (F18) (outside MLRA 150A, 150B)				
Muck Pre	cky Mineral (A7) (LR esence (A8) (LRR U) ck (A9) (LRR P, T) I Below Dark Surface		Depleted Da	Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Marl (F10) (LRR U)					Piedmont Floodplain Soils (F19) (LRR P, T) Anomalous Bright Floodplain Soils (F20) (MLRA 153B) Red Parent Material (F21)		
Thick Dark Surface (A12) Depleted Ochi Coast Prairie Redox (A16) (MLRA 150A) Iron-Mangane Sandy Mucky Mineral (S1) (LRR O, S) Umbric Surface Sandy Gleyed Matrix (S4) Delta Ochric (I					sses (F12 3) (LRR F MLRA 15	2) (LRR C P, T, U) 1)	-	Barrier Islands Low Chroma Matrix (TS7) (MLRA 153B, 153D)			
Stripped Dark Sur Polyvalue	edox (S5) Matrix (S6) rface (S7) (LRR P, S, e Below Surface (S8) S, T, U)	_RR P, S, T, U) Anomalous Bright Floodplain Soils (F					A 149A)	³ Indicate wetla	Explain in Remarks) ors of hydrophytic vegetation and nd hydrology must be present, is disturbed or problematic.		
Restrictive L Type:	₋ayer (if observed):										
Depth (in	nches):						Hydric	Soil Prese	nt? Yes X No		

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Atlantic and Gu See ERDC/EL TR-10-20; the proponent agency is	-	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)			
Project/Site: Coldwater - Slocum Parcel	City/County: Tate County	Sampling Date: 8/1/23			
Applicant/Owner: Tate County Board of Supervisors		State: MS Sampling Point: W15			
Investigator(s): Headwaters, Inc. Se	ction, Township, Range: S36	6, T4S, R8W			
Landform (hillside, terrace, etc.): Loess hills Loca	relief (concave, convex, none	e): none Slope (%): 2-5			
Subregion (LRR or MLRA): LRR P, MLRA 134 Lat: 34.699326	Long: -89.9	90942 Datum: WGS84			
Soil Map Unit Name: CaB2 - Calloway silt loam, 2 to 5 percent slopes, m	oderately eroded	NWI classification: UPL			
Are climatic / hydrologic conditions on the site typical for this time of year's	Yes X	No (If no, explain in Remarks.)			
Are Vegetation N , Soil N , or Hydrology N significantly distu		mstances" present? Yes X No			
Are Vegetation N , Soil N , or Hydrology N naturally problem		any answers in Remarks.)			
SUMMARY OF FINDINGS – Attach site map showing sa	mpling point locations	s, transects, important features, etc.			
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes No X Wetland Hydrology Present? Yes No X	Is the Sampled Area within a Wetland?	Yes No_X			
Remarks: Upland sample point					
L HYDROLOGY					
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Aquatic Fauna (B13) High Water Table (A2) Marl Deposits (B15) (L Saturation (A3) Hydrogen Sulfide Odor Water Marks (B1) Oxidized Rhizospheres Sediment Deposits (B2) Presence of Reduced I Drift Deposits (B3) Recent Iron Reduction Algal Mat or Crust (B4) Thin Muck Surface (C7 Iron Deposits (B5) Other (Explain in Remaining the second sec	RR U)	condary Indicators (minimum of two required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Sphagnum Moss (D8) (LRR T, U)			
Remarks:					

Γ

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 ft.)	% Cover	Species?	Status	Dominance Test worksheet:
1. Quercus pagoda	30	Yes	FAC	Number of Dominant Species
2. Ulmus americana	25	Yes	FAC	That Are OBL, FACW, or FAC: (A)
3. Celtis laevigata	20	Yes	FACW	Total Number of Dominant
4. Acer rubrum	10	No	FAC	Species Across All Strata: 4 (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 100.0% (A/B)
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
		=Total Cover		OBL species 0 x 1 = 0
50% of total cover:	43 20%	of total cover:	17	FACW species 20 x 2 = 40
Sapling/Shrub Stratum (Plot size: 30 ft.)			FAC species 80 x 3 = 240
1				FACU species 0 x 4 = 0
2				UPL species 0 x 5 = 0
3				Column Totals: 100 (A) 280 (B)
4				Prevalence Index = B/A = 2.80
5				Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7.				X 2 - Dominance Test is >50%
8.				3 - Prevalence Index is ≤3.0 ¹
		=Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20%	of total cover:		
Herb Stratum (Plot size: 30 ft.)				
1				¹ Indicators of hydric soil and wetland hydrology must be
2.			<u>.</u>	present, unless disturbed or problematic.
3.				Definitions of Four Vegetation Strata:
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5.				more in diameter at breast height (DBH), regardless of
5 6.				
				more in diameter at breast height (DBH), regardless of height.
6.				more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
6 7				more in diameter at breast height (DBH), regardless of height.
6. 7. 8.				more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
6. 7. 8. 9. 10.				 more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
6. 7. 8. 9. 10.				more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
6. 7. 8. 9. 10. 11.		=Total Cover		 more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
6. 7. 8. 9. 10. 11.		=Total Cover		 more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
6				 more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 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
6			FAC	 more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 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
6	20%	of total cover:	FAC	 more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 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
6	20%	of total cover:	FAC	 more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 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
6	20%	of total cover:	FAC	 more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 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
6	20%	of total cover:		 more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 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.
6	20%	Yes	FAC	 more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 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.
6	20% 20% 15 	Yes =Total Cover		 more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
6.	20% 15 	Yes		 more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 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.
6	20% 15 	Yes =Total Cover		 more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
6.	20% 15 	Yes =Total Cover		 more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
6.	20% 15 	Yes =Total Cover		 more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
6.	20% 15 	Yes =Total Cover		 more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation

SOIL

	cription: (Describe	to the dept									
Depth inches)	Matrix Color (moist)	%	Color (moist)	x Featur %	Type ¹	Loc ²	Ter	xture	P	emarks	
,				70	турс	<u></u>				cinano	
0-12	10YR 4/3	100				<u> </u>	Loamy	//Clayey			
						<u> </u>					
						<u> </u>					
						<u> </u>					
Type: C=Co	oncentration, D=Dep	letion, RM=	Reduced Matrix, I	MS=Mas	ked Sand	d Grains.		² Location:	PL=Pore Lining, N	/I=Matrix.	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)								Indicators for Problematic Hydric Soils ³ :			
Histosol (A1) Thin Dark Surface (S9) (LRR S, T, U						S, T, U)	-	1 cm I	Muck (A9) (LRR O)	
Histic Epipedon (A2) Barrier Islands 1 cm Muck (S12)						12)	-		Muck (A10) (LRR \$	•	
Black Histic (A3) (MLRA 153B, 153D)							-	Coast	t Prairie Redox (A1	6)	
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR O						RR O)		(out	tside MLRA 150A)	1	
Stratified Layers (A5)Loamy Gleyed Matrix (F2)							-	Reduc	ced Vertic (F18)		
Organic	Bodies (A6) (LRR P,	, T, U)	Depleted Ma	atrix (F3))		(outside MLRA 150A, 150B)				
5 cm Mu	icky Mineral (A7) (LF	RR P, T, U)	Redox Dark	Surface	(F6)		Piedmont Floodplain Soils (F19) (LRR P, 1				
Muck Pr	esence (A8) (LRR U)	Depleted Da	ark Surfa	ce (F7)		Anomalous Bright Floodplain Soils (F20)				
1 cm Mu	ick (A9) (LRR P, T)		Redox Depr	essions	(F8)		(MLRA 153B)				
Depleted	d Below Dark Surface	e (A11)	Marl (F10) (LRR U)			-	Red Parent Material (F21)			
Thick Da	ark Surface (A12)		Depleted Oc	chric (F1	1) (MLR A	151)	Very Shallow Dark Surface (F22)				
Coast Pr	rairie Redox (A16) (N	ILRA 150A	Iron-Mangai	nese Ma	sses (F12	2) (LRR C	D, P, T)	(out	tside MLRA 138, 1	52A in FL, 154)	
	lucky Mineral (S1) (L	.RR O, S)	Umbric Surf	ace (F13	B) (LRR F	', T, U)	-	Barrie	er Islands Low Chro	oma Matrix (TS7)	
Sandy G	leyed Matrix (S4)		Delta Ochrid	; (F17) (I	MLRA 15	1)		(ML	.RA 153B, 153D)		
	edox (S5)		Reduced Ve	•	, .		-	Other	(Explain in Remar	ks)	
	Matrix (S6)		Piedmont Fl	oodplain	Soils (F	9) (MLR	A 149A)				
Dark Su	rface (S7) (LRR P, S	5, T, U)	Anomalous	Bright Fl	oodplain	Soils (F20	0)				
Polyvalu	e Below Surface (S8	3)	(MLRA 14	19A , 153	C, 153D)			³ Indica	ators of hydrophytic	c vegetation and	
(LRR S	S, T, U)		Very Shallo		•	,		wet	tland hydrology mu	st be present,	
			(MLRA 13	38, 152A	in FL, 1	54)		unle	ess disturbed or pro	oblematic.	
estrictive l	Layer (if observed):										
Type:											
Depth (ir	nches):						Hydric	: Soil Pres	sent? Yes	No X	
Remarks:											

WETLAND DETERMINATION DATA S	U.S. Army Corps of Engineers VETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Reg See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R								
Project/Site: Coldwater - Slocum Parcel		City/County: Tate County	S	ampling Date: 8/1/23					
Applicant/Owner: Tate County Board of \$	Supervisors	State: MS Sampling Point: W1							
Investigator(s): Headwaters, Inc.	Sec	ction, Township, Range: S36							
Landform (hillside, terrace, etc.): Flood plain		relief (concave, convex, none		Slope (%): 0-2					
Subregion (LRR or MLRA): LRR P, MLRA 1		Long: -89.98		Datum: WGS84					
	54 Lat. 54.092210	Long09.90	NWI classification						
Soil Map Unit Name: Fa - Falaya silt Ioam			_						
Are climatic / hydrologic conditions on the site				lain in Remarks.)					
Are Vegetation N, Soil N, or Hydro			mstances" present?	Yes X No					
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydro	logy N naturally problem	atic? (If needed, explain	any answers in Rem	arks.)					
SUMMARY OF FINDINGS – Attach	site map showing sar	npling point locations	, transects, imp	ortant features, etc.					
Hydrophytic Vegetation Present?	Yes No X	Is the Sampled Area							
Hydric Soil Present?	Yes <u>No X</u>	within a Wetland?	Yes N	lo_X_					
Wetland Hydrology Present?	Yes <u>No X</u>								
Upland sample point									
HYDROLOGY									
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required in the second of the second	Aquatic Fauna (B13) Marl Deposits (B15) (LF Hydrogen Sulfide Odor Oxidized Rhizospheres Presence of Reduced Ir Recent Iron Reduction i Thin Muck Surface (C7) Other (Explain in Reman 7) No X Depth (inches): No X Depth (inches):	RR U) (C1) on Living Roots (C3) on (C4) n Tilled Soils (C6) rks)	Surface Soil Cracks Sparsely Vegetated Drainage Patterns (E Moss Trim Lines (B1 Dry-Season Water T Crayfish Burrows (C Saturation Visible or Geomorphic Positior Shallow Aquitard (D FAC-Neutral Test (D Sphagnum Moss (Da rology Present?	Concave Surface (B8) 810) 6) able (C2) 8) Aerial Imagery (C9) 1 (D2) 8) 5)					
Remarks:									

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 ft.)	% Cover	Species?	Status	Dominance Test worksheet:
1. Quercus pagoda	35	Yes	FAC	Number of Dominant Species
2. Liquidambar styraciflua	20	Yes	FAC	That Are OBL, FACW, or FAC:(A)
3.			. <u> </u>	Total Number of Dominant
4.			. <u> </u>	Species Across All Strata: 4 (B)
5				Percent of Dominant Species
6.	<u> </u>			That Are OBL, FACW, or FAC: 50.0% (A/B)
7	<u> </u>			Prevalence Index worksheet:
8		T tol Onum		Total % Cover of: Multiply by:
		=Total Cover	4.4	OBL species 0 x 1 = 0
	28 20%	of total cover:	11	FACW species $0 x^2 = 0$
Sapling/Shrub Stratum (Plot size: 30 ft.	_)			FAC species 55 $x = 165$
1				FACU species 45 x 4 = 180
2.				UPL species $0 \times 5 = 0$
3.		·		Column Totals: 100 (A) 345 (B)
4.				Prevalence Index = B/A = <u>3.45</u>
5.				Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8		Tetal Onyor		3 - Prevalence Index is $\leq 3.0^1$
F0% of total action		=Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20%	6 of total cover:		
Herb Stratum (Plot size: 30 ft.)	05	Vea		
1. Sorghum halepense	25	Yes	FACU	¹ Indicators of hydric soil and wetland hydrology must be
2.		·		present, unless disturbed or problematic.
3.	<u> </u>			Definitions of Four Vegetation Strata:
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5.				height.
6.		·		
7				Sapling/Shrub – Woody plants, excluding vines, less
8.		·		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
9		·		
10				Herb – All herbaceous (non-woody) plants, regardless
11		·		of size, and woody plants less than 3.28 ft tall.
12				
50% - (total		=Total Cover	-	Woody Vine – All woody vines greater than 3.28 ft in height.
	13 20%	of total cover:	5	neight.
Woody Vine Stratum (Plot size: <u>30 ft.</u>)		M- a	54011	
1. Pueraria montana	20	Yes	FACU	
2.				
3.				
4.		·		
5				Hydrophytic
500 (101-1 - 100-10		=Total Cover		Vegetation
50% of total cover:	10 20%	of total cover:	4	Present? Yes No X
Remarks: (If observed, list morphological adaptation	ons below.)			

SOIL

Depth	Matrix		Redo	x Featu	res						
inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Te	exture	Remarks		
0-12	10YR 5/3	100					Loam	oamy/Clayey			
vpe: C=Co	oncentration, D=Dep	etion, RM=	Reduced Matrix, I	∕IS=Mas	ked Sand	d Grains.		² Location: Pl	L=Pore Lining, M=Ma	atrix.	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)							Indicators for Problematic Hydric Soils ³ :				
Histosol	(A1)	Thin Dark S	urface (S	39) (LRR	S, T, U)		1 cm Mu	ck (A9) (LRR O)			
Histic Ep	pipedon (A2)	Barrier Islan	ds 1 cm	Muck (S	12)		2 cm Mu	ck (A10) (LRR S)			
Black His	stic (A3)	(MLRA 15	53B, 153	BD)			Coast Pr	airie Redox (A16)			
Hydroge	n Sulfide (A4)	Loamy Mucl	ky Miner	al (F1) (L	RR O)		(outsic	de MLRA 150A)			
Stratified	I Layers (A5)		Loamy Gley	ed Matri	x (F2)			Reduced	l Vertic (F18)		
Organic	Bodies (A6) (LRR P,	T, U)	Depleted Ma	Depleted Matrix (F3)					de MLRA 150A, 150	В)	
5 cm Mu	cky Mineral (A7) (LR	R P, T, U)	Redox Dark	Surface	(F6)		Piedmont Floodplain Soils (F19) (LRR P, T				
Muck Pre	esence (A8) (LRR U))	Depleted Da	irk Surfa	ice (F7)			Anomalous Bright Floodplain Soils (F20)			
1 cm Mu	ck (A9) (LRR P, T)		Redox Depr	essions	(F8)			(MLRA	153B)		
 Depleted	Below Dark Surface	e (A11)	Marl (F10) (LRR U)			Red Parent Material (F21)				
Thick Da	ark Surface (A12)		Depleted Oc	hric (F1	1) (MLRA	151)		Very Sha	allow Dark Surface (F	-22)	
Coast Pr	airie Redox (A16) (N	ILRA 150A) Iron-Mangar	nese Ma	sses (F12	2) (LRR C), P, T)	(outsic	de MLRA 138, 152A	in FL, 154)	
Sandy M	lucky Mineral (S1) (L	RR O, S)	Umbric Surf	ace (F13	B) (LRR P	, T, U)	-	Barrier Is	slands Low Chroma I	Matrix (TS7)	
Sandy G	leyed Matrix (S4)	-	Delta Ochric	(F17) (MLRA 15	1)		(MLRA	153B, 153D)	. ,	
Sandy R	edox (S5)		Reduced Ve	rtic (F18	B) (MLRA	150A, 15	50B)	Other (E	xplain in Remarks)		
Stripped	Matrix (S6)		Piedmont Fl	oodplain	Soils (F	9) (MLR	A 149A)				
Dark Sur	rface (S7) (LRR P, S	, T, U)	Anomalous	Bright Fl	oodplain	Soils (F2	0)				
	e Below Surface (S8		(MLRA 14	0	•	`	,	³ Indicato	rs of hydrophytic veg	etation and	
	S, T, U)	Very Shallov					wetland hydrology must be present,				
•			(MLRA 13			,			disturbed or probler	•	
	_ayer (if observed):										
Type:											

WETLAND DETERMIN See ERDC/E		SHEET – A	-	OMB Control #: 0 Requirement Co (Authority: AR :	, ,	KEMPT:				
Project/Site: Coldwater - S	locum Parcel			City/County	y: Tate County	5	Sampling Date:	8/1/23		
Applicant/Owner: Tate (County Board of	Supervisors				State: MS S	Sampling Point:	W17		
Investigator(s): Headwaters	, Inc.		Se	ection, Towns	hip, Range: S3'	1, T4S, R7W				
Landform (hillside, terrace, e					ve, convex, none		Slope (%):	5-8		
Subregion (LRR or MLRA):					Long: -89.98		Datum:	WGS84		
Soil Map Unit Name: GrC3				everely eroder		NWI classification				
Are climatic / hydrologic con							blain in Remark	(a)		
, .			•							
Are Vegetation N, Soil						mstances" present?	Yes X			
Are Vegetation <u>N</u> , Soil						any answers in Rem				
SUMMARY OF FINDIN	NGS – Attach	n site map	showing sa	ampling po	int locations	s, transects, imp	ortant featu	ires, etc.		
Hydrophytic Vegetation Pre Hydric Soil Present? Wetland Hydrology Presen		Yes X Yes Yes	No X No X	Is the Sam within a W	-	Yes	No <u>X</u>			
Remarks: Upland sample point										
HYDROLOGY										
Primary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on A	High Water Table (A2)Marl Deposits (B15) (LFSaturation (A3)Hydrogen Sulfide OdorWater Marks (B1)Oxidized RhizospheresSediment Deposits (B2)Presence of Reduced InDrift Deposits (B3)Recent Iron Reduction inAlgal Mat or Crust (B4)Thin Muck Surface (C7)					or (C1) Moss Trim Lines (B16) es on Living Roots (C3) Dry-Season Water Table (C2) Iron (C4) Crayfish Burrows (C8) n in Tilled Soils (C6) Saturation Visible on Aerial Imagery (7) Geomorphic Position (D2)				
Surface Water Present?	Yes	No X	Depth (inches	s):						
Water Table Present?	Yes		Depth (inches							
Saturation Present?	Yes	No <u>X</u>	Depth (inches	s):	Wetland Hyd	rology Present?	Yes	No X		
(includes capillary fringe)										
Describe Recorded Data (s	stream gauge, mo	onitoring wel	l, aerial photos,	previous insp	ections), if availa	ble:				
Remarks:										

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	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 ft.)	% Cover	Species?	Status	Dominance Test worksheet:
1. Quercus pagoda	40	Yes	FAC	Number of Dominant Species
2. Quercus nigra 3.	30	Yes	FAC	That Are OBL, FACW, or FAC: <u>3</u> (A)
3 4.				Total Number of Dominant Species Across All Strata: 4 (B)
4 5				
5 6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)
o 7.				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
o	70	=Total Cover		$\frac{1}{\text{OBL species}} 0 \qquad \text{x1} = 0$
50% of total cover: 3		of total cover:	14	FACW species 0 $x^2 = 0$
Sapling/Shrub Stratum (Plot size: 30 ft.	<u>, 10 10 10 10 10 10 10 10 10 10 10 10 10 </u>			FAC species $80 \times 3 = 240$
1. Ligustrum sinense	, 10	Yes	FAC	FACU species $20 x4 = 80$
2.	10	103	TAU	$\begin{array}{c c} \text{PACO species} & 20 & x4 = & 0 \\ \text{UPL species} & 0 & x5 = & 0 \end{array}$
3.				Column Totals: 100 (A) 320 (B)
4.				Prevalence Index = $B/A = 3.20$ (B)
4 5.				Hydrophytic Vegetation Indicators:
6.	·	<u> </u>		1 - Rapid Test for Hydrophytic Vegetation
7				X 2 - Dominance Test is >50%
8	10	T : 10		3 - Prevalence Index is $\leq 3.0^1$
500/ // /		=Total Cover	2	Problematic Hydrophytic Vegetation ¹ (Explain)
	5 20%	of total cover:	2	
Herb Stratum (Plot size: 30 ft.)				
1				¹ Indicators of hydric soil and wetland hydrology must be
2				present, unless disturbed or problematic.
3			. <u> </u>	Definitions of Four Vegetation Strata:
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5				more in diameter at breast height (DBH), regardless of height.
6			. <u> </u>	neight.
7				Sapling/Shrub – Woody plants, excluding vines, less
8			. <u> </u>	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
9				
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12				
	:	=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover:	20%	of total cover:		height.
Woody Vine Stratum (Plot size: 30 ft.)				
1. Pueraria montana		Yes	FACU	
2.	20	165	17.00	
	20	165	17100	
3				
3				
				Underskydia
4.		=Total Cover		Hydrophytic Vegetation
4 5				Hydrophytic Vegetation Present? Yes X No
4	 	=Total Cover		Vegetation
4 5	 	=Total Cover		Vegetation
4	 	=Total Cover		Vegetation
4	 	=Total Cover		Vegetation
4	 	=Total Cover		Vegetation
4	 	=Total Cover		Vegetation

SOIL

	-	oth needed to docu						alcators.)		
•	atrix		Feature		. 2	_				
inches) Color (mo	oist) %	Color (moist)	%	Type ¹	Loc ²	Te	xture	Remark	(S	
0-12 10YR 5	/3 100					Loamy	//Clayey			
					<u> </u>					
					<u> </u>					
Type: C=Concentration, I	D=Depletion, RM	=Reduced Matrix, M	1S=Mask	ked Sand	Grains.		² Location: PL=P	ore Lining, M=Ma	trix.	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)							Indicators for Problematic Hydric Soils ³ :			
Histosol (A1)	Thin Dark Su	Irface (S	9) (LRR	S, T, U)	_	1 cm Muck ((A9) (LRR O)			
Histic Epipedon (A2)	ds 1 cm l	Muck (S ²	2)		2 cm Muck ((A10) (LRR S)				
Black Histic (A3)		(MLRA 153B, 153D)					Coast Prairie	e Redox (A16)		
Hydrogen Sulfide (A4)	Loamy Muck	y Minera	ul (F1) (L	RR O)	-	(outside M	/ILRA 150A)			
Stratified Layers (A5)	Loamy Gleye	d Matrix	: (F2)			Reduced Ve	ertic (F18)			
Organic Bodies (A6) (I	_RR P, T, U)	Depleted Ma	trix (F3)			•	(outside M	MLRA 150A, 150B)	
5 cm Mucky Mineral (A	(LRR P, T, U	Redox Dark	Surface	(F6)			Piedmont Floodplain Soils (F19) (LRR P, T)			
Muck Presence (A8) (LRR U)	Depleted Da	Depleted Dark Surface (F7)					Anomalous Bright Floodplain Soils (F20)		
1 cm Muck (A9) (LRR	Ρ, Τ)	Redox Depre	essions (F8)		(MLRA 153B)				
Depleted Below Dark	Surface (A11)	Marl (F10) (L	.RR U)			Red Parent Material (F21)				
Thick Dark Surface (A	12)	Depleted Oc	hric (F11) (MLRA	151)	Very Shallow Dark Surface (F22)				
Coast Prairie Redox (A	A16) (MLRA 150	A) Iron-Mangan	ese Mas	ses (F12) (LRR C), P, T)	(outside M	MLRA 138, 152A i	n FL, 154)	
Sandy Mucky Mineral	(S1) (LRR O, S)	Umbric Surfa	ice (F13)) (LRR P	, T, U)		Barrier Islan	ds Low Chroma M	atrix (TS7)	
Sandy Gleyed Matrix (S4)	Delta Ochric	(F17) (ILRA 15	1)	_	(MLRA 15	3B, 153D)		
Sandy Redox (S5)		Reduced Ve	tic (F18)	(MLRA	150A, 15	50B)	Other (Expla	ain in Remarks)		
Stripped Matrix (S6)		Piedmont Flo	odplain	Soils (F1	9) (MLR	A 149A)				
Dark Surface (S7) (LR	R P, S, T, U)	Anomalous E	Bright Flo	odplain	Soils (F2	0)				
Polyvalue Below Surfa	ice (S8)	(MLRA 14	9A, 1530	C, 153D)			³ Indicators o	of hydrophytic vege	tation and	
(LRR S, T, U) Very Shallow Dark Surface (F22)							wetland h	ydrology must be	oresent,	
		(MLRA 13	8, 152A	in FL, 1	54)		unless dis	sturbed or problem	atic.	
Restrictive Layer (if obse	erved):									
Туре:										
							Soil Present?	Yes	No X	

WETLAND DETERMINA See ERDC/EL		SHEET – A	-	OMB Control #: 07 Requirement Co (Authority: AR 3	ntrol Symbol EX	KEMPT:			
Project/Site: Coldwater - Slo	ocum Parcel			City/Count	y: Tate County	S	ampling Date:	8/1/23	
Applicant/Owner: Tate Co	ounty Board of S	Supervisors				State: MS S	ampling Point:	W18	
Investigator(s): Headwaters,		•	Se	ection. Towns	hip, Range: S3			1	
Landform (hillside, terrace, etc		s			ive, convex, non		Slope (%):	2-5	
Subregion (LRR or MLRA): L					Long: -89.9		Datum:	WGS84	
Soil Map Unit Name: CaB2 -				oderately er		NWI classification		110004	
								-)	
Are climatic / hydrologic condi			-				lain in Remark		
Are Vegetation Y, Soil					re "Normal Circu	mstances" present?	Yes X	No	
Are Vegetation N, Soil	N, or Hydro	logy <u>N</u> r	naturally probler	natic? (If	needed, explair	any answers in Rem	arks.)		
SUMMARY OF FINDING	GS – Attach	site map	showing sa	mpling po	oint locations	s, transects, impo	ortant featu	res, etc.	
Hydrophytic Vegetation Pres Hydric Soil Present? Wetland Hydrology Present?		Yes Yes Yes	No X No X No X	Is the Sam within a W	-	YesN	lo_X		
Remarks: Upland sample point									
HYDROLOGY									
Wetland Hydrology Indicate	ors:				Se	condary Indicators (mi	nimum of two	required)	
Primary Indicators (minimum	<u>of one is requi</u>	red; check a	ll that apply)			Surface Soil Cracks	(B6)		
Surface Water (A1)		Aquatio	c Fauna (B13)			Sparsely Vegetated	Concave Surfa	ce (B8)	
High Water Table (A2)		Marl D	eposits (B15) (L	.RR U)		Drainage Patterns (E	310)		
Saturation (A3)		Hydrog	gen Sulfide Odo	r (C1)		Moss Trim Lines (B1	6)		
Water Marks (B1)			ed Rhizospheres	-	oots (C3)	Dry-Season Water T			
Sediment Deposits (B2)			ice of Reduced	. ,		Crayfish Burrows (Ca			
Drift Deposits (B3)					n Tilled Soils (C6) Saturation Visible on Aerial Imagery (C				
Algal Mat or Crust (B4)			uck Surface (C7			Geomorphic Position			
Iron Deposits (B5)	rial las a ria ria (D-		Explain in Rem	arks)		Shallow Aquitard (D3 FAC-Neutral Test (D			
Inundation Visible on Ae Water-Stained Leaves (E	•••	()				Sphagnum Moss (D8	,		
```	59)								
Field Observations: Surface Water Present?	Yes	No X	Dopth (inchos	١.					
Water Table Present?	Yes	No X	Depth (inches Depth (inches						
Saturation Present?	Yes	No X	Depth (inches		Wetland Hyd	rology Present?	Yes	No X	
(includes capillary fringe)			I X	,	2	0,		•	
Describe Recorded Data (str Remarks:	eam gauge, mo	onitoring well	, aerial photos,	previous insp	ections), if availa	able:			

Г

Tree Stratum (Plot size: 30 ft. )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1.	70 00001	Opecies:	Otatus	
2.				Number of Dominant Species         That Are OBL, FACW, or FAC:       0         (A)
3				Total Number of Dominant Species Across All Strata: 1 (B)
5.				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: 0.0% (A/B)
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
		=Total Cover		OBL species 0 x 1 = 0
50% of total cover:	20%	of total cover:		FACW species 0 x 2 = 0
Sapling/Shrub Stratum (Plot size: 30 ft. )				FAC species 0 x 3 = 0
1				FACU species 100 x 4 = 400
2.				UPL species 0 x 5 = 0
3.				Column Totals: 100 (A) 400 (B)
4				Prevalence Index = $B/A = 4.00$
5.				Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7.				2 - Dominance Test is >50%
8.				3 - Prevalence Index is ≤3.0 ¹
		=Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:		of total cover:		
Herb Stratum (Plot size: 30 ft. )				
1. Sorghum halepense	100	Yes	FACU	1
2.	100	103	TAGO	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
1				-
				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
				height.
6.				
7				Sapling/Shrub – Woody plants, excluding vines, less
8.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
9				
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12				
		=Total Cover		<b>Woody Vine</b> – All woody vines greater than 3.28 ft in
50% of total cover: 50	) 20%	of total cover:	20	height.
Woody Vine Stratum (Plot size: 30 ft. )				
1				
2.				
3.				
4.				
5				Hydrophytic
		=Total Cover		Vegetation
50% of total cover:	20%	of total cover:		Present? Yes No X
Remarks: (If observed, list morphological adaptation	s below )			·
Edge of agricultural row crop operation / soybean	5 551014.)			

Depth	Matrix		Redo	x Featu	res					
inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Те	xture	Ren	narks
0-12	10YR 5/3	100					Loamy	//Clayey		
						·				
		······				·				
						<u> </u>				
Type: C=Co	oncentration, D=Dep	letion, RM=	Reduced Matrix,	NS=Mas	ked Sand	d Grains.		² Location: PL	_=Pore Lining, M=	Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)						Indicators fo	r Problematic Hy	dric Soils ³ :		
Histosol (A1) Thin I			Thin Dark S	Thin Dark Surface (S9) <b>(LRR S, T, U)</b>					ck (A9) <b>(LRR O)</b>	
Histic Ep	Histic Epipedon (A2) Barrier Islands 1 cm Muck (S12)			12)	-	2 cm Muc	ck (A10) <b>(LRR S)</b>			
Black Histic (A3)         (MLRA 153B, 153D)				-	Coast Pra	airie Redox (A16)				
Hydrogen Sulfide (A4) Loamy Mucky Mineral (			al (F1) <b>(L</b>	RR O)		(outsid	e MLRA 150A)			
Stratified Layers (A5) Loamy			Loamy Gley	ed Matri	x (F2)		_	Reduced	Vertic (F18)	
Organic I	Bodies (A6) (LRR P,	, T, U)	Depleted Ma	atrix (F3)	)			(outsid	e MLRA 150A, 1	50B)
5 cm Mu	cky Mineral (A7) <b>(LR</b>	R P, T, U)	Redox Dark	Surface	(F6)			Piedmont	t Floodplain Soils	(F19) <b>(LRR P, T</b>
Muck Pre	esence (A8) <b>(LRR U</b> )	)	Depleted Da	irk Surfa	ice (F7)		-	Anomalo	us Bright Floodpla	in Soils (F20)
1 cm Mu	ck (A9) <b>(LRR P, T)</b>		Redox Depr	essions	(F8)		-	(MLRA	153B)	
 Depleted	Below Dark Surface	e (A11)	Marl (F10) (	LRR U)				Red Pare	ent Material (F21)	
Thick Da	rk Surface (A12)		Depleted O	hric (F1	1) (MLRA	151)	•	Very Sha	llow Dark Surface	(F22)
Coast Pr	airie Redox (A16) (N	ILRA 150A	Iron-Manga	Iron-Manganese Masses (F12) (LRR O, P, 1				(outsid	e MLRA 138, 152	A in FL, 154)
Sandy M	ucky Mineral (S1) (L	.RR O, S)	Umbric Surf	ace (F1:	B) (LRR F	, T, U)	-	Barrier Is	lands Low Chrom	a Matrix (TS7)
Sandy G	leyed Matrix (S4)	-	Delta Ochrid	Delta Ochric (F17) <b>(MLRA 151)</b>				(MLRA 153B, 153D)		
Sandy R	edox (S5)		Reduced Ve				50B)	Other (Ex	plain in Remarks	)
Stripped	Matrix (S6)		Piedmont Fl	oodplair	Soils (F	9) <b>(MLR</b>	A 149A)		. ,	
Dark Surface (S7) (LRR P, S, T, U) Anomalous Bright Floodplain Soils (F2				Soils (F2	0)					
	e Below Surface (S8		(MLRA 14	0	•			³ Indicator	s of hydrophytic v	egetation and
	S, T, U)	,	Very Shallo						d hydrology must	0
,	-, , -,		(MLRA 13		•	,			disturbed or prob	•
	ayer (if observed):									
Restrictive L										
Restrictive L Type:										

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Reg See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
Project/Site: Coldwater - Slocum Parcel City/County: Tate Coldwater	Inty Sampling Date: 8/1/23
Applicant/Owner: Tate County Board of Supervisors	State: MS Sampling Point: W19
Investigator(s): Headwaters, Inc. Section, Township, Range	
Landform (hillside, terrace, etc.): Loess hills Local relief (concave, convex	none): none Slope (%): 2-5
Subregion (LRR or MLRA): LRR P, MLRA 134 Lat: 34.696179 Long:	89.985386 Datum: WGS84
Soil Map Unit Name: CaB2 - Calloway silt loam, 2 to 5 percent slopes, moderately eroded	NWI classification: UPL
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X	No (If no, explain in Remarks.)
	Circumstances" present? Yes X No
	xplain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locat	ions, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes       X       No       Is the Sampled Area         Hydric Soil Present?       Yes       No       X       within a Wetland?         Wetland Hydrology Present?       Yes       No       X	Yes No_X
Remarks: Upland sample point	
L HYDROLOGY	
Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)         Surface Water (A1)       Aquatic Fauna (B13)         High Water Table (A2)       Marl Deposits (B15) (LRR U)         Saturation (A3)       Hydrogen Sulfide Odor (C1)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots (C3)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aquitard (D3) FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum Moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present?       Yes       No       X       Depth (inches):       Wetland         Water Table Present?       Yes       No       X       Depth (inches):       Wetland         Saturation Present?       Yes       No       X       Depth (inches):       Wetland         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if the stress of	Hydrology Present? Yes No X
Remarks:	

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	Absolute	Dominant	Indicator	
<u>Tree Stratum</u> (Plot size: <u>30 ft.</u> )	% Cover	Species?	Status	Dominance Test worksheet:
1. Quercus pagoda	30	Yes	FAC	Number of Dominant Species
2. Quercus nigra	20	Yes	FAC	That Are OBL, FACW, or FAC:3 (A)
3.				Total Number of Dominant
4.				Species Across All Strata: (B)
5				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: 75.0% (A/B)
7	. <u> </u>		. <u> </u>	Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
		=Total Cover	40	OBL species $0 \times 1 = 0$
50% of total cover: 2	<u>5</u> 20%	of total cover:	10	FACW species $0$ $x 2 = 0$
Sapling/Shrub Stratum (Plot size: 30 ft. )				FAC species $60 \times 3 = 180$
1. Ligustrum sinense	10	Yes	FAC	FACU species 40 x 4 = 160
2				UPL species 0 x 5 = 0
3				Column Totals: 100 (A) 340 (B)
4				Prevalence Index = B/A =3.40
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				X 2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	10 :	=Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 5	20%	of total cover:	2	
Herb Stratum (Plot size: 30 ft. )				
1. Sorghum halepense	40	Yes	FACU	¹ Indicators of hydric soil and wetland hydrology must be
2				present, unless disturbed or problematic.
3				Definitions of Four Vegetation Strata:
4				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
5				more in diameter at breast height (DBH), regardless of
6				height.
7				Sapling/Shrub – Woody plants, excluding vines, less
8				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
9				
10				Herb All berbasseus (non weady) plants, regardless
11				<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
12				
	40	=Total Cover		Woody Vine - All woody vines greater than 3.28 ft in
50% of total cover: 20	0 20%	of total cover:	8	height.
Woody Vine Stratum (Plot size: 30 ft. )				
1				
2				
3				
4.				
5.				Undrophysic
		=Total Cover		Hydrophytic Vegetation
50% of total cover:	20%	of total cover:		Present? Yes X No
Remarks: (If observed, list morphological adaptatior				
	is below.)			

	ription: (Describe	to the dept				tor or co	onfirm the	e absence o	of indicate	ors.)		
Depth	Matrix			x Featu		. 2	_			_		
inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Tex	ture		Ren	narks	
0-12	10YR 5/3	100				<u> </u>	Loamy	/Clayey				
						·						
						·						
Type: C=Cc	oncentration, D=Depl	letion, RM=F	Reduced Matrix, I	NS=Mas	ked Sand	Grains.	2	² Location: F	PL=Pore L	ining, M=	Matrix.	
lydric Soil I	Indicators: (Applica	ble to all L	RRs, unless oth	erwise r	noted.)			Indicators f	or Proble	ematic Hy	dric Soil	s ³ :
Histosol (A1)			Thin Dark Surface (S9) (LRR S, T, U)				_	1 cm Muck (A9) <b>(LRR O)</b>				
Histic Epipedon (A2)			Barrier Islan	ds 1 cm	Muck (S	12)		2 cm Mu	uck (A10)	(LRR S)		
Black Histic (A3)			(MLRA 15	3B, 153	D)			Coast P	rairie Rec	lox (A16)		
Hydrogen Sulfide (A4)			Loamy Mucl	ky Miner	al (F1) <b>(L</b>	RR O)		(outsi	de MLRA	150A)		
Stratified Layers (A5)			Loamy Gley	ed Matri	x (F2)			Reduce	d Vertic (F	-18)		
Organic	Bodies (A6) (LRR P,	T, U)	Depleted Ma	atrix (F3)			-	(outsi	de MLRA	150A, 15	50B)	
5 cm Mu	cky Mineral (A7) (LR	R P, T, U)	Redox Dark	Surface	(F6)			Piedmo	nt Floodpl	ain Soils	(F19) <b>(LR</b>	R P, T
Muck Pre	esence (A8) (LRR U)	)	Depleted Da	irk Surfa	ce (F7)		-	Anomal	ous Brigh	t Floodpla	in Soils (I	F20)
1 cm Mu	ck (A9) (LRR P, T)		Redox Depr	essions	(F8)		-	(MLR)	A 153B)			
Depleted	Below Dark Surface	e (A11)	Marl (F10) (					Red Par	rent Mater	rial (F21)		
Thick Da	ark Surface (A12)		Depleted Oc	hric (F1	1) (MLRA	151)	-	Very Sh	allow Dar	k Surface	(F22)	
Coast Pr	airie Redox (A16) (N	ILRA 150A)	Iron-Mangar	nese Ma	sses (F12	2) (LRR C	), P, T)	(outsi	de MLRA	138, 152	A in FL,	154)
Sandy M	lucky Mineral (S1) (L	.RR O, S)	Umbric Surf	ace (F13	B) (LRR P	, T, U)		Barrier I	slands Lo	w Chrom	a Matrix (	TS7)
Sandy G	leyed Matrix (S4)		Delta Ochric	(F17) <b>(</b>	MLRA 15	1)	-	(MLR	A 153B, 1	53D)		
Sandy R	edox (S5)		Reduced Ve	rtic (F18	B) (MLRA	150A, 15	50B)	Other (E	Explain in	Remarks)		
Stripped	Matrix (S6)		Piedmont Fl	oodplain	Soils (F	9) <b>(MLR</b>	A 149A)			,		
Dark Sur	face (S7) (LRR P, S	, T, U)	Anomalous	Bright Fl	oodplain	Soils (F2	0)					
Polyvalu	e Below Surface (S8	5)	(MLRA 14	9A, 153	C, 153D)			³ Indicate	ors of hyd	rophytic v	egetation	and
(LRR S	S, T, U)		Very Shallov	v Dark S	Surface (F	22)			nd hydrole		-	
-	·		(MLRA 13	8, 152A	in FL, 1	54)		unles	s disturbe	d or prob	lematic.	
Restrictive L	_ayer (if observed):											
Туре:												
Depth (in	nches):						Hydric	Soil Prese	nt?	Yes	No	Х
Remarks:												

U.S. Army Corps of Er WETLAND DETERMINATION DATA SHEET – Atlan See ERDC/EL TR-10-20; the proponent	tic and Gulf Coastal Plain Region	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
Project/Site: Coldwater - Slocum Parcel	City/County: Tate County	Sampling Date: 8/1/23
Applicant/Owner: Tate County Board of Supervisors		State: MS Sampling Point: W20
Investigator(s): Headwaters, Inc.	Section, Township, Range: S3	
Landform (hillside, terrace, etc.): Loess hills	Local relief (concave, convex, non	e): none Slope (%): 2-5
Subregion (LRR or MLRA): LRR P, MLRA 134 Lat: 34.6	96293 Long: -89.9	B3206 Datum: WGS84
Soil Map Unit Name: CaB2 - Calloway silt loam, 2 to 5 perce		NWI classification: UPL
Are climatic / hydrologic conditions on the site typical for this t	· · ·	No (If no, explain in Remarks.)
Are Vegetation N , Soil N , or Hydrology N signi		mstances" present? Yes X No
Are Vegetation N , Soil N , or Hydrology N natur		any answers in Remarks.)
		•
SUMMARY OF FINDINGS – Attach site map sh	owing sampling point locations	s, transects, important features, etc.
	Is the Sampled Area       X     within a Wetland?       X	Yes NoX
Remarks: Upland sample point		
L HYDROLOGY		
Saturation (A3)       Hydrogen S         Water Marks (B1)       Oxidized R         Sediment Deposits (B2)       Presence of         Drift Deposits (B3)       Recent Iron         Algal Mat or Crust (B4)       Thin Muck         Iron Deposits (B5)       Other (Exp         Inundation Visible on Aerial Imagery (B7)       Water-Stained Leaves (B9)	at apply)	condary Indicators (minimum of two required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Sphagnum Moss (D8) <b>(LRR T, U)</b>
	epth (inches):	
	epth (inches): Wetland Hyd	rology Present? Yes No X
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, ae	rial photos, previous inspections), if availa	ble:
Remarks:		

Γ

	Absolute	Dominant	Indicator	<u> </u>
Tree Stratum (Plot size: 30 ft. )	% Cover	Species?	Status	Dominance Test worksheet:
1. Quercus pagoda	30	Yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
2. <u>Quercus nigra</u> 3.	20	Yes	FAC	
4.		<u> </u>		Total Number of Dominant Species Across All Strata: 4 (B)
4. 5.		<u> </u>		、
6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)
7.				That Are OBL, FACW, or FAC: 75.0% (A/B) Prevalence Index worksheet:
7. 8.				Total % Cover of: Multiply by:
o	50	=Total Cover		$\begin{array}{c c c c c c c c c c c c c c c c c c c $
50% of total cover: 2	-	of total cover:	10	FACW species $0   x^2 = 0$
Sapling/Shrub Stratum (Plot size: 30 ft. )	.5 20%	on total cover.	10	FAC species 75 $x 3 = 225$
· · · · · · · · · · · · · · · · · · ·	25	Yes	FAC	FACU species $25 \times 4 = 100$
1. Ligustrum sinense	25	165	FAC	$\frac{1}{100}$
3				
5.				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				X 2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	25	=Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)
	3 20%	of total cover:	5	
Herb Stratum (Plot size: 30 ft. )				
1				¹ Indicators of hydric soil and wetland hydrology must be
2				present, unless disturbed or problematic.
3				Definitions of Four Vegetation Strata:
4				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
5				more in diameter at breast height (DBH), regardless of
6				height.
7				Sapling/Shrub – Woody plants, excluding vines, less
8				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
9				
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12				
		=Total Cover		Woody Vine - All woody vines greater than 3.28 ft in
50% of total cover:	20%	of total cover:		height.
Woody Vine Stratum (Plot size: 30 ft. )				
1. Parthenocissus quinquefolia	25	Yes	FACU	
2.				
3.				
4.				
5.				
	25	=Total Cover		Hydrophytic Vegetation
50% of total cover: 1	-	of total cover:	5	Present? Yes X No
Remarks: (If observed, list morphological adaptatio	ns below.)			

	ription: (Describe	to the depti					minin the	ausence		1015.)	
Depth (in a h a a)	Matrix	0/		x Featu		L = = 2	Tau	4		Dam	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Iex	ture		Rema	arks
0-12	10YR 5/3	100				<u> </u>	Loamy	/Clayey	<u> </u>		
						·					
						·					
									<u> </u>		
	oncentration, D=Dep					Grains.				Lining, M=N	
•	ndicators: (Applica	able to all Li				o =	I			lematic Hyd	fric Soils':
Histosol			Thin Dark S	`	<i>,</i> <b>,</b>		-		Muck (A9)	. ,	
	ipedon (A2)		Barrier Islan		``	2)	-			D) (LRR S)	
			(MLRA 1		•		-			edox (A16)	
			Loamy Muc	•	· / ·	RR O)		•	side MLR		
	Layers (A5)		Loamy Gley		` '		-		ced Vertic	· · ·	
_ ·	Bodies (A6) (LRR P,		Depleted Ma					•		RA 150A, 150	•
	cky Mineral (A7) <b>(LF</b>		Redox Dark		· · /		_				[–] 19) <b>(LRR P, T</b>
	esence (A8) (LRR U	)	Depleted Da		. ,		_		-	•	n Soils (F20)
1 cm Mu	ck (A9) <b>(LRR P, T)</b>		Redox Depr	essions	(F8)			(ML	RA 153B)		
	Below Dark Surface	e (A11)	Marl (F10) (				_			erial (F21)	
Thick Da	rk Surface (A12)		Depleted Oc	chric (F1	1) <b>(MLRA</b>	151)	_	Very S	Shallow D	ark Surface	(F22)
Coast Pr	airie Redox (A16) (N	ILRA 150A)	Iron-Manga	nese Ma	sses (F12	2) (LRR C	), P, T)	(out	side MLR	RA 138, 152/	A in FL, 154)
Sandy M	ucky Mineral (S1) <b>(L</b>	.RR O, S)	Umbric Surf	ace (F13	B) (LRR P	, T, U)	_	Barrie	r Islands I	_ow Chroma	Matrix (TS7)
Sandy G	leyed Matrix (S4)		Delta Ochric	: (F17) <b>(</b> I	MLRA 15	1)		(ML	RA 153B,	153D)	
Sandy R	edox (S5)		Reduced Ve	ertic (F18	B) (MLRA	150A, 15	50B)	Other	(Explain i	n Remarks)	
Stripped	Matrix (S6)		Piedmont Fl	oodplair	n Soils (F	9) <b>(MLR</b>	A 149A)				
Dark Sur	face (S7) <b>(LRR P, S</b>	i, T, U)	Anomalous	Bright Fl	oodplain	Soils (F20	0)				
Polyvalue	e Below Surface (S8	3)	(MLRA 14	<b>19A</b> , 153	C, 153D)			³ Indica	ators of hy	drophytic ve	getation and
(LRR S	S, T, U)		Very Shallov	w Dark S	Surface (F	22)		wet	land hydro	ology must b	e present,
			(MLRA 13	38, 152A	in FL, 1	54)		unle	ess distur	bed or proble	ematic.
Restrictive L	ayer (if observed):										
Type:											
Depth (in	iches):						Hydric	Soil Pres	sent?	Yes	No X
Remarks:											

U.S. Arm WETLAND DETERMINATION DATA See ERDC/EL TR-10-20; 1	-	Requirement Co	710-0024, Exp: 11/30/2024 ntrol Symbol EXEMPT: 335-15, paragraph 5-2a)				
Project/Site: Coldwater - Slocum Parcel		City/County: Tate County	S	ampling Date: 8/1/23			
Applicant/Owner: Tate County Board of	Supervisors			ampling Point: W21			
	•	tion Township Dongo, COA					
Investigator(s): Headwaters, Inc.		tion, Township, Range: <u>S31</u>					
Landform (hillside, terrace, etc.): Flood pla		relief (concave, convex, none	e): none	Slope (%): 0-2			
Subregion (LRR or MLRA): LRR P, MLRA	134 Lat: <u>34.695893</u>	Long: -89.98	32553	Datum: WGS84			
Soil Map Unit Name: Co - Collins silt loam, loca	al alluvium, 0 to 2 percent slopes, c	ccasionally flooded, brief duration	NWI classification	n: UPL			
Are climatic / hydrologic conditions on the sit	te typical for this time of year?	Yes X N	lo (If no, exp	lain in Remarks.)			
Are Vegetation Y, Soil N, or Hydro	ology N significantly distur	bed? Are "Normal Circur	mstances" present?	Yes X No			
Are Vegetation N , Soil N , or Hydro			any answers in Rem	arks.)			
SUMMARY OF FINDINGS – Attacl			•				
Hydrophytic Vegetation Present?	Yes No X	Is the Sampled Area	Sampled Area				
Hydric Soil Present?	Yes No X	within a Wetland?	Yes N	lo <u>X</u>			
Wetland Hydrology Present?	Yes No X						
Upland sample point							
HYDROLOGY							
Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required)         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial Imagery (B         Water-Stained Leaves (B9)	Aquatic Fauna (B13) Marl Deposits (B15) <b>(LF</b> Hydrogen Sulfide Odor Oxidized Rhizospheres Presence of Reduced Ir Recent Iron Reduction i Thin Muck Surface (C7) Other (Explain in Rema	(C1) (C1) on Living Roots (C3) on (C4) n Tilled Soils (C6)	Surface Soil Cracks Sparsely Vegetated Drainage Patterns (E Moss Trim Lines (B1 Dry-Season Water T Crayfish Burrows (C	Concave Surface (B8) 310) 6) able (C2) 8) Aerial Imagery (C9) 6 (D2) 3) 5)			
Field Observations:	No. V. Donth (inchor)						
Surface Water Present? Yes Water Table Present? Yes	No X Depth (inches): No X Depth (inches):						
Saturation Present? Yes	No X Depth (inches):		rology Present?	Yes No X			
(includes capillary fringe)							
Describe Recorded Data (stream gauge, m Remarks:	onitoring well, aerial photos, p	revious inspections), if availa	ble:				

Tree Stratum (Plot size: 30 ft. )	Absolute Domina % Cover Species		Dominance Test worksheet:
1			Number of Dominant Species
2			That Are OBL, FACW, or FAC:(A)
3 4.			Total Number of Dominant Species Across All Strata: 2 (B)
5.			Percent of Dominant Species
6.			That Are OBL, FACW, or FAC: 0.0% (A/B)
7.			Prevalence Index worksheet:
8.			Total % Cover of: Multiply by:
	=Total Cov	/er	OBL species $0$ $x 1 = 0$
50% of total cover:	20% of total co		FACW species $0   x 2 = 0$
Sapling/Shrub Stratum (Plot size: 30 ft. )			FAC species $0   x 3 = 0$
1			FACU species 100 $x 4 = 400$
2.			UPL species $0   x 5 = 0$
3.			Column Totals: 100 (A) 400 (B)
4.			Prevalence Index = $B/A = 4.00$
5.			Hydrophytic Vegetation Indicators:
6.			1 - Rapid Test for Hydrophytic Vegetation
7			2 - Dominance Test is >50%
8.			$3 - Prevalence Index is \leq 3.0^1$
	=Total Cov	/er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of total co		
Herb Stratum (Plot size: 30 ft. )			
1. Paspalum notatum	50 Yes	FACU	11- disators of hydria and watland hydrology must be
2. Sorghum halepense	50 Yes	FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.			Definitions of Four Vegetation Strata:
4.			<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or
5.			more in diameter at breast height (DBH), regardless of
6.			height.
7.			
8.			<b>Sapling/Shrub</b> – Woody plants, excluding vines, less
9.			than 3 in. DBH and greater than 3.28 ft (1 m) tall.
10.			
11.			Herb – All herbaceous (non-woody) plants, regardless
12.			of size, and woody plants less than 3.28 ft tall.
	100 =Total Cov	/er	Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 50			height.
Woody Vine Stratum (Plot size: 30 ft. )			
1.			
2.			
3.			
4.			
5.			
J.	=Total Cov		Hydrophytic
50% of total cover:	20% of total co		Vegetation Present? Yes No X
Remarks: (If observed, list morphological adaptation	,		
Edge of agricultural row crop operation (soybean) an	d adjacent residences		

Profile Description: (Descri Depth Matri	-		x Feature					,	
inches) Color (moist)		Color (moist)		Type ¹	Loc ²	Te	xture	Rema	arks
0-12 10YR 5/3	100					Loam	//Clayey		
	·								
	·		·						
			·						
Type: C=Concentration, D=E	Depletion, RM:	=Reduced Matrix, N	//S=Maske	ed Sand	Grains.		² Location: I	PL=Pore Lining, M=N	latrix.
lydric Soil Indicators: (App	licable to all	LRRs, unless othe	erwise no	ted.)			Indicators	for Problematic Hyc	Iric Soils ³ :
Histosol (A1)		Thin Dark S	urface (S9	) <b>(LRR</b>	S, T, U)	-	1 cm M	luck (A9) <b>(LRR O)</b>	
Histic Epipedon (A2)		Barrier Islan	ds 1 cm N	luck (S1	2)	_	2 cm M	luck (A10) <b>(LRR S)</b>	
Black Histic (A3)		(MLRA 15	3B, 153D	)		_	Coast F	Prairie Redox (A16)	
Hydrogen Sulfide (A4)	Loamy Muck	y Mineral	(F1) <b>(L</b>	RR O)		(outs	ide MLRA 150A)		
Stratified Layers (A5)	Loamy Gley	ed Matrix	(F2)			Reduce	ed Vertic (F18)		
Organic Bodies (A6) (LRF	R P, T, U)	Depleted Ma	atrix (F3)				(outs	ide MLRA 150A, 150	)B)
5 cm Mucky Mineral (A7)	(LRR P, T, U)	Redox Dark	Surface (I	F6)			Piedmo	ont Floodplain Soils (F	=19) <b>(LRR P, T</b>
Muck Presence (A8) (LRF	R U)	Depleted Da	rk Surface	e (F7)		-	Anoma	lous Bright Floodplair	n Soils (F20)
1 cm Muck (A9) (LRR P,	T)	Redox Depr	essions (F	-8)		-	(MLR	A 153B)	. ,
Depleted Below Dark Sur	•	 Marl (F10) <b>(I</b>	_RR U)	,			Red Pa	arent Material (F21)	
Thick Dark Surface (A12)		Depleted Oc		(MLRA	151)	-	Very Sł	hallow Dark Surface (	(F22)
Coast Prairie Redox (A16	) (MLRA 1504	A) Iron-Mangar	nese Mass	、 ses (F12	) (LRR O	), P, T)	(outs	ide MLRA 138, 152A	A in FL, 154)
Sandy Mucky Mineral (S1	, ,	Umbric Surfa			, <b>.</b>		•	Islands Low Chroma	
Sandy Gleyed Matrix (S4)		Delta Ochric	· · ·	•		-		A 153B, 153D)	~ /
Sandy Redox (S5)		Reduced Ve	· / ·		•	50B)	•	Explain in Remarks)	
Stripped Matrix (S6)		Piedmont Fl	. ,	•		· ·		· ,	
Dark Surface (S7) (LRR F	P. S. T. U)	Anomalous	•	•	<i>,</i> ,				
Polyvalue Below Surface		(MLRA 14	0	•	、	,	³ Indicat	tors of hydrophytic ve	getation and
(LRR S, T, U)	× /	Very Shallow			22)			and hydrology must b	0
· · · · ·		(MLRA 13		`	,			ss disturbed or proble	•
Restrictive Layer (if observe	ed):								
Туре:									
Depth (inches):						Hydric	Soil Prese	ent? Yes	No X
Remarks:									

U.S. Arm WETLAND DETERMINATION DATA See ERDC/EL TR-10-20;	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)						
Project/Site: Coldwater - Slocum Parcel		City/County: Tate County	Sa	ampling Date: 8/1/23			
Applicant/Owner: Tate County Board o	f Supervisors		State: MS Sa	ampling Point: W22			
nvestigator(s): Headwaters, Inc. Section, Township, Range: S31, T4S, R7W							
Landform (hillside, terrace, etc.): Shoulder Local relief (concave, convex, none): none Slope (%): 2-5							
Subregion (LRR or MLRA):         LRR P, MLRA 134         Lat:         34.69436         Long:         -89.982623         Datum:         WGS84							
Soil Map Unit Name: MeB3 - Memphis silt		0	NWI classification:				
· · · · · · · · · · · · · · · · · · ·							
				Yes X No			
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydr			any answers in Rema				
SUMMARY OF FINDINGS – Attac	h site map showing sa	impling point locations	s, transects, impo	ortant features, etc.			
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         No         X           Yes         No         X           Yes         No         X	Is the Sampled Area within a Wetland?	Yes N	o_X_			
Remarks: Upland sample point							
L HYDROLOGY							
Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required)         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial Imagery (B         Water-Stained Leaves (B9)         Field Observations:         Surface Water Present?         Yes         Water Table Present?         Yes         (includes capillary fringe)         Describe Recorded Data (stream gauge, not stream gauge, not str	Aquatic Fauna (B13) Marl Deposits (B15) <b>(L</b> Hydrogen Sulfide Odor Oxidized Rhizospheres Presence of Reduced Recent Iron Reduction Thin Muck Surface (C7 Other (Explain in Rema 37)	RR U)	condary Indicators (mir Surface Soil Cracks ( Sparsely Vegetated C Drainage Patterns (B Moss Trim Lines (B16 Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on Geomorphic Position Shallow Aquitard (D3 FAC-Neutral Test (D5 Sphagnum Moss (D8) <b>rology Present?</b>	B6) Concave Surface (B8) 10) 5) able (C2) ) Aerial Imagery (C9) (D2) )			
Remarks:							

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	Absolute	Dominant	Indicator	Deminence Test workshoot
Tree Stratum (Plot size: 30 ft. )	% Cover	Species?	Status	Dominance Test worksheet:
1 2.				Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
3.				
4.				Total Number of Dominant Species Across All Strata: 2 (B)
5.				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: 0.0% (A/B)
7.				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
	=	=Total Cover		OBL species         0         x 1 =         0
50% of total cover:	20%	of total cover:		FACW species 0 x 2 = 0
Sapling/Shrub Stratum (Plot size: 30 ft. )				FAC species 0 x 3 = 0
1				FACU species 100 x 4 = 400
2.				UPL species 0 x 5 = 0
3.				Column Totals: 100 (A) 400 (B)
4.				Prevalence Index = B/A = 4.00
5.				Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7.				2 - Dominance Test is >50%
8.				3 - Prevalence Index is ≤3.0 ¹
	=	=Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20%	of total cover:		
Herb Stratum (Plot size: 30 ft. )				
1. Paspalum notatum	50	Yes	FACU	¹ Indicators of hydric soil and wetland hydrology must be
2. Sorghum halepense	50	Yes	FACU	present, unless disturbed or problematic.
3.				Definitions of Four Vegetation Strata:
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5.				more in diameter at breast height (DBH), regardless of
6.				height.
7				Sapling/Shrub – Woody plants, excluding vines, less
8				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
9				
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12				
	100 =	Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 5	0 20%	of total cover:	20	height.
Woody Vine Stratum (Plot size: 30 ft. )				
1				
2				
3				
4				
5				Hydrophytic
	=	=Total Cover		Vegetation
50% of total cover:	20%	of total cover:		Present? Yes No X
Remarks: (If observed, list morphological adaptation	ns below.)			
Edge of agricultural row crop operation (soybean) an		sidences		

	cription: (Describe	to the uppe						- 00351166				
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Featu %	res Type ¹	Loc ²	То	xture		Rom	arks	
inches)		/0		/0	Туре					Ken	Idiko	
0-12 10YR 5/3 100						Loam	y/Clayey					
						<u> </u>						
						<u> </u>						_
	oncentration, D=Dep		Poducod Matrix			Grains		² Location:		e Lining, M=I	Motrix	
71	Indicators: (Applica					d Grains.				olematic Hy		
Histosol (A1)			Thin Dark S			S. T. U)				) (LRR O)		
Histic Epipedon (A2)			Barrier Islar		<i>,</i> .					0) (LRR S)		
Black Histic (A3)			(MLRA 1		•					edox (A16)		
Hydrogen Sulfide (A4)			Loamy Muc			RR O)				RA 150A)		
Stratified Layers (A5)			Loamy Gley		· / ·			•	ced Vertic			
	Bodies (A6) (LRR P,	T. U)		Depleted Matrix (F3)						RA 150A, 15	60B)	
	icky Mineral (A7) (LR		·	Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8)				Piedmont Floodplain Soils (F19) (LRR P, T Anomalous Bright Floodplain Soils (F20) (MLRA 153B)			γ. Т	
	esence (A8) (LRR U											
1 cm Mu	ick (A9) (LRR P, T)		Redox Depr									
	Below Dark Surface	e (A11)	Marl (F10) (		<b>`</b> ,			Red Parent Material (F21)				
Thick Da	ark Surface (A12)		Depleted O	chric (F1	1) (MLRA	151)		Very Shallow Dark Surface (F22)				
Coast Pr	rairie Redox (A16) (N	ILRA 150A)	Iron-Manga	nese Ma	sses (F1	2) (LRR C	), P, T)				A in FL, 154	)
Sandy M	lucky Mineral (S1) (L	.RR O, S)	Umbric Surf	ace (F1:	3) (LRR F	, T, U)	-	Barrier Islands Low Chroma Matrix (TS7)			7)	
Sandy G	ileyed Matrix (S4)		Delta Ochrid	c (F17) <b>(</b>	MLRA 15	1)		(MLRA 153B, 153D)				
Sandy R	edox (S5)		Reduced Ve	ertic (F18	B) (MLRA	150A, 15	50B)	Other	(Explain	in Remarks)		
Stripped	Matrix (S6)		Piedmont F	loodplair	n Soils (F	19) <b>(MLR</b>	A 149A)					
Dark Surface (S7) (LRR P, S, T, U) Anomalous Bright Floodplain				loodplain	Soils (F2	0)						
Polyvalue Below Surface (S8)			(MLRA 14	49A, 153	BC, 153D)	1		³ Indicators of hydrophytic vegetation and				
(LRR S, T, U)			Very Shallo	w Dark S	Surface (F	22)		wetland hydrology must be present,				
			(MLRA 13	38, 152A	in FL, 1	54)		unl	ess distur	bed or probl	ematic.	
Restrictive I	Layer (if observed):											
Type:												
Depth (ir	nches):						Hydrie	c Soil Pres	sent?	Yes	No X	
Remarks:												

WETLAND DETERMINA See ERDC/EL		-	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)						
Project/Site: Coldwater - Slo	ocum Parcel			Citv/Countv:	Tate County		Sampling Date: 8/1/23		
	ounty Board of	Supervisors		_ , ,	,		Sampling Point: W23		
Investigator(s): Headwaters,		Capernoore		ection, Townshi	n Range: S31				
<u> </u>					· · ·				
Landform (hillside, terrace, et		24 Lati		al relief (concave			Slope (%): <u>2-5</u> Datum: WGS84		
Subregion (LRR or MLRA): L				lana and dad	Long: -89.98				
Soil Map Unit Name: LgB2 -						NWI classificatio			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)									
Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No									
Are Vegetation <u>N</u> , Soil	N, or Hydro	ology N	naturally probler	matic? (If n	eeded, explain	any answers in Rer	narks.)		
SUMMARY OF FINDIN	GS – Attach	site map	showing sa	ampling poi	nt locations	, transects, imp	oortant features, etc.		
Hydrophytic Vegetation Pres	sent?	Yes X	No	Is the Samp	led Area				
Hydric Soil Present?					tland?	Yes X	No		
Wetland Hydrology Present?	?	Yes X	No						
Remarks: Emergent wetland									
HYDROLOGY									
Wetland Hydrology Indicat					Sec		ninimum of two required)		
Primary Indicators (minimum	<u>) of one is requi</u>					Surface Soil Cracks	( )		
Surface Water (A1) High Water Table (A2)			ic Fauna (B13) Deposits (B15) <b>(L</b>		Sparsely Vegetated Concave Surface (B8) X Drainage Patterns (B10)				
Saturation (A3)			gen Sulfide Odo	-	<u></u>	Moss Trim Lines (B16)			
Water Marks (B1)			ed Rhizosphere		ts (C3)				
Sediment Deposits (B2)			nce of Reduced	-		Crayfish Burrows (			
Drift Deposits (B3)		Recen	t Iron Reduction	n in Tilled Soils (					
Algal Mat or Crust (B4)			luck Surface (C	,		Geomorphic Positio	on (D2)		
Iron Deposits (B5)			(Explain in Rem	arks)		Shallow Aquitard (			
Inundation Visible on Ae	0,1	7)				FAC-Neutral Test (	,		
Water-Stained Leaves (I	39)					Sphagnum Moss (I	(LRR I, U)		
Field Observations:	N	Na V	Danth (in chas						
Surface Water Present? Water Table Present?	Yes Yes	No <u>X</u> No X	Depth (inches Depth (inches	·					
Saturation Present?	Yes	No X	Depth (inches		Wetland Hvdr	rology Present?	Yes X No		
(includes capillary fringe)									
Describe Recorded Data (str	ream gauge, mo	onitoring we	ll, aerial photos,	previous inspec	ctions), if availa	ble:			
Remarks:									

Tree Stratum (Plot size: 30 ft. )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 2.				Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
3.				Total Number of Dominant
4.				Species Across All Strata: 1 (B)
5 6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
7.				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
		=Total Cover		OBL species $0$ $x 1 = 0$
50% of total cover:	20%	of total cover:		FACW species 0 x 2 = 0
Sapling/Shrub Stratum (Plot size: 30 ft. )				FAC species 100 x 3 = 300
1				FACU species $0   x 4 = 0$
2				UPL species $0 \times 5 = 0$
2				Column Totals: 100 (A) 300 (B)
4.				Prevalence Index = $B/A = 3.00$
· · · · · · · · · · · · · · · · · · ·				Hydrophytic Vegetation Indicators:
5 6.				
				1 - Rapid Test for Hydrophytic Vegetation
7				$\frac{X}{2}$ - Dominance Test is >50%
8				X 3 - Prevalence Index is ≤3.0 ¹
		=Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20%	of total cover:		
Herb Stratum (Plot size: 30 ft. )				
1. Carex spp.	100	Yes	FAC	¹ Indicators of hydric soil and wetland hydrology must be
2				present, unless disturbed or problematic.
3				Definitions of Four Vegetation Strata:
4				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
5				more in diameter at breast height (DBH), regardless of
6				height.
7				<b>Capling/Chruth</b> Weady planta avaluding vines loss
8				<b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
9.				
10.				
11.				<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
12.				
	100 :	=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 5		of total cover:	20	height.
Woody Vine Stratum (Plot size: 30 ft. )				
1,				
2.				
3.				
4 5				
5.		Total Causer		Hydrophytic
		=Total Cover		Vegetation
50% of total cover:	20%	of total cover:		Present? Yes X No
Remarks: (If observed, list morphological adaptation	ns below.)			

	ription: (Describe	to the dep				ator or co	onfirm the	e absence o	of indicators.)		
Depth	Matrix			x Featur		. 2	_		_		
inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Tex	ture	Remarks		
0-12	10YR 5/2	80	10YR 4/6	20	C	PL/M	Loamy	/Clayey	Prominent redox of	concentrations	
		·				·					
	Dincentration, D=Depl		-Paducad Matrix					² Location: E	  PL=Pore Lining, M=Mi	atrix	
<i>,</i> ,	Indicators: (Applica					a oranis.			for Problematic Hydi		
Histosol (A1) Thin Dark Surface (S9) (LRR S				S, T, U)			uck (A9) <b>(LRR O)</b>				
Histic Epipedon (A2) Barrier				,	Muck (S		-		uck (A10) (LRR S)		
Black His	,		(MLRA 153B, 153D)				-		Prairie Redox (A16)		
	drogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR O)					.RR O)	-		ide MLRA 150A)		
Stratified Layers (A5) Loamy Gleyed Matrix (F2)					- /		•	d Vertic (F18)			
	Bodies (A6) (LRR P,	T. U)	X Depleted Ma		. ,		-		ide MLRA 150A, 150	B)	
	icky Mineral (A7) <b>(LR</b>		·	Redox Dark Surface (F6)					nt Floodplain Soils (F		
	esence (A8) (LRR U)		Depleted Dark Surface (F7)						ous Bright Floodplain		
	ick (A9) (LRR P, T)	,	·	Redox Depressions (F8)					(MLRA 153B)		
	Below Dark Surface	e (A11)	·	Mari (F10) <b>(LRR U)</b>					Red Parent Material (F21)		
- ·	ark Surface (A12)	()		Depleted Ochric (F11) (MLRA 151)					Very Shallow Dark Surface (F22)		
	rairie Redox (A16) (M	ILRA 1504	·	Iron-Manganese Masses (F12) (LRR O, P, T)							
	lucky Mineral (S1) (L		· <u> </u>			<i>,</i> <b>,</b>	, , ,	•	Islands Low Chroma I		
	leyed Matrix (S4)	-,-,		Umbric Surface (F13) (LRR P, T, U) Delta Ochric (F17) (MLRA 151)				(MLRA 153B, 153D)			
	edox (S5)		Reduced Ve	· / ·		•					
	Matrix (S6)		Piedmont Fl	•	, <b>.</b>		-		1		
	rface (S7) (LRR P, S	, T, U)	Anomalous I								
	e Below Surface (S8						,	³ Indicate	ors of hydrophytic veg	etation and	
(LRR S, T, U)			•	Very Shallow Dark Surface (F22)					wetland hydrology must be present,		
· ·			(MLRA 13						s disturbed or probler	•	
Restrictive I	Layer (if observed):										
Type:	,										
Depth (ir	nches):						Hydric	Soil Prese	nt? Yes X	No	
Remarks:	·										

U.S. Arm WETLAND DETERMINATION DATA See ERDC/EL TR-10-20;	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)						
Project/Site: Coldwater - Slocum Parcel		City/County: Tate County	Sa	mpling Date: 8/1/23			
Applicant/Owner: Tate County Board o	f Supervisors		State: MS Sa	mpling Point: W24			
Investigator(s): Headwaters, Inc.	Se	ection, Township, Range: S3 ²					
Landform (hillside, terrace, etc.): Shoulde		I relief (concave, convex, none		Slope (%): 2-5			
Subregion (LRR or MLRA): LRR P, MLRA		Long: -89.9		Datum: WGS84			
Soil Map Unit Name: LgB2 - Loring-Grena			NWI classification:				
Are climatic / hydrologic conditions on the s				ain in Remarks.)			
Are Vegetation Y , Soil N , or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No							
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hyd			any answers in Rema				
SUMMARY OF FINDINGS – Attac	h site map showing sa	impling point locations	s, transects, impo	rtant features, etc.			
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         No           Yes         No         X           Yes         No         X	Is the Sampled Area within a Wetland?	Yes N	o_X_			
Remarks: Upland sample point							
HYDROLOGY							
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes	Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)         Surface Water (A1)       Aquatic Fauna (B13)         High Water Table (A2)       Marl Deposits (B15) (LR         Saturation (A3)       Hydrogen Sulfide Odor         Water Marks (B1)       Oxidized Rhizospheres         Sediment Deposits (B2)       Presence of Reduced Ir         Drift Deposits (B3)       Recent Iron Reduction in         Algal Mat or Crust (B4)       Thin Muck Surface (C7)         Iron Deposits (B5)       Other (Explain in Remark         Inundation Visible on Aerial Imagery (B7)       Water-Stained Leaves (B9)			himum of two required) B6) Concave Surface (B8) 10) S) hble (C2) ) Aerial Imagery (C9) (D2) ) (LRR T, U)			
Water Table Present?     Yes       Saturation Present?     Yes	No         X         Depth (inches           No         X         Depth (inches		rology Present?	Yes No X			
(includes capillary fringe)	No <u>×</u> Deptit (inches		rology Present?				
Describe Recorded Data (stream gauge, r Remarks:	nonitoring well, aerial photos,	previous inspections), if availa	ble:				

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Tree Stratum (Plot size: 30 ft. )	Absolute Dominant Indicator % Cover Species? Status	Dominance Test worksheet:
1.       2.		Number of Dominant Species           That Are OBL, FACW, or FAC:         (A)
3		Total Number of Dominant Species Across All Strata:(B)
5		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
7.		Prevalence Index worksheet:
8.		Total % Cover of: Multiply by:
0	=Total Cover	OBL species         x 1 =
50% of total cover:		FACW species         x 2 =
Sapling/Shrub Stratum (Plot size: 30 ft. )	2070 01 total 00001.	
	1	
1		FACU species x 4 =
2		UPL species x 5 =
3		Column Totals:(A)(B)
4		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6.		1 - Rapid Test for Hydrophytic Vegetation
7.		2 - Dominance Test is >50%
8.		- 3 - Prevalence Index is ≤3.0 ¹
·	=Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:		
	2070 01 10(21 00/01.	-
/		
1		¹ Indicators of hydric soil and wetland hydrology must be
		present, unless disturbed or problematic.
3		Definitions of Four Vegetation Strata:
4		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5		more in diameter at breast height (DBH), regardless of
6.		height.
7.		
8.		<ul> <li>Sapling/Shrub – Woody plants, excluding vines, less</li> <li>than 3 in. DBH and greater than 3.28 ft (1 m) tall.</li> </ul>
9.		
10.		-
		Herb – All herbaceous (non-woody) plants, regardless
40		of size, and woody plants less than 3.28 ft tall.
12		
	=Total Cover	<b>Woody Vine</b> – All woody vines greater than 3.28 ft in height.
50% of total cover:	20% of total cover:	
Woody Vine Stratum (Plot size: 30 ft. )		
1		-
2		
3.		_
4.		
5.		
	=Total Cover	- Hydrophytic Vegetation
50% of total cover:	20% of total cover:	Present? Yes No
Remarks: (If observed, list morphological adaptation Agricultural row crop operation (soybean)	ns below.)	

	ription: (Describe	to the dept				tor or co	onfirm the	e absence o	of indicators.)		
Depth	Matrix			x Featu		. 2	_				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Tex	dure	Remarks		
0-12	10YR 5/3	100					Loamy	/Clayey			
		<u> </u>									
Type: C=Co	oncentration, D=Dep	letion, RM=	Reduced Matrix, I	NS=Mas	ked Sand	Grains.	:	² Location: I	PL=Pore Lining, M=Matrix		
lydric Soil I	ndicators: (Applica	ble to all L	RRs, unless oth	erwise r	noted.)			Indicators	for Problematic Hydric S	ioils ³ :	
Histosol	(A1)		Thin Dark S	urface (S	69) <b>(LRR</b>	S, T, U)	_		luck (A9) <b>(LRR O)</b>		
Histic Epipedon (A2)			Barrier Islan	ds 1 cm	Muck (S	2)	_	2 cm M	luck (A10) <b>(LRR S)</b>		
Black Histic (A3)			(MLRA 15	53B, 153	D)			Coast F	Prairie Redox (A16)		
Hydrogen Sulfide (A4)			Loamy Mucl	ky Miner	al (F1) <b>(L</b>	RR O)		(outs	ide MLRA 150A)		
Stratified Layers (A5)			Loamy Gley	ed Matri	x (F2)		_	Reduce	ed Vertic (F18)		
Organic I	Bodies (A6) (LRR P,	T, U)	Depleted Ma	atrix (F3)	)		-	(outs	ide MLRA 150A, 150B)		
5 cm Mu	cky Mineral (A7) <b>(LR</b>	R P, T, U)	Redox Dark Surface (F6)					Piedmo	ont Floodplain Soils (F19)	(LRR P, T	
Muck Pre	esence (A8) (LRR U)	)	Depleted Dark Surface (F7)					Anomalous Bright Floodplain Soils (F20)			
1 cm Mu	ck (A9) <b>(LRR P, T)</b>		Redox Depressions (F8)					(MLRA 153B)			
Depleted	Below Dark Surface	e (A11)	Marl (F10) (	Marl (F10) <b>(LRR U)</b>					Red Parent Material (F21)		
	rk Surface (A12)	· · /		Depleted Ochric (F11) (MLRA 151)					Very Shallow Dark Surface (F22)		
	airie Redox (A16) (N	ILRA 150A	·	•	<i>,</i> <b>,</b>		), P, T)				
	ucky Mineral (S1) (L		Umbric Surf		•	, <b>.</b>		Barrier Islands Low Chroma Matrix (TS7)			
	leyed Matrix (S4)		Delta Ochric			-	-	(MLRA 153B, 153D)			
	edox (S5)		Reduced Ve	• • •			50B)	Other (Explain in Remarks)			
	Matrix (S6)		Piedmont Fl	`	<i>,</i> ,						
	face (S7) <b>(LRR P, S</b>	. T. U)	Anomalous	•	•	<i>,</i> ,					
Polyvalue Below Surface (S8) (MLRA 14				-	•		-,	³ Indicat	tors of hydrophytic vegetat	ion and	
(LRR S, T, U)			Very Shallov					³ Indicators of hydrophytic vegetation and wetland hydrology must be present,			
(=:::::	-, -, -, -,		(MLRA 13		•	,			ss disturbed or problemation		
Restrictive L	ayer (if observed):										
Type:											
Depth (in	nches):						Hydric	Soil Prese	ent? Yes N	lo_X_	
Remarks:											

U.S. Arm WETLAND DETERMINATION DATA See ERDC/EL TR-10-20;	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)						
Project/Site: Coldwater - Slocum Parcel		City/County: Tate County	S	ampling Date: 8/1/23			
Applicant/Owner: Tate County Board o	f Supervisors		State: MS S	ampling Point: W25			
Investigator(s): Headwaters, Inc.	Se	ection, Township, Range: S3					
Landform (hillside, terrace, etc.): Loess h		I relief (concave, convex, non		Slope (%): 2-5			
Subregion (LRR or MLRA): LRR P, MLRA		Long: -89.9		Datum: WGS84			
Soil Map Unit Name: MeB2 - Memphis silt		· · ·					
Are climatic / hydrologic conditions on the s				lain in Remarks.)			
, ,				· · · · · · · · · · · · · · · · · · ·			
	Are Vegetation       Y       , Soil       N       , or Hydrology       N       significantly disturbed?       Are "Normal Circumstances" present?       Yes       X       No						
Are Vegetation N, Soil N, or Hyd			any answers in Rema				
SUMMARY OF FINDINGS – Attac	h site map showing sa	Impling point locations	s, transects, impo	ortant features, etc.			
Hydrophytic Vegetation Present?	Yes No	Is the Sampled Area					
Hydric Soil Present?	Yes No X	within a Wetland?	Yes N	lo_X_			
Wetland Hydrology Present?	Yes No X						
Remarks: Upland sample point							
L HYDROLOGY							
Wetland Hydrology Indicators:		Sec	condary Indicators (mi	nimum of two required)			
Primary Indicators (minimum of one is requ	uired; check all that apply)		Surface Soil Cracks	(B6)			
Surface Water (A1)	Aquatic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)	Marl Deposits (B15) (L		RR U) Drainage Patterns (B10)				
Saturation (A3)	Hydrogen Sulfide Odo						
Water Marks (B1)			s on Living Roots (C3) Dry-Season Water Table (C2)				
Sediment Deposits (B2) Drift Deposits (B3)	Presence of Reduced Recent Iron Reduction	. ,	· · · · · · · · · · · · · · · · · · ·				
Algal Mat or Crust (B4)	Thin Muck Surface (C7						
Iron Deposits (B5)	Other (Explain in Rem	· · · · · · · · · · · · · · · · · · ·	Geomorphic Position (D2) Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (	B7)	,	FAC-Neutral Test (D5)				
Water-Stained Leaves (B9)			Sphagnum Moss (D8	B) (LRR T, U)			
Field Observations:			_				
Surface Water Present? Yes	No X Depth (inches	):					
Water Table Present? Yes							
Saturation Present? Yes	No X Depth (inches	): Wetland Hyd	rology Present?	Yes <u>No X</u>			
(includes capillary fringe) Describe Recorded Data (stream gauge, n	nonitoring well, porial photon	provious inspections) if avails	blo				
Describe Recorded Data (Sirearii gauge, i	nonitoning well, aenai priotos,	previous inspections), il availa	idle.				
Remarks:							
Remarks.							

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Sampling Point:

W25

Tree Stratum (Plot size: 30 ft. )	Absolute Dominant Indicato	
1		
2		That Are OBL, FACW, or FAC:(A)
3 4		Total Number of Dominant Species Across All Strata: (B)
5 6.		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
7.		Prevalence Index worksheet:
8.		Total % Cover of: Multiply by:
	=Total Cover	OBL species x 1 =
50% of total cover:	20% of total cover:	
Sapling/Shrub Stratum (Plot size: 30 ft.	)	FAC species x 3 =
1		FACU species x 4 =
2.		UPL species x 5 =
3.		Column Totals: (A) (B)
4.		Prevalence Index = B/A =
5.		Hydrophytic Vegetation Indicators:
6.		1 - Rapid Test for Hydrophytic Vegetation
7.		2 - Dominance Test is >50%
8.		3 - Prevalence Index is ≤3.0 ¹
	=Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of total cover:	
Herb Stratum (Plot size: 30 ft. )		-
1		¹ Indicators of hydric soil and wetland hydrology must be
2.		present, unless disturbed or problematic.
3.		Definitions of Four Vegetation Strata:
4.		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5.		more in diameter at breast height (DBH), regardless of
6.		height.
7.		-
8.		<b>Sapling/Shrub</b> – Woody plants, excluding vines, less
9.		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
10.		-
11.		Herb – All herbaceous (non-woody) plants, regardless
12.		of size, and woody plants less than 3.28 ft tall.
	=Total Cover	Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover:	20% of total cover:	height.
Woody Vine Stratum (Plot size: 30 ft. )		-
1		
2		-
2		-
		-
4 5		-
0.	=Total Cover	- Hydrophytic
50% of total cover:	20% of total cover:	Vegetation Present? Yes No

	cription: (Describe							0 0000100			
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Featu	Type ¹	Loc ²	Te	xture		Remarks	
· / /					.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		-				
0-12 10YR 5/3 100				Loamy	//Clayey						
						<u> </u>					
						<u> </u>					
						<u> </u>					
Type: C=Co	oncentration, D=Dep	letion, RM=	Reduced Matrix,	MS=Mas	ked Sand	l Grains.		² Location:	PL=Pore Lining,	M=Matrix.	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)							Indicators	s for Problemation	c Hydric Soils ³ :		
Histosol	(A1)		Thin Dark S	urface (S	59) <b>(LRR</b>	S, T, U)		1 cm I	Muck (A9) <b>(LRR</b>	0)	
Histic Epipedon (A2) Barrier Islands 1 cm Muck (S12				2)		2 cm l	Muck (A10) <b>(LRR</b>	: S)			
Black Histic (A3) (MLRA 153			53B, 153	SD)			Coast	Prairie Redox (A	.16)		
Hydrogen Sulfide (A4)Loamy Mucky Mineral (F1			al (F1) <b>(L</b>	RR O)		(out	side MLRA 150	A)			
Stratified Layers (A5)Loamy Gley				ed Matri	x (F2)			Reduc	ced Vertic (F18)		
Organic	Bodies (A6) (LRR P,	T, U)	Depleted M	atrix (F3)	)			(out	side MLRA 150	A, 150B)	
5 cm Mu	icky Mineral (A7) <b>(LR</b>	R P, T, U)	Redox Dark	dox Dark Surface (F6)					Piedmont Floodplain Soils (F19) (LRR P, T		
Muck Pr	esence (A8) (LRR U	)	Depleted Da	Depleted Dark Surface (F7)					Anomalous Bright Floodplain Soils (F20)		
1 cm Mu	ick (A9) (LRR P, T)		Redox Depr	Redox Depressions (F8)					(MLRA 153B)		
Depleted	d Below Dark Surface	e (A11)	Marl (F10) (	LRR U)			Red Parent Material (F21)				
Thick Da	ark Surface (A12)		Depleted O	chric (F1	1) (MLRA	151)		Very S	ery Shallow Dark Surface (F22)		
Coast P	rairie Redox (A16) (N	ILRA 150A	) Iron-Manga	nese Ma	sses (F12	2) (LRR O	D, P, T) (outside MLRA 138, 152A in FL, 154)				
Sandy M	lucky Mineral (S1) <b>(L</b>	.RR O, S)	Umbric Surf	ace (F13	B) (LRR F	, T, U)		Barrie	r Islands Low Ch	roma Matrix (TS7)	
Sandy G	leyed Matrix (S4)		Delta Ochrid	c (F17) <b>(</b> I	MLRA 15	1)	-	(ML	RA 153B, 153D)		
Sandy R	edox (S5)		Reduced Ve	ertic (F18	B) (MLRA	150A, 15	50B)	Other	(Explain in Rema	arks)	
Stripped	Matrix (S6)		Piedmont F	oodplair	Soils (F	9) (MLR	A 149A)				
Dark Su	rface (S7) (LRR P, S	, T, U)	Anomalous				-				
Polyvalue Below Surface (S8) (MLRA 149A, 153C, 153D)						³ Indica	ators of hydrophy	tic vegetation and			
			Very Shallo						land hydrology m	-	
	·		(MLRA 1	38, 152A	in FL, 1	54)		unle	ess disturbed or p	problematic.	
Restrictive I	Layer (if observed):										
Type:	-										
Depth (ir	nches):						Hydric	Soil Pres	sent? Yes	No X	
Remarks:											

U.S. Army WETLAND DETERMINATION DATA S See ERDC/EL TR-10-20; t	-	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)					
Project/Site: Coldwater - Slocum Parcel		City/County: Tate County	Sa	ampling Date: 8/1/23			
Applicant/Owner: Tate County Board of	Supervisors			ampling Point: W26			
Investigator(s): Headwaters, Inc.		ction, Township, Range: S31					
Landform (hillside, terrace, etc.): Shoulder		relief (concave, convex, none		Slope (%): 2-5			
Subregion (LRR or MLRA): LRR P, MLRA 1		Long: -89.98		Datum: WGS84			
Soil Map Unit Name: LgB2 - Loring-Grenada			NWI classification				
Are climatic / hydrologic conditions on the site				ain in Remarks.)			
Are Vegetation Y, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No							
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydro	ology <u>N</u> naturally problem	atic? (If needed, explain	any answers in Rema	irks.)			
SUMMARY OF FINDINGS – Attach	n site map showing sar	npling point locations	, transects, impo	ortant features, etc.			
Hydrophytic Vegetation Present?	Yes No X	Is the Sampled Area					
Hydric Soil Present?	Yes No X	within a Wetland?	Yes N	o X			
Wetland Hydrology Present?	Yes No X						
Remarks: Upland sample point							
HYDROLOGY		0.00		:			
Wetland Hydrology Indicators: Primary Indicators (minimum of one is requi	red: check all that apply)	500	Surface Soil Cracks (	nimum of two required) B6)			
Surface Water (A1)	Aquatic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)	Marl Deposits (B15) (LF		Drainage Patterns (B10)				
Saturation (A3)	Hydrogen Sulfide Odor	(C1)	Moss Trim Lines (B16)				
Water Marks (B1)	Oxidized Rhizospheres	on Living Roots (C3)	Dry-Season Water Table (C2)				
Sediment Deposits (B2)	Presence of Reduced Ir		Crayfish Burrows (C8)				
Drift Deposits (B3)	Recent Iron Reduction i		Saturation Visible on				
Algal Mat or Crust (B4)	Thin Muck Surface (C7)		Geomorphic Position	· ,			
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B	Other (Explain in Remai	rks)	Shallow Aquitard (D3)				
Water-Stained Leaves (B9)	")		FAC-Neutral Test (D5) Sphagnum Moss (D8) <b>(LRR T, U)</b>				
Field Observations:		<u></u>		, (, <b>0</b> ,			
Surface Water Present? Yes	No X Depth (inches):						
Water Table Present? Yes	No X Depth (inches):						
Saturation Present? Yes	No X Depth (inches):	Wetland Hydr	rology Present?	Yes No X			
(includes capillary fringe)							
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos, p	revious inspections), if availa	ble:				
Remarks:							

Tree Stratum (Plot size: 30 ft. )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
3.				Total Number of Dominant Species Across All Strata: 2 (B)
5			 	Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)
				Prevalence Index worksheet:
7.				
8				Total % Cover of: Multiply by:
		=Total Cover		OBL species 0 x 1 = 0
50% of total cover:	20%	of total cover:		FACW species 0 x 2 = 0
Sapling/Shrub Stratum (Plot size: 30 ft. )				FAC species 0 x 3 = 0
1				FACU species 100 x 4 = 400
2.				UPL species 0 x 5 = 0
3.				Column Totals: 100 (A) 400 (B)
4.				Prevalence Index = $B/A = 4.00$
5.				Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7.				2 - Dominance Test is >50%
8.				
o				3 - Prevalence Index is $\leq 3.0^{1}$
		=Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20%	of total cover:		
Herb Stratum (Plot size: 30 ft. )				
1. Paspalum notatum	50	Yes	FACU	¹ Indicators of hydric soil and wetland hydrology must be
2. Sorghum halepense	50	Yes	FACU	present, unless disturbed or problematic.
3.				Definitions of Four Vegetation Strata:
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5.				more in diameter at breast height (DBH), regardless of
6.				height.
7.				
				Sapling/Shrub – Woody plants, excluding vines, less
8.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
9				
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12.				
	100	=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 50%	20%	of total cover:	20	height.
Woody Vine Stratum (Plot size: 30 ft. )				
1.				
2.				
2				
4.				
5				Hydrophytic
		=Total Cover		Vegetation
50% of total cover:	20%	of total cover:		Present? Yes <u>No X</u>
Remarks: (If observed, list morphological adaptatior	ns below.)			
Edge of agricultural row crop operation (soybean) an	,			

Depth	Matrix		Redo	x Featu	res						
inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Loamy/Clayey		Remarks		
0-12	10YR 5/3	100									
						<u> </u>					
						<u> </u>		·			
Type: C=Co	oncentration, D=Depl	etion, RM=	Reduced Matrix, I	MS=Mas	sked Sand	d Grains.		² Location: P	L=Pore Lining	, M=Matrix.	
lydric Soil	Indicators: (Applica	ble to all L	RRs, unless oth	erwise r	noted.)			Indicators for	or Problemati	c Hydric Soils ³ :	
Histosol (A1)			Thin Dark Surface (S9) (LRR S, T, U)					1 cm Muck (A9) <b>(LRR O)</b>			
Histic Epipedon (A2)			Barrier Islands 1 cm Muck (S12)					2 cm Muck (A10) <b>(LRR S)</b>			
Black Histic (A3)			(MLRA 153B, 153D)					Coast Prairie Redox (A16)			
Hydrogen Sulfide (A4)			Loamy Mucky Mineral (F1) (LRR O)					(outside MLRA 150A)			
Stratified Layers (A5)			Loamy Gleyed Matrix (F2)					Reduced Vertic (F18)			
Organic Bodies (A6) (LRR P, T, U)			Depleted Matrix (F3)					(outside MLRA 150A, 150B)			
5 cm Mucky Mineral (A7) (LRR P, T, U)			Redox Dark Surface (F6)					Piedmont Floodplain Soils (F19) (LRR P, T			
Muck Presence (A8) (LRR U)			Depleted Dark Surface (F7)					Anomalous Bright Floodplain Soils (F20)			
1 cm Muck (A9) (LRR P, T)			Redox Depressions (F8)					(MLRA 153B)			
Depleted Below Dark Surface (A11)			Marl (F10) <b>(LRR U)</b>					Red Parent Material (F21)			
Thick Da	ark Surface (A12)		Depleted Ochric (F11) (MLRA 151)					Very Shallow Dark Surface (F22)			
Coast P	rairie Redox (A16) ( <b>N</b>	ILRA 150A	Iron-Manganese Masses (F12) (LRR O, P					P, T) (outside MLRA 138, 152A in FL, 154)			
Sandy Mucky Mineral (S1) (LRR O, S)			Umbric Surface (F13) (LRR P, T, U)					Barrier Islands Low Chroma Matrix (TS7)			
Sandy Gleyed Matrix (S4)			Delta Ochric (F17) (MLRA 151)					(MLRA 153B, 153D)			
Sandy R	edox (S5)	Reduced Vertic (F18) (MLRA 150A, 150B)					Other (E	xplain in Rema	arks)		
Stripped	Matrix (S6)	Piedmont Floodplain Soils (F19) (MLRA 149A									
Dark Surface (S7) (LRR P, S, T, U)			Anomalous Bright Floodplain Soils (F20)								
Polyvalue Below Surface (S8)			(MLRA 149A, 153C, 153D)					³ Indicators of hydrophytic vegetation and			
(LRR S, T, U)			Very Shallow Dark Surface (F22)					wetland hydrology must be present,			
			(MLRA 13	88, 152A	in FL, 1	54)		unless	s disturbed or p	problematic.	
	Layer (if observed):										
Type:											
	nches):							c Soil Preser	nt? Yes	No X	

## ATTACHMENT C

## CUSTOM SOIL RESOURCE REPORT FOR TATE COUNTY, MS



United States Department of Agriculture



Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

# Custom Soil Resource Report for **Tate County, Mississippi**

**Slocum Parcels** 



## Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/? cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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## **How Soil Surveys Are Made**

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

## Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



	MAP L	EGEND	)	MAP INFORMATION				
Area of In	t <b>erest (AOI)</b> Area of Interest (AOI)	8	Spoil Area Stony Spot	The soil surveys that comprise your AOI were mapped at 1:15,800.				
Soils	Soil Map Unit Polygons	0	Very Stony Spot	Warning: Soil Map may not be valid at this scale.				
~	Soil Map Unit Lines Soil Map Unit Points	\$° ∆	Wet Spot Other	Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil				
_	Point Features Blowout	 Water Fe	Streams and Canals	line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.				
	Borrow Pit Clay Spot	~~ Transport		Please rely on the bar scale on each map sheet for map				
0	Closed Depression	¥ <b> </b>		measurements. Source of Map: Natural Resources Conservation Service				
*	Gravel Pit Gravelly Spot		US Routes Major Roads	Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857)				
0 1.	Landfill Lava Flow	Backgrou	Local Roads	Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the				
<u>⊸</u> ≪	Marsh or swamp Mine or Quarry	No.	Aerial Photography	Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.				
0	Miscellaneous Water Perennial Water			This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.				
~ +	Rock Outcrop Saline Spot			Soil Survey Area: Tate County, Mississippi Survey Area Data: Version 17, Sep 9, 2022				
**	Sandy Spot Severely Eroded Spot			Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.				
\$	Sinkhole			Date(s) aerial images were photographed: Oct 3, 2020—Nov 12, 2020				
ja ja	Slide or Slip Sodic Spot			The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.				

## **Map Unit Legend**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI	
CaB2	Calloway silt loam, 2 to 5 percent slopes, moderately eroded	60.9	50.8%	
Co	Collins silt loam, local alluvium, 0 to 2 percent slopes, occasionally flooded, brief duration	17.0	14.2%	
Fa	Falaya silt loam	3.5	3.0%	
GrC3	Grenada silt loam, 5 to 8 percent slopes, severely eroded	7.1	5.9%	
LgB2	Loring-Grenada silt loams, 2 to 5 percent slopes, eroded	19.0	15.9%	
MeB2	Memphis silt loam, 2 to 5 percent slopes, moderately eroded, northern phase	10.2	8.5%	
MeB3	Memphis silt loam, 2 to 5 percent slopes, severely eroded	2.0	1.6%	
Totals for Area of Interest		119.8	100.0%	

## **Map Unit Descriptions**

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They

generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

### Tate County, Mississippi

### CaB2—Calloway silt loam, 2 to 5 percent slopes, moderately eroded

### **Map Unit Setting**

National map unit symbol: 2t23h Elevation: 200 to 520 feet Mean annual precipitation: 52 to 56 inches Mean annual air temperature: 46 to 72 degrees F Frost-free period: 189 to 240 days Farmland classification: All areas are prime farmland

### **Map Unit Composition**

Calloway and similar soils: 87 percent Minor components: 13 percent Estimates are based on observations, descriptions, and transects of the mapunit.

### **Description of Calloway**

### Setting

Landform: Loess hills Landform position (two-dimensional): Summit Landform position (three-dimensional): Base slope Down-slope shape: Linear Across-slope shape: Concave Parent material: Loess

### **Typical profile**

Ap - 0 to 7 inches: silt loam Bw - 7 to 19 inches: silt loam Eg - 19 to 27 inches: silt loam Btx - 27 to 62 inches: silt loam C - 62 to 80 inches: silt loam

### **Properties and qualities**

Slope: 2 to 5 percent
Depth to restrictive feature: 15 to 30 inches to fragipan
Drainage class: Somewhat poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 7 to 21 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 6.1 inches)

### Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 2e Hydrologic Soil Group: D Ecological site: F134XY004AL - Northern Moderately Wet Loess Interfluve -PROVISIONAL Hydric soil rating: No

### **Minor Components**

### Routon

Percent of map unit: 7 percent Landform: Stream terraces Landform position (two-dimensional): Toeslope Landform position (three-dimensional): Tread Down-slope shape: Concave Across-slope shape: Concave Ecological site: F134XY005AL - Northern Wet Loess Interfluve - PROVISIONAL Hydric soil rating: Yes

### Loring

Percent of map unit: 6 percent Landform: Loess hills Landform position (two-dimensional): Summit Landform position (three-dimensional): Interfluve Down-slope shape: Concave Across-slope shape: Concave Ecological site: F134XY012AL - Northern Loess Fragipan Upland - PROVISIONAL Hydric soil rating: No

## Co—Collins silt loam, local alluvium, 0 to 2 percent slopes, occasionally flooded, brief duration

### Map Unit Setting

National map unit symbol: 2t23n Elevation: 180 to 540 feet Mean annual precipitation: 51 to 56 inches Mean annual air temperature: 47 to 73 degrees F Frost-free period: 193 to 242 days Farmland classification: All areas are prime farmland

### Map Unit Composition

*Collins and similar soils:* 94 percent *Minor components:* 6 percent *Estimates are based on observations, descriptions, and transects of the mapunit.* 

### **Description of Collins**

### Setting

Landform: Flood plains Landform position (three-dimensional): Talf Down-slope shape: Linear Across-slope shape: Linear Parent material: Coarse-silty alluvium derived from sedimentary rock

### **Typical profile**

*Ap - 0 to 6 inches:* silt loam *C - 6 to 52 inches:* silt loam

### **Properties and qualities**

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 24 to 60 inches
Frequency of flooding: NoneOccasional
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 11.3 inches)

### Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 2w Hydrologic Soil Group: B Hydric soil rating: No

### **Minor Components**

### Vicksburg

Percent of map unit: 6 percent Landform: Flood plains Landform position (three-dimensional): Rise, talf Down-slope shape: Linear Across-slope shape: Linear Hydric soil rating: No

### Fa—Falaya silt loam

### Map Unit Setting

National map unit symbol: m2my
Elevation: 250 to 450 feet
Mean annual precipitation: 45 to 55 inches
Mean annual air temperature: 57 to 63 degrees F
Frost-free period: 230 to 290 days
Farmland classification: Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season

### Map Unit Composition

*Falaya and similar soils:* 93 percent *Minor components:* 7 percent *Estimates are based on observations, descriptions, and transects of the mapunit.* 

### **Description of Falaya**

### Setting

Landform: Flood plains Landform position (three-dimensional): Tread Down-slope shape: Linear Across-slope shape: Convex Parent material: Silty alluvium

### **Typical profile**

*H1 - 0 to 31 inches:* silt loam *H2 - 31 to 45 inches:* silt loam

### Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 2.00 in/hr)
Depth to water table: About 12 to 24 inches
Frequency of flooding: NoneOccasional
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.0 inches)

### Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 2w Hydrologic Soil Group: B/D Hydric soil rating: No

### **Minor Components**

### Unnamed hydric soils (134fp)

Percent of map unit: 7 percent Landform: Flood plains Landform position (three-dimensional): Talf Down-slope shape: Linear Across-slope shape: Linear Hydric soil rating: Yes

### GrC3—Grenada silt loam, 5 to 8 percent slopes, severely eroded

### Map Unit Setting

National map unit symbol: m2n1 Elevation: 100 to 610 feet Mean annual precipitation: 60 to 75 inches Mean annual air temperature: 64 to 70 degrees F Frost-free period: 270 to 335 days Farmland classification: Not prime farmland

### **Map Unit Composition**

*Grenada, severely eroded, and similar soils:* 90 percent *Minor components:* 2 percent *Estimates are based on observations, descriptions, and transects of the mapunit.* 

### **Description of Grenada, Severely Eroded**

### Setting

Landform position (two-dimensional): Shoulder Landform position (three-dimensional): Side slope Down-slope shape: Linear Across-slope shape: Linear Parent material: Loess deposits

### **Typical profile**

H1 - 0 to 3 inches: silt loam H2 - 3 to 19 inches: silt loam H3 - 19 to 22 inches: silt loam H4 - 22 to 40 inches: silt loam H5 - 40 to 60 inches: silt loam

### **Properties and qualities**

Slope: 5 to 8 percent
Depth to restrictive feature: 18 to 36 inches to fragipan
Drainage class: Moderately well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 27 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.4 inches)

### Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 4e Hydrologic Soil Group: D Ecological site: F134XY105MS - Southern Rolling Plains Loess Fragipan Upland -PROVISIONAL Hydric soil rating: No

### **Minor Components**

### Unnamed hydric soils (134dr)

Percent of map unit: 2 percent Landform: Drainageways Landform position (three-dimensional): Dip Down-slope shape: Linear Across-slope shape: Linear Hydric soil rating: Yes

### LgB2—Loring-Grenada silt loams, 2 to 5 percent slopes, eroded

### Map Unit Setting

National map unit symbol: m2nc

*Elevation:* 200 to 520 feet *Mean annual precipitation:* 45 to 55 inches *Mean annual air temperature:* 57 to 63 degrees F *Frost-free period:* 230 to 290 days *Farmland classification:* All areas are prime farmland

### Map Unit Composition

*Loring and similar soils:* 50 percent *Grenada and similar soils:* 40 percent *Estimates are based on observations, descriptions, and transects of the mapunit.* 

### **Description of Loring**

### Setting

Landform position (two-dimensional): Shoulder Landform position (three-dimensional): Side slope Down-slope shape: Linear Across-slope shape: Linear Parent material: Loess deposits

### **Typical profile**

H1 - 0 to 5 inches: silt loam

- H2 5 to 28 inches: silt loam
- H3 28 to 50 inches: silt loam
- H4 50 to 65 inches: silt loam

### **Properties and qualities**

Slope: 2 to 5 percent
Depth to restrictive feature: 14 to 35 inches to fragipan
Drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 24 to 32 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.3 inches)

### Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 2e Hydrologic Soil Group: C Hydric soil rating: No

### **Description of Grenada**

### Setting

Landform position (two-dimensional): Shoulder Landform position (three-dimensional): Side slope Down-slope shape: Linear Across-slope shape: Linear Parent material: Loess deposits

### **Typical profile**

H1 - 0 to 5 inches: silt loam H2 - 5 to 21 inches: silt loam H3 - 21 to 24 inches: silt loam *H4 - 24 to 42 inches:* silt loam *H5 - 42 to 60 inches:* silt loam

### **Properties and qualities**

Slope: 2 to 5 percent
Depth to restrictive feature: 18 to 36 inches to fragipan
Drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 27 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.6 inches)

### Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 2e Hydrologic Soil Group: C/D Hydric soil rating: No

## MeB2—Memphis silt loam, 2 to 5 percent slopes, moderately eroded, northern phase

### Map Unit Setting

National map unit symbol: 2t23z Elevation: 260 to 540 feet Mean annual precipitation: 50 to 54 inches Mean annual air temperature: 47 to 71 degrees F Frost-free period: 182 to 220 days Farmland classification: All areas are prime farmland

### Map Unit Composition

*Memphis, eroded, north, and similar soils:* 88 percent *Minor components:* 12 percent *Estimates are based on observations, descriptions, and transects of the mapunit.* 

### **Description of Memphis, Eroded, North**

### Setting

Landform: Loess hills Landform position (two-dimensional): Summit Landform position (three-dimensional): Interfluve Down-slope shape: Linear Across-slope shape: Linear Parent material: Fine-silty noncalcareous loess

### **Typical profile**

Ap - 0 to 6 inches: silt loam Bt1 - 6 to 18 inches: silty clay loam Bt2 - 18 to 74 inches: silt loam C - 74 to 80 inches: silt loam

### **Properties and qualities**

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very high (about 13.0 inches)

### Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 2e Hydrologic Soil Group: B Ecological site: F134XY002AL - Northern Deep Loess Summit - PROVISIONAL Hydric soil rating: No

### **Minor Components**

### Lexington

Percent of map unit: 6 percent Landform: Loess hills Landform position (two-dimensional): Summit Landform position (three-dimensional): Interfluve Down-slope shape: Convex Across-slope shape: Convex Ecological site: F134XY003AL - Northern Loess Interfluve - PROVISIONAL Hydric soil rating: No

### Loring

Percent of map unit: 4 percent Landform: Loess hills Landform position (two-dimensional): Summit Landform position (three-dimensional): Crest Down-slope shape: Linear Across-slope shape: Linear Ecological site: F134XY012AL - Northern Loess Fragipan Upland - PROVISIONAL Hydric soil rating: No

### Grenada

Percent of map unit: 2 percent Landform: Loess hills Landform position (two-dimensional): Summit Landform position (three-dimensional): Base slope Down-slope shape: Convex Across-slope shape: Linear Ecological site: F134XY012AL - Northern Loess Fragipan Upland - PROVISIONAL Hydric soil rating: No

### MeB3—Memphis silt loam, 2 to 5 percent slopes, severely eroded

### Map Unit Setting

National map unit symbol: m2nh Elevation: 200 to 520 feet Mean annual precipitation: 60 to 75 inches Mean annual air temperature: 64 to 70 degrees F Frost-free period: 270 to 335 days Farmland classification: Farmland of statewide importance

### Map Unit Composition

*Memphis and similar soils:* 90 percent *Estimates are based on observations, descriptions, and transects of the mapunit.* 

### **Description of Memphis**

### Setting

Landform position (two-dimensional): Shoulder Landform position (three-dimensional): Side slope Down-slope shape: Linear Across-slope shape: Linear Parent material: Loess deposits

### **Typical profile**

H1 - 0 to 3 inches: silt loam H2 - 3 to 31 inches: silty clay loam H3 - 31 to 80 inches: silt loam

### **Properties and qualities**

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very high (about 12.9 inches)

### Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 3e Hydrologic Soil Group: B Ecological site: F134XY002AL - Northern Deep Loess Summit - PROVISIONAL Hydric soil rating: No

## **Soil Information for All Uses**

## Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

## Land Classifications

Land Classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

## Hydric Rating by Map Unit (Slocum Parcels)

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

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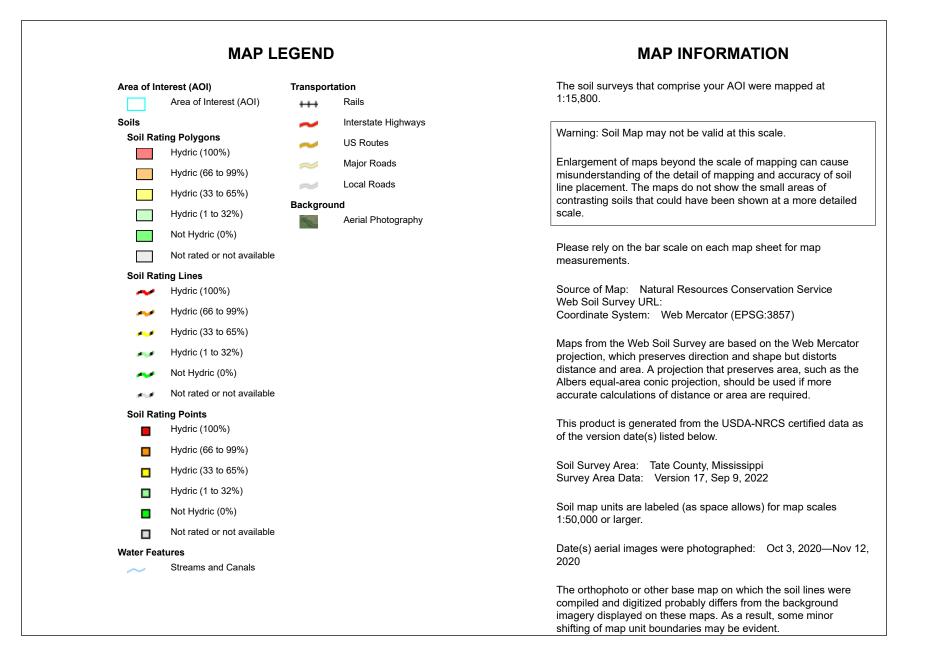
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Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.





Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CaB2	Calloway silt loam, 2 to 5 percent slopes, moderately eroded	7	60.9	50.8%
Co	Collins silt loam, local alluvium, 0 to 2 percent slopes, occasionally flooded, brief duration	0	17.0	14.2%
Fa	Falaya silt loam	7	3.5	3.0%
GrC3	Grenada silt loam, 5 to 8 percent slopes, severely eroded	2	7.1	5.9%
LgB2	Loring-Grenada silt loams, 2 to 5 percent slopes, eroded	0	19.0	15.9%
MeB2	Memphis silt loam, 2 to 5 percent slopes, moderately eroded, northern phase	0	10.2	8.5%
MeB3	Memphis silt loam, 2 to 5 percent slopes, severely eroded	0	2.0	1.6%
Totals for Area of Inter	est	1	119.8	100.0%

### Table—Hydric Rating by Map Unit (Slocum Parcels)

### Rating Options—Hydric Rating by Map Unit (Slocum Parcels)

### Aggregation Method: Percent Present

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The aggregation method "Percent Present" returns the cumulative percent composition of all components of a map unit for which a certain condition is true.

For example, attribute "Hydric Rating by Map Unit" returns the cumulative percent composition of all components of a map unit where the corresponding hydric rating is "Yes". Conditions may be simple or complex. At runtime, the user may be able to specify all, some or none of the conditions in question.

### Component Percent Cutoff: None Specified

Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

### Tie-break Rule: Lower

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

## References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

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## ATTACHMENT D

PHOTOGRAPHIC DOCUMENTATION



WAYPOINT #1

PHOTOGRAPH #1

Looking east at upland habitat.



WAYPOINT #1

PHOTOGRAPH #2

Looking west at upland habitat.



WAYPOINT #1

PHOTOGRAPH #3

Looking north at upland habitat.



WAYPOINT #1

PHOTOGRAPH #4

Looking at 10YR 5/3 upland soil.





PHOTOGRAPH #5

Looking north at upland ag field.



WAYPOINT #2

PHOTOGRAPH #6

Looking down gradient at ephemeral feature.



WAYPOINT #2

PHOTOGRAPH #7

Looking up gradient at ephemeral feature.



WAYPOINT #2

PHOTOGRAPH #8

Looking west at upland habitat.



WAYPOINT #2

PHOTOGRAPH #9

Looking east at upland habitat.



WAYPOINT #3

PHOTOGRAPH #10

Looking north at upland habitat.



WAYPOINT #3

PHOTOGRAPH #11

Looking south at upland habitat.



WAYPOINT #4

PHOTOGRAPH #12

Looking at 10YR 5/2 4/6 hydric soil from forested wetland.



WAYPOINT #4

PHOTOGRAPH #13

Looking east at forested wetland habitat.



WAYPOINT #4

PHOTOGRAPH #14

Looking west at forested wetland habitat.



WAYPOINT #4

PHOTOGRAPH #15

Looking south at upland habitat.



WAYPOINT #4

PHOTOGRAPH #16

Looking north at forested wetland habitat.



WAYPOINT #7

PHOTOGRAPH #17

Looking up gradient at ephemeral feature.



WAYPOINT #7

PHOTOGRAPH #18

Looking down gradient at forested wetland.



WAYPOINT #7

PHOTOGRAPH #19

Looking west at upland habitat.



WAYPOINT #7

PHOTOGRAPH #20

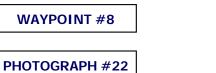
Looking at 10YR 5/3 upland top bank soil of ephemeral feature.



WAYPOINT #8

PHOTOGRAPH #21

Looking at 10YR 4/2 4/6 hydric soil from scrub shrub wetland.





Looking north at scrub shrub wetland.



WAYPOINT #8

PHOTOGRAPH #23

Looking south at upland habitat.



WAYPOINT #9

PHOTOGRAPH #24

Looking at 10YR 5/2 4/6 hydric soil from scrub shrub wetland.



WAYPOINT #9

PHOTOGRAPH #25

Looking south at scrub shrub wetland.



WAYPOINT #9

PHOTOGRAPH #26

Looking east at upland habitat.



WAYPOINT #10

PHOTOGRAPH #27

Looking at 10YR 5/4 upland soil.



WAYPOINT #10

PHOTOGRAPH #28

Looking south at upland habitat.



WAYPOINT #10

PHOTOGRAPH #29

Looking north at upland habitat.



WAYPOINT #11

PHOTOGRAPH #30

Looking at 10YR 5/1 4/6 hydric soil from forested wetland.



WAYPOINT #11

PHOTOGRAPH #31

Looking north at forested wetland habitat.



PHOTOGRAPH #32



Looking east at forested wetland habitat.



WAYPOINT #12

PHOTOGRAPH #33

Looking at 10YR 4/3 upland soil.



WAYPOINT #12

PHOTOGRAPH #34



WAYPOINT #12

PHOTOGRAPH #35

Looking south at upland habitat.



WAYPOINT #13

PHOTOGRAPH #36

Looking at 10YR 5/2 4/6 hydric soil from forested wetland.



WAYPOINT #13

PHOTOGRAPH #37

Looking south at forested wetland habitat.



WAYPOINT #13

PHOTOGRAPH #38

Looking north at forested wetland habitat.



WAYPOINT #15

PHOTOGRAPH #39

Looking at 10YR 4/3 upland soil.



WAYPOINT #15

PHOTOGRAPH #40

Looking west at upland habitat.



WAYPOINT #15

PHOTOGRAPH #41

Looking east at upland habitat.



WAYPOINT #16

PHOTOGRAPH #42



WAYPOINT #16

PHOTOGRAPH #43

Looking north at upland habitat.



WAYPOINT #17

PHOTOGRAPH #44

Looking east at upland habitat.



WAYPOINT #17

PHOTOGRAPH #45

Looking west at upland habitat.



WAYPOINT #17

PHOTOGRAPH #46



WAYPOINT #17

PHOTOGRAPH #47

Looking at 10YR 5/3 upland soil.



WAYPOINT #18

PHOTOGRAPH #48

Looking up gradient at ag ditch.



WAYPOINT #18

PHOTOGRAPH #49

Looking down gradient at ag ditch.



WAYPOINT #19

PHOTOGRAPH #50





PHOTOGRAPH #51

Looking south at upland habitat.



WAYPOINT #19

PHOTOGRAPH #52

Looking east at upland habitat.



WAYPOINT #20

PHOTOGRAPH #53

Looking east at upland habitat.



WAYPOINT #23

PHOTOGRAPH #54

Looking south at emergent wetland.



WAYPOINT #23

PHOTOGRAPH #55

Looking west at emergent wetland.

WAYPOINT #23

PHOTOGRAPH #56



Looking at 10YR 5/2 4/6 hydric soil from emergent wetland.





PHOTOGRAPH #57