

## APPENDIX B

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### JD Report

March 31, 2021

Stephen Cain  
Manager – Environmental Compliance  
Arkansas Electric Cooperative Corporation  
1 Cooperative Way  
Little Rock, AR 72209

Re: Jurisdictional Determination  
AECC Augusta Property  
GBMc No. 3008-20-303

Dear Mr. Cain:

GBMc & Associates (GBMc) was tasked with conducting a jurisdictional determination (JD) for an approximately 805-acre area and an approximately 0.4 mile proposed transmission line (T-line) right-of-way (ROW) located in Augusta in Woodruff County, Arkansas. The JD includes identifying and delineating any possible Waters of the U.S. (WOTUS) within the property boundaries and proposed T-Line ROW (Attachment 1). GBMc & Associates performed a desktop survey for the project site and then conducted field investigations on January 13, 2021 and March 11, 2021. Weather conditions on January 13, 2021 were cold and clear. Weather conditions were overcast and cool on March 11, 2021. Based on data from the Southern Regional Climate Center <sup>1</sup>, the area received approximately 0.05 inch of rain five days prior to the January 13, 2021 site visit. The area did not receive any precipitation for over seven days prior to the March 11, 2021 site visit. According to the USACE Antecedent Precipitation Tool, conditions were considered normal during the January 13, 2021 site visit and drier than normal during the March 11, 2021 site visit.

The property is situated west of AR-33 in Augusta, Arkansas (Attachment 1). The geographic coordinates for the approximate center of the property are Latitude 35.260034° and Longitude -91.343868°.

## Methodology

The property was initially assessed from the desktop using aerial photographs<sup>2</sup>, soil survey maps<sup>3</sup>, topographic maps, and National Wetlands Inventory (NWI) Maps<sup>4</sup>. The desktop evaluation was used to determine areas potentially containing WOTUS as an aid to the site visit

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<sup>1</sup> <https://www.srcc.lsu.edu/>

<sup>2</sup> Google Earth Dates: 12/1985 to 10/2019

<sup>3</sup> <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>

<sup>4</sup> <http://www.fws.gov/wetlands/>



for the verification and delineation of such waters. Desktop indicators of WOTUS primarily include color characteristic of wetlands adjacent to other jurisdictional waters on aerial photographs, mapped hydric soils on the Natural Resources Conservation Service (NRCS) Web Soil Survey, areas identified as wetlands on NWI maps, streams marked on topographic maps, and topographic features indicating drainage pathways. The information obtained during the desktop evaluation was used to aide in the field investigation.

The potential for jurisdictional waters was determined based on the definition of “Waters of the U.S.” as stated in the Clean Water Act and the Navigable Waters Protection Rule (NWPR) that became law on June 22, 2020<sup>5</sup>. This definition covers territorial seas and traditional navigable waters; perennial and intermittent tributaries that contribute surface water flow to such waters; certain lakes, ponds, and impoundments of jurisdictional waters; and wetlands adjacent to other jurisdictional waters.

Stream and wetland characteristics are typically recorded during the site investigation to provide the information necessary to make a decision on the jurisdictional status and, should some be classified as jurisdictional, to facilitate the permitting process.

Wetland determination is typically based on the three diagnostic characteristics (wetland hydrology, hydrophytic vegetation, and hydric soils) outlined in the United States Army Corps of Engineers (USACE) Wetlands Delineation Manual (1987 Corps Manual) and the Regional Supplement to the USACE Wetland Delineation Manual: Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region<sup>6</sup>. For an area to be considered a wetland, it is required, under most circumstances, to meet each of the three diagnostic criteria. During the site investigation, wetland determinations were completed at representative locations throughout the property and in areas that exhibit wetland field indicators. Data is recorded on wetland determination field forms originating from the USACE wetland delineation manual regional supplement. The data documents the presence or absence of field wetland indicators that predict the presence or absence of wetlands in an area. Wetland determinations are usually completed at representative wetland and upland sites within an area to create a contrast for comparison of field conditions. Wetland boundaries are determined by changes in one or more of the three wetland indicators.

## **Desktop Assessment**

The proposed project area includes three separate tracts of land and a proposed T-line ROW. The desktop assessment indicated a high potential for streams and a moderate potential for wetlands on the tracts of land. The desktop assessment indicated a high potential for streams

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<sup>5</sup> The Navigable Waters Protection Rule: Definition of ‘Waters of the United States’, 85 Fed. Reg. 22250 (Apr. 21, 2020).

<sup>6</sup> Wetlands Research Program. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1. January 1997. Environmental Laboratory.

Wetlands Regulatory Assistance Program. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain (Version 2.0). U.S. Army Corps of Engineers, November 2010.

and wetlands on the proposed T-line ROW. Aerial images indicated the site is predominantly farmland with a small patch of forest on the south side of the easternmost tract of land. The proposed T-line ROW is predominantly forested. National Wetlands Inventory (NWI) Maps indicate four potential wetlands on the easternmost tract and one farmed wetland on the middle tract of land. NWI maps indicate a large wetland complex and one stream on the proposed T-line ROW. Topographic maps also indicate one intermittent stream on the property and one intermittent stream on the proposed T-line ROW. Digital elevation models (DEM) and aerial images suggest that the two perennial streams do not currently exist as indicated on topographic maps.

The NCRS soil survey map shows the site to be predominantly made up of Overcup silt loam, 0 to 1 percent slopes (hydric rating of 100), Jackport silty clay loam, 0 to 1 percent slopes (hydric rating of 90), Teksob loam, 1 to 3 percent slopes (hydric rating of 10), Teksob loam, 0 to 1 percent slopes (hydric rating of 10). The hydric rating indicates the percentage of map units that meet the criteria for hydric soils. A hydric rating of 0 indicates the soils are made up of almost entirely nonhydric soils with a very low (less than 1%) potential for minor hydric components in the lower positions on the landform. Hydric ratings of 100 indicate the soils are made up of almost entirely hydric components.

## Field Survey

The field surveys were completed on January 13, 2021 and March 11, 2021 using technical guidance and field methods set forth in the U.S. Army Corps of Engineers documents mentioned above. Two intermittent streams, five ephemeral streams, and three wetlands were identified within the proposed project area (Attachment 1, Figure 2). For large tracts of land, the 1987 Corps Manual recommends utilizing a transect methodology with additional wetland determination points for areas not along transects that exhibit wetland characteristics. The site was divided into seven east to west transects. Additional points were evaluated along the T-line corridor and at 9 points within the fields.

## Streams

Two intermittent streams and five ephemeral streams were identified within the property boundary. Each stream was assigned an identification name and number (Table 1). Stream dimensions and stream classifications were characterized to aid in the determination of their jurisdictional status. Stream type classification was based on stream order, channel size, flow, geomorphic features, habitat, and guidance in the North Carolina Division of Water Quality (DWQ) Methodology for Identification of Intermittent and Perennial Streams and Their Origins<sup>7</sup> document. This stream identification methodology uses observable geomorphic, hydrologic, and biological indicators to produce a numeric score. The total score of all indicators is used to

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<sup>7</sup> North Carolina Division of Water Quality Methodology for Identification of Intermittent and Perennial Streams and Their Origins Version 4.11 (Sep. 1, 2010)

assign stream a type of ephemeral, intermittent, or perennial to each evaluated stream reach. A stream is considered at least intermittent if it receives a score of  $\geq 19$  or perennial if it receives a score of  $\geq 30$ . Streams with a score of  $<19$  are considered ephemeral. Stream identification forms for each stream are included in Attachment 4. Ordinary high-water widths and depths (OHWW and OHWD, respectively), latitude/longitude coordinates, and stream type are tabularized in the following table. Measurements of OHWW and OHWD were collected on each stream to provide representative values for each stream within the property boundary. If multiple measurements were taken, those values were averaged to represent the data summarized in Table 1.

Table 1. Summary of Stream Measurements – January 13, 2021 and March 11, 2021.

Map ID	Latitude	Longitude	OHWW (ft)	OHWD (ft)	Length on Property (ft)	NC DWQ Stream Identification Scores*	Stream Type	Likely Jurisdictional (Y/N)**
S-1	35.258176°	-91.347522°	26.2	5.0	5,645	22.5	Intermittent	Yes
S-2	35.263518°	-91.344680°	10.0	0.5	572	4.0	Ephemeral	No
S-3 (Caney Creek)	35.259443°	-91.356386°	15.0	3.0	109	29.0	Intermittent	Yes
S-4	35.255848°	-91.357133°	6.0	1.5	1,167	7.5	Ephemeral	No
S-5	35.253019°	-91.356098°	7.0	1.0	915	6.5	Ephemeral	No
S-6	35.253592°	-91.355859°	4.5	1.5	912	6.5	Ephemeral	No
S-7	35.249906°	-91.361523°	2.3	0.4	616	6.5	Ephemeral	No

\* A stream with a score of  $<19$  is considered ephemeral; a stream is considered at least intermittent if it receives a score of  $\geq 19$  or perennial if it receives a score of  $\geq 30$ .

\*\*Based on the 2020 Environmental Protection Agency and the Department of the Army's Navigable Waters Protection Rule: Definition of "Waters of the United States."<sup>6</sup>

The two intermittent streams, S-1 and S-3 (Caney Creek) currently serve a variety of functions such as providing flood control; seasonal wildlife habitat and refugia for aquatic and semi-aquatic life; transporting storm water runoff; and reducing the migration of nutrients, sediment, and organic matter within the watershed. Hydrology in the intermittent streams is primarily contributed by surface water from storm water runoff. Substrates for both intermittent streams were predominantly silt, sand, and gravel. Stream S-1 is channelized and has been manipulated by farming activities within the project area. South of the project area S-1 exhibits a more natural channel with a forested riparian zone but is significantly incised. Stream S-3 crosses the proposed ROW adjacent to an existing ROW corridor. S-3 is sinuous with a forested riparian zone and is largely unimpacted by farming activities with the exception of silt deposition likely resulting from agricultural field runoff.

Streams S-2, S-4, S-5, S-6, and S-7 displayed features consistent with ephemeral streams, which provide seasonal wildlife habitat and provide a conduit for transport of storm water runoff. Hydrology in the ephemeral streams exists primarily as surface water run-off from storm events.

Substrates within the ephemeral streams are predominantly silt. Stream Identification Forms were completed to classify each stream (Attachment 4). Representative photographs of each stream are provided in Attachment 3.

Given that S-1 and S-3 (Caney Creek) are intermittent tributaries, it is likely that they will be considered jurisdictional WOTUS. Stream S-2, S-4, S-5, S-6, and S-7 are ephemeral surface features and would likely not be considered jurisdictional under the NWPR.

## Wetlands

For wetland determination, seven transects oriented from east to west were established across the property. During the site visit, wetland determinations were performed periodically along each transect and where vegetative communities changed. Wetland determinations were also performed throughout the property at locations that exhibited wetland characteristics but were not located on the transects. Wetland determinations on the proposed T-line were performed in areas that displayed potential wetland characteristics. Data were also collected in upland areas to provide a contrast in upland and wetland characteristics to facilitate the delineation of the wetland boundary. Two wetland areas were identified within the property boundary and one wetland was identified within the proposed T-line ROW. A map showing the location of wetland determination points is provided in Attachment 1. A complete record of wetland indicators for each wetland determination point are included in the wetland determination forms provided in Attachment 2. Representative photographs of each wetland are provided in Attachment 3. A summary of all wetland determination points is provided in Table 2.

**Wetland W-1** (Wpt 0187) is an approximately 0.4-acre forested wetland located in the proposed T-line ROW. Hydrology indicators included surface water, a high water table, soil saturation, water stained leaves, and a positive FAC-neutral test. Dominant vegetation for this area included red maple (*Acer rubrum*), loblolly pine (*Pinus taeda*), and soft rush (*Juncus effusus*). The field investigation revealed soils to meet the hydric soil indicator of a depleted matrix.

**Wetland W-2** (Wpt 0248) is an approximately 0.1-acre herbaceous wetland located on the northwest side of the property. Hydrology indicators included surface water in close proximity to the sampling point, a high water table, soil saturation, inundation visible on aerial imagery, geomorphic position, and a positive FAC-neutral test. Dominant vegetation for this area included hairy buttercup (*Ranunculus sardous*) and marsh flatsedge (*Cyperus pseudovegetus*). The field investigation revealed soils to meet the hydric soil indicator of a depleted matrix.

**Wetland W-3** (Wpt 0266) is an approximately 0.6-acre herbaceous wetland located on the south side of the property. Hydrology indicators included surface water in close proximity to the sampling point, a high water table, soil saturation, saturation visible on aerial imagery, and a positive FAC-neutral test. Vegetation for this area is dominated by hairy buttercup

(*Ranunculus sardous*). The field investigation revealed soils to meet the hydric soil indicator of a depleted matrix.

Table 2. Summary of Wetland Determination Points – January 13, 2021 and March 11, 2021.

Map ID*	Wetland Hydrology	Hydric Soils	Hydrophytic Vegetation	Wetland Status (Y/N)	Notes
0186	Yes	No	Yes	No	T-line point
0187	Yes	Yes	Yes	Yes	Wetland 1 (W-1)
0189	No	No	Yes	No	Upland reference point
0191	No	Yes	Yes	No	Transect 3 point
0192	No	Yes	Yes	No	Transect 3 point
0193	No	Yes	No	No	Transect 3 point
0194	No	No	No	No	Transect 3 point
0195	No	Yes	No	No	Transect 2 point
0196	No	Yes	Yes	No	Transect 2 point
0197	No	Yes	No	No	Transect 2 point
0198	No	No	No	No	Transect 2 point
0248	Yes	Yes	Yes	Yes	Wetland 2 (W-2)
0250	No	No	No	No	Transect 4 point
0252	No	Yes	Yes	Yes	Transect 5 point
0253	No	Yes	No	No	Transect 5 point
0256	No	Yes	No	No	Transect 5 point
0257	No	Yes	No	No	Transect 5 point
0258	No	Yes	No	No	Transect 5 point
0259	No	Yes	No	No	Transect 4 point
0260	No	Yes	No	No	Transect 4 point
0261	No	Yes	No	No	Transect 4 point
0262	No	Yes	No	No	Transect 4 point
0264	No	Yes	Yes	No	Transect 6 point
0265	No	Yes	Yes	No	Upland reference point
0266	Yes	Yes	Yes	Yes	Wetland 3 (W-3)
0267	No	Yes	Yes	No	Transect 6 point
0268	No	Yes	Yes	No	Transect 6 point
0272	No	Yes	Yes	No	Transect 6 point
0273	No	Yes	Yes	No	Transect 5 point
0274	No	Yes	Yes	No	Transect 5 point
0275	No	Yes	Yes	No	Transect 4 point
0276	No	Yes	Yes	No	Transect 4 point

Map ID*	Wetland Hydrology	Hydric Soils	Hydrophytic Vegetation	Wetland Status (Y/N)	Notes
0277	No	Yes	Yes	No	Transect 5 point
0278	No	No	No	No	Transect 6 point
0279	No	Yes	Yes	No	Transect 6 point
0280	No	Yes	Yes	No	Wetland determination point
0281	No	No	Yes	No	Transect 7 point
0282	No	No	Yes	No	Transect 7 point
0283	No	Yes	No	No	Wetland determination point
0284	No	No	Yes	No	Wetland determination point
0285	No	Yes	No	No	Wetland determination point
0288	No	Yes	Yes	No	Wetland determination point
0289	No	No	No	No	Transect 1 point
0290	No	No	Yes	No	Transect 1 point
0291	No	No	Yes	No	Wetland determination point
0292	No	No	No	No	Wetland determination point
0293	No	No	No	No	Transect 2 point
0294	No	No	No	No	Transect 2 point
1992	No	No	No	No	Transect 4 point
1993	No	No	No	No	Transect 5 point
1994	No	No	Yes	No	Transect 4 point
1995	No	No	No	No	Transect 4 point
1996	No	No	Yes	No	Transect 5 point
1999	No	No	No	No	Transect 5 point
2000	No	No	No	No	Transect 5 point
2001	No	No	No	No	Transect 5 point
2002	No	No	No	No	Transect 5 point
2003	No	No	No	No	Transect 5 point
2004	No	No	No	No	Transect 4 point
2005	No	No	No	No	Transect 4 point
2006	No	No	No	No	Transect 4 point
2007	No	No	No	No	Transect 4 point
2008	No	No	No	No	Transect 4 point
2025	No	No	No	No	Transect 1 point
2027	No	No	No	No	Transect 2 point
2028	No	No	No	No	Transect 2 point
2029	No	No	No	No	Transect 3 point

Map ID*	Wetland Hydrology	Hydric Soils	Hydrophytic Vegetation	Wetland Status (Y/N)	Notes
2030	No	No	No	No	Transect 3 point
2031	No	No	No	No	Transect 3 point
2035	No	Yes	Yes	No	Upland reference point
2036	No	Yes	Yes	No	Transect 1 point
2037	No	Yes	Yes	No	Transect 1 point
2038	No	No	No	No	Transect 1 point
2039	No	No	No	No	Transect 1 point

\*The Map ID refers to the exact waypoint collected on individual GPS units. Waypoints out of order do not indicate missing data.

The area represented by waypoints 0187, 0248, and 0266 meet the requirements to be classified as wetlands. Waypoints 0189, 0266, and 2035 represent upland areas that provide contrasting characteristics to nearby wetlands. The boundaries of the wetlands were delineated based on hydrology and shifts in vegetation from upland to wetland. Given that wetlands W-1 and W-3 do not abut or have direct hydrologic surface connection to any jurisdictional waters it is likely that they would not be considered jurisdictional WOTUS under the NWPR. Wetland W-2 is adjacent to a jurisdictional stream (Caney Creek) and has direct hydrologic surface connection in a typical year and would likely be considered jurisdictional. The wetlands are depicted on the WOTUS map in Attachment 1, Figure 2.

### Summary of Jurisdictional Determination

The desktop and field investigation revealed that the property and proposed T-line ROW contain two intermittent streams (totaling 5,754 feet), five ephemeral streams (totaling 4,182 feet), and three wetlands (totaling 1.1 acres). Stream S-1 and S-2 (Caney Creek) are intermittent tributaries that eventually flow into jurisdictional waters (Horseshoe Lake and White River) and would likely be considered a jurisdictional WOTUS under the Navigable Waters Protection Rule. Streams S-2, S-4, S-5, S-6, and S-7 are ephemeral surface features and would likely not be considered jurisdictional. Given that W-1 and W-3 do not abut or have direct hydrological surface connections to any jurisdictional WOTUS, it is likely that they would be considered non-jurisdictional. Given that W-2 abuts and has direct hydrologic surface connection to Caney Creek, it would likely be considered a jurisdictional WOTUS.

The USACE will make the final decisions on the jurisdictional status of all water bodies identified and the permitting requirements for each of the waters in this letter report. Disturbance to WOTUS would be subject to the requirements of Section 404 permitting and USACE approval.

Mr. Cain  
March 31, 2021  
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We appreciate the opportunity to provide you with this jurisdictional determination. Should you have any questions please do not hesitate to contact me or Travis Gasnier at (501) 847-7077.

Respectfully submitted,  
GBMc & ASSOCIATES

A handwritten signature in blue ink, appearing to read "Brad Phillips".

Brad Phillips  
Principal/ Senior Scientist

Enclosures

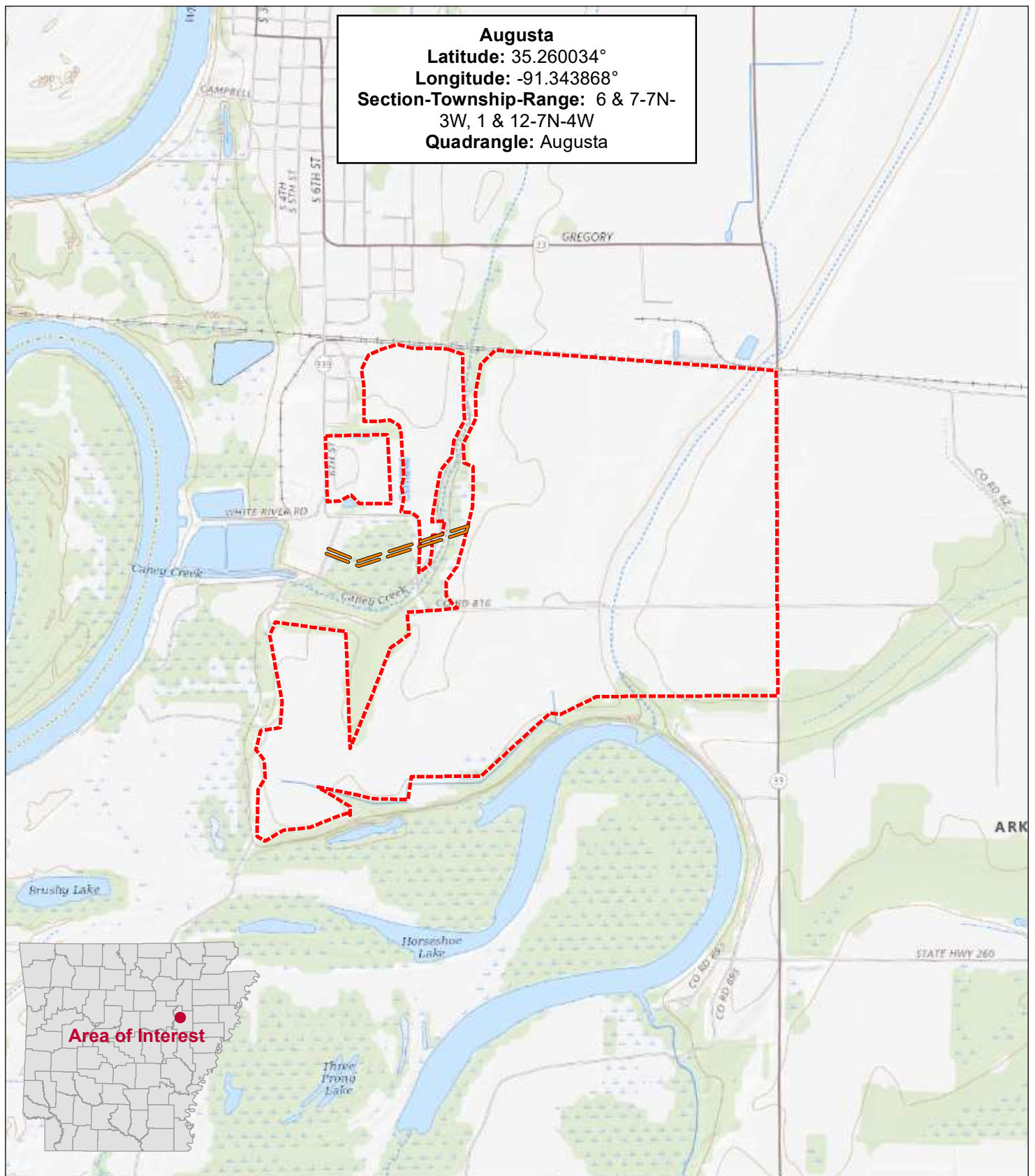


# **Attachment 1**

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## Site Maps

**Augusta**  
**Latitude:** 35.260034°  
**Longitude:** -91.343868°  
**Section-Township-Range:** 6 & 7-7N-  
 3W, 1 & 12-7N-4W  
**Quadrangle:** Augusta



2,500

Feet

 Property Boundary  
 Transmission Line Right-of-Way

3008.000.G1

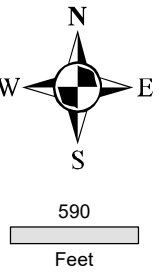
AUGUSTA  
 JURISDICTIONAL DETERMINATION  
 TOPOGRAPHIC LOCATION MAP  
 AR ELECTRIC CO-OP  
 WOODRUFF COUNTY, ARKANSAS

Approved by: BJP  
 Checked by: SJH  
 Drawn by: ALB



Project No.: 3008-20-303  
 Date: 03/15/2021  
 Scale: SHOWN





- Wetland
- Determination Point
- Stream Data Point
- Stream
- Transect
- USACE District Boundary
- Wetland
- Transmission Line Right-of-Way
- Property Boundary

NO	DATE	REVISION	BY	CK	APPR

DESIGNED BY SJH  
CHECKED BY SJH  
APPR BY BJP  
DRAWN BY ALB



SHEET TITLE

AERIAL MAP

JOB NAME

AUGUSTA  
JURISDICTIONAL DETERMINATION  
AR ELECTRIC CO-OP,  
WOODRUFF COUNTY, ARKANSAS

PROJECT NO.

3008-20-303

DATE

03/15/2021

SCALE

SHOWN

REV. NO.

DWG. NO.



## **Attachment 2**

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### Wetland Determination Forms

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0248  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** concave **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.262971° **Long.:** -91.355579° **Datum:** WGS 84  
**Soil Map Unit Name:** Grubbs silt loam, 3 to 8 percent slopes, eroded **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): <u>1</u> Water Table Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): <u>10</u> Saturation Present? (includes capillary fringe) Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): <u>0</u>	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

 Sampling Point: 0248

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. _____	0	<input type="checkbox"/> 0.0%	_____
2. _____	0	<input type="checkbox"/> 0.0%	_____
3. _____	0	<input type="checkbox"/> 0.0%	_____
4. _____	0	<input type="checkbox"/> 0.0%	_____
5. _____	0	<input type="checkbox"/> 0.0%	_____
6. _____	0	<input type="checkbox"/> 0.0%	_____
7. _____	0	<input type="checkbox"/> 0.0%	_____
8. _____	0	<input type="checkbox"/> 0.0%	_____
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>	
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>			
1. _____	0	<input type="checkbox"/> 0.0%	_____
2. _____	0	<input type="checkbox"/> 0.0%	_____
3. _____	0	<input type="checkbox"/> 0.0%	_____
4. _____	0	<input type="checkbox"/> 0.0%	_____
5. _____	0	<input type="checkbox"/> 0.0%	_____
6. _____	0	<input type="checkbox"/> 0.0%	_____
7. _____	0	<input type="checkbox"/> 0.0%	_____
8. _____	0	<input type="checkbox"/> 0.0%	_____
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>	
<b>Shrub Stratum (Plot size: _____ )</b>			
1. _____	0	<input type="checkbox"/> 0.0%	_____
2. _____	0	<input type="checkbox"/> 0.0%	_____
3. _____	0	<input type="checkbox"/> 0.0%	_____
4. _____	0	<input type="checkbox"/> 0.0%	_____
5. _____	0	<input type="checkbox"/> 0.0%	_____
6. _____	0	<input type="checkbox"/> 0.0%	_____
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>	
<b>Herb Stratum (Plot size: <u>15'</u> )</b>			
1. <u>Ranunculus sardous</u>	45	<input checked="" type="checkbox"/> 64.3%	FAC
2. <u>Eleocharis tenuis</u>	5	<input type="checkbox"/> 7.1%	FACW
3. <u>Cardamine hirsuta</u>	5	<input type="checkbox"/> 7.1%	FACU
4. <u>Cyperus pseudovegetus</u>	15	<input checked="" type="checkbox"/> 21.4%	FACW
5. _____	0	<input type="checkbox"/> 0.0%	_____
6. _____	0	<input type="checkbox"/> 0.0%	_____
7. _____	0	<input type="checkbox"/> 0.0%	_____
8. _____	0	<input type="checkbox"/> 0.0%	_____
9. _____	0	<input type="checkbox"/> 0.0%	_____
10. _____	0	<input type="checkbox"/> 0.0%	_____
11. _____	0	<input type="checkbox"/> 0.0%	_____
12. _____	0	<input type="checkbox"/> 0.0%	_____
50% of Total Cover: <u>35</u> 20% of Total Cover: <u>14</u>	70	<b>= Total Cover</b>	
<b>Woody Vine Stratum (Plot size: _____ )</b>			
1. _____	0	<input type="checkbox"/> 0.0%	_____
2. _____	0	<input type="checkbox"/> 0.0%	_____
3. _____	0	<input type="checkbox"/> 0.0%	_____
4. _____	0	<input type="checkbox"/> 0.0%	_____
5. _____	0	<input type="checkbox"/> 0.0%	_____
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>	

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

**Prevalence Index worksheet:**  
 Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_  
 OBL species 0 x 1 = 0  
 FACW species 20 x 2 = 40  
 FAC species 45 x 3 = 135  
 FACU species 5 x 4 = 20  
 UPL species 0 x 5 = 0  
**Column Totals:** 70 (A) 195 (B)  
  
 Prevalence Index = B/A = 2.786

**Hydrophytic Vegetation Indicators:**  
☐ 1 - Rapid Test for Hydrophytic Vegetation  
☒ 2 - Dominance Test is > 50%  
☒ 3 - Prevalence Index is ≤ 3.0 <sup>1</sup>  
☐ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)

<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definition of Vegetation Strata:**  
 Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
 Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
 Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  
  
 Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
 Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
 Woody vine - All woody vines, regardless of height.

**Hydrophytic Vegetation Present?**    Yes ☒    No ☐

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

Sampling Point: 0248

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

Depth (inches)	Matrix			Redox Features					Texture	Remarks
	Color (moist)		%	Color (moist)		%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR	5/2	80	10YR	5/6	20	C	M	Silt Loam	
8-14	10YR	5/1	60	10YR	5/6	40	C	M	Silt Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0250  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.255047° **Long.:** -91.357766° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (minimum of 2 required)</b>	
<b>Primary Indicators (minimum of one required; check all that apply)</b>			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
<b>Field Observations:</b>		<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology indicators present.			



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

**Sampling Point:** 0250

Tree Stratum		Sapling or Sapling/Shrub Stratum		Shrub Stratum		Herb Stratum		Woody Vine Stratum			
(Plot size: _____ )		(Plot size: _____ )		(Plot size: _____ )		(Plot size: 15' _____ )		(Plot size: _____ )			
Absolute % Cover		Absolute % Cover		Absolute % Cover		Absolute % Cover		Absolute % Cover			
Rel.Strat. Cover		Rel.Strat. Cover		Rel.Strat. Cover		Rel.Strat. Cover		Rel.Strat. Cover			
Indicator Status		Indicator Status		Indicator Status		Indicator Status		Indicator Status			
1.	_____	0	<input type="checkbox"/>	0.0%	_____	1.	_____	0	<input type="checkbox"/>	0.0%	_____
2.	_____	0	<input type="checkbox"/>	0.0%	_____	2.	_____	0	<input type="checkbox"/>	0.0%	_____
3.	_____	0	<input type="checkbox"/>	0.0%	_____	3.	_____	0	<input type="checkbox"/>	0.0%	_____
4.	_____	0	<input type="checkbox"/>	0.0%	_____	4.	_____	0	<input type="checkbox"/>	0.0%	_____
5.	_____	0	<input type="checkbox"/>	0.0%	_____	5.	_____	0	<input type="checkbox"/>	0.0%	_____
6.	_____	0	<input type="checkbox"/>	0.0%	_____	6.	_____	0	<input type="checkbox"/>	0.0%	_____
7.	_____	0	<input type="checkbox"/>	0.0%	_____	7.	_____	0	<input type="checkbox"/>	0.0%	_____
8.	_____	0	<input type="checkbox"/>	0.0%	_____	8.	_____	0	<input type="checkbox"/>	0.0%	_____
50% of Total Cover: 0		20% of Total Cover: 0		0 = Total Cover		50% of Total Cover: 0		20% of Total Cover: 0		0 = Total Cover	
Sapling or Sapling/Shrub Stratum		Sapling or Sapling/Shrub Stratum		Sapling or Sapling/Shrub Stratum		Sapling or Sapling/Shrub Stratum		Sapling or Sapling/Shrub Stratum		Sapling or Sapling/Shrub Stratum	
(Plot size: _____ )		(Plot size: _____ )		(Plot size: _____ )		(Plot size: _____ )		(Plot size: _____ )		(Plot size: _____ )	
1.	_____	0	<input type="checkbox"/>	0.0%	_____	1.	_____	0	<input type="checkbox"/>	0.0%	_____
2.	_____	0	<input type="checkbox"/>	0.0%	_____	2.	_____	0	<input type="checkbox"/>	0.0%	_____
3.	_____	0	<input type="checkbox"/>	0.0%	_____	3.	_____	0	<input type="checkbox"/>	0.0%	_____
4.	_____	0	<input type="checkbox"/>	0.0%	_____	4.	_____	0	<input type="checkbox"/>	0.0%	_____
5.	_____	0	<input type="checkbox"/>	0.0%	_____	5.	_____	0	<input type="checkbox"/>	0.0%	_____
6.	_____	0	<input type="checkbox"/>	0.0%	_____	6.	_____	0	<input type="checkbox"/>	0.0%	_____
7.	_____	0	<input type="checkbox"/>	0.0%	_____	7.	_____	0	<input type="checkbox"/>	0.0%	_____
8.	_____	0	<input type="checkbox"/>	0.0%	_____	8.	_____	0	<input type="checkbox"/>	0.0%	_____
50% of Total Cover: 0		20% of Total Cover: 0		0 = Total Cover		50% of Total Cover: 0		20% of Total Cover: 0		0 = Total Cover	
Shrub Stratum		Shrub Stratum		Shrub Stratum		Shrub Stratum		Shrub Stratum		Shrub Stratum	
(Plot size: _____ )		(Plot size: _____ )		(Plot size: _____ )		(Plot size: _____ )		(Plot size: _____ )		(Plot size: _____ )	
1.	_____	0	<input type="checkbox"/>	0.0%	_____	1.	_____	0	<input type="checkbox"/>	0.0%	_____
2.	_____	0	<input type="checkbox"/>	0.0%	_____	2.	_____	0	<input type="checkbox"/>	0.0%	_____
3.	_____	0	<input type="checkbox"/>	0.0%	_____	3.	_____	0	<input type="checkbox"/>	0.0%	_____
4.	_____	0	<input type="checkbox"/>	0.0%	_____	4.	_____	0	<input type="checkbox"/>	0.0%	_____
5.	_____	0	<input type="checkbox"/>	0.0%	_____	5.	_____	0	<input type="checkbox"/>	0.0%	_____
6.	_____	0	<input type="checkbox"/>	0.0%	_____	6.	_____	0	<input type="checkbox"/>	0.0%	_____
50% of Total Cover: 0		20% of Total Cover: 0		0 = Total Cover		50% of Total Cover: 0		20% of Total Cover: 0		0 = Total Cover	
Herb Stratum		Herb Stratum		Herb Stratum		Herb Stratum		Herb Stratum		Herb Stratum	
(Plot size: 15' _____ )		(Plot size: 15' _____ )		(Plot size: 15' _____ )		(Plot size: 15' _____ )		(Plot size: 15' _____ )		(Plot size: 15' _____ )	
1.	Leptochloa fusca ssp. fascicularis	10	<input checked="" type="checkbox"/>	20.0%	FACW	1.	Leptochloa fusca ssp. fascicularis	10	<input checked="" type="checkbox"/>	20.0%	FACW
2.	Poa annua	20	<input checked="" type="checkbox"/>	40.0%	FACU	2.	Poa annua	20	<input checked="" type="checkbox"/>	40.0%	FACU
3.	Lamium amplexicaule	5	<input type="checkbox"/>	10.0%	UPL	3.	Lamium amplexicaule	5	<input type="checkbox"/>	10.0%	UPL
4.	Stellaria media	10	<input checked="" type="checkbox"/>	20.0%	FACU	4.	Stellaria media	10	<input checked="" type="checkbox"/>	20.0%	FACU
5.	Andropogon virginicus	5	<input type="checkbox"/>	10.0%	FAC	5.	Andropogon virginicus	5	<input type="checkbox"/>	10.0%	FAC
6.	_____	0	<input type="checkbox"/>	0.0%	_____	6.	_____	0	<input type="checkbox"/>	0.0%	_____
7.	_____	0	<input type="checkbox"/>	0.0%	_____	7.	_____	0	<input type="checkbox"/>	0.0%	_____
8.	_____	0	<input type="checkbox"/>	0.0%	_____	8.	_____	0	<input type="checkbox"/>	0.0%	_____
9.	_____	0	<input type="checkbox"/>	0.0%	_____	9.	_____	0	<input type="checkbox"/>	0.0%	_____
10.	_____	0	<input type="checkbox"/>	0.0%	_____	10.	_____	0	<input type="checkbox"/>	0.0%	_____
11.	_____	0	<input type="checkbox"/>	0.0%	_____	11.	_____	0	<input type="checkbox"/>	0.0%	_____
12											

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

## SOIL

Sampling Point: 0250

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR	4/3	100				Silt Loam	
8-15	10YR	5/3	100				Silt Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0252  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 12 T 7N R 4W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.253036° **Long.:** -91.358811° **Datum:** WGS 84  
**Soil Map Unit Name:** Jackport silty clay loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (minimum of 2 required)</b>	
<b>Primary Indicators (minimum of one required; check all that apply)</b>			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
<b>Field Observations:</b>		<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology indicators present.			

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

Tree Stratum (Plot size: _____ )				Dominant Species?	Indicator Status	Sampling Point: <u>0252</u>	
1.	Absolute % Cover	Rel.Strat. Cover	Indicator Status				
1. _____	0	<input type="checkbox"/> 0.0%					
2. _____	0	<input type="checkbox"/> 0.0%					
3. _____	0	<input type="checkbox"/> 0.0%					
4. _____	0	<input type="checkbox"/> 0.0%					
5. _____	0	<input type="checkbox"/> 0.0%					
6. _____	0	<input type="checkbox"/> 0.0%					
7. _____	0	<input type="checkbox"/> 0.0%					
8. _____	0	<input type="checkbox"/> 0.0%					
50% of Total Cover: <u>0</u>		20% of Total Cover: <u>0</u>		0	= Total Cover		
Sapling or Sapling/Shrub Stratum (Plot size: _____ )							
1. _____	0	<input type="checkbox"/> 0.0%					
2. _____	0	<input type="checkbox"/> 0.0%					
3. _____	0	<input type="checkbox"/> 0.0%					
4. _____	0	<input type="checkbox"/> 0.0%					
5. _____	0	<input type="checkbox"/> 0.0%					
6. _____	0	<input type="checkbox"/> 0.0%					
7. _____	0	<input type="checkbox"/> 0.0%					
8. _____	0	<input type="checkbox"/> 0.0%					
50% of Total Cover: <u>0</u>		20% of Total Cover: <u>0</u>		0	= Total Cover		
Shrub Stratum (Plot size: _____ )							
1. _____	0	<input type="checkbox"/> 0.0%					
2. _____	0	<input type="checkbox"/> 0.0%					
3. _____	0	<input type="checkbox"/> 0.0%					
4. _____	0	<input type="checkbox"/> 0.0%					
5. _____	0	<input type="checkbox"/> 0.0%					
6. _____	0	<input type="checkbox"/> 0.0%					
50% of Total Cover: <u>0</u>		20% of Total Cover: <u>0</u>		0	= Total Cover		
Herb Stratum (Plot size: <u>15'</u> )							
1. <i>Andropogon virginicus</i>	35	<input checked="" type="checkbox"/> 35.0%	FAC				
2. <i>Stellaria media</i>	10	<input type="checkbox"/> 10.0%	FACU				
3. <i>Leptochloa fusca ssp. fascicularis</i>	15	<input type="checkbox"/> 15.0%	FACW				
4. <i>Ranunculus sardous</i>	30	<input checked="" type="checkbox"/> 30.0%	FAC				
5. <i>Geranium carolinianum</i>	10	<input type="checkbox"/> 10.0%	UPL				
6. _____	0	<input type="checkbox"/> 0.0%					
7. _____	0	<input type="checkbox"/> 0.0%					
8. _____	0	<input type="checkbox"/> 0.0%					
9. _____	0	<input type="checkbox"/> 0.0%					
10. _____	0	<input type="checkbox"/> 0.0%					
11. _____	0	<input type="checkbox"/> 0.0%					
12. _____	0	<input type="checkbox"/> 0.0%					
50% of Total Cover: <u>50</u>		20% of Total Cover: <u>20</u>		100	= Total Cover		
Woody Vine Stratum (Plot size: _____ )							
1. _____	0	<input type="checkbox"/> 0.0%					
2. _____	0	<input type="checkbox"/> 0.0%					
3. _____	0	<input type="checkbox"/> 0.0%					
4. _____	0	<input type="checkbox"/> 0.0%					
5. _____	0	<input type="checkbox"/> 0.0%					
50% of Total Cover: <u>0</u>		20% of Total Cover: <u>0</u>		0	= Total Cover		

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

**Prevalence Index worksheet:**  
 Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_  
 OBL species 0 x 1 = 0  
 FACW species 15 x 2 = 30  
 FAC species 65 x 3 = 195  
 FACU species 10 x 4 = 40  
 UPL species 10 x 5 = 50  
**Column Totals:** 100 (A) 315 (B)  
  
 Prevalence Index = B/A = 3.150

**Hydrophytic Vegetation Indicators:**  
☐ 1 - Rapid Test for Hydrophytic Vegetation  
☒ 2 - Dominance Test is > 50%  
☐ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
☐ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definition of Vegetation Strata:**  
 Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
 Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
 Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  
  
 Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
 Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
 Woody vine - All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes ☒ No ☐

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

Sampling Point: 0252

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR	4/3	100				Silty Clay Loam	
6-14	10YR	6/2	100				Silty Clay Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0253  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.253025° **Long.:** -91.357231° **Datum:** WGS 84  
**Soil Map Unit Name:** Jackport silty clay loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (minimum of 2 required)</b>	
<b>Primary Indicators (minimum of one required; check all that apply)</b>			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
<b>Field Observations:</b>			
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology indicators present.			

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

Dominant Species?					Sampling Point: 0253
Tree Stratum (Plot size: _____)	Absolute % Cover	Rel.Strat. Cover	Indicator Status		
1. _____	0	<input type="checkbox"/>	0.0%		
2. _____	0	<input type="checkbox"/>	0.0%		
3. _____	0	<input type="checkbox"/>	0.0%		
4. _____	0	<input type="checkbox"/>	0.0%		
5. _____	0	<input type="checkbox"/>	0.0%		
6. _____	0	<input type="checkbox"/>	0.0%		
7. _____	0	<input type="checkbox"/>	0.0%		
8. _____	0	<input type="checkbox"/>	0.0%		
50% of Total Cover: 0    20% of Total Cover: 0	0	= Total Cover			
Sapling or Sapling/Shrub Stratum (Plot size: _____)					
1. _____	0	<input type="checkbox"/>	0.0%		
2. _____	0	<input type="checkbox"/>	0.0%		
3. _____	0	<input type="checkbox"/>	0.0%		
4. _____	0	<input type="checkbox"/>	0.0%		
5. _____	0	<input type="checkbox"/>	0.0%		
6. _____	0	<input type="checkbox"/>	0.0%		
7. _____	0	<input type="checkbox"/>	0.0%		
8. _____	0	<input type="checkbox"/>	0.0%		
50% of Total Cover: 0    20% of Total Cover: 0	0	= Total Cover			
Shrub Stratum (Plot size: _____)					
1. _____	0	<input type="checkbox"/>	0.0%		
2. _____	0	<input type="checkbox"/>	0.0%		
3. _____	0	<input type="checkbox"/>	0.0%		
4. _____	0	<input type="checkbox"/>	0.0%		
5. _____	0	<input type="checkbox"/>	0.0%		
6. _____	0	<input type="checkbox"/>	0.0%		
50% of Total Cover: 0    20% of Total Cover: 0	0	= Total Cover			
Herb Stratum (Plot size: 15')					
1. <i>Gossypium hirsutum</i>	15	<input checked="" type="checkbox"/>	21.4%	FACU	
2. <i>Poa annua</i>	40	<input checked="" type="checkbox"/>	57.1%	FACU	
3. <i>Ranunculus sardous</i>	5	<input type="checkbox"/>	7.1%	FAC	
4. <i>Stellaria media</i>	10	<input type="checkbox"/>	14.3%	FACU	
5. _____	0	<input type="checkbox"/>	0.0%		
6. _____	0	<input type="checkbox"/>	0.0%		
7. _____	0	<input type="checkbox"/>	0.0%		
8. _____	0	<input type="checkbox"/>	0.0%		
9. _____	0	<input type="checkbox"/>	0.0%		
10. _____	0	<input type="checkbox"/>	0.0%		
11. _____	0	<input type="checkbox"/>	0.0%		
12. _____	0	<input type="checkbox"/>	0.0%		
50% of Total Cover: 35    20% of Total Cover: 14	70	= Total Cover			
Woody Vine Stratum (Plot size: _____)					
1. _____	0	<input type="checkbox"/>	0.0%		
2. _____	0	<input type="checkbox"/>	0.0%		
3. _____	0	<input type="checkbox"/>	0.0%		
4. _____	0	<input type="checkbox"/>	0.0%		
5. _____	0	<input type="checkbox"/>	0.0%		
50% of Total Cover: 0    20% of Total Cover: 0	0	= Total Cover			

**Dominance Test worksheet:**

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

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

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

**Prevalence Index worksheet:**

Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 5 x 3 = 15

FACU species 65 x 4 = 260

UPL species 0 x 5 = 0

Column Totals: 70 (A) 275 (B)

Prevalence Index = B/A = 3.929

**Hydrophytic Vegetation Indicators:**

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤3.0<sup>1</sup>

☐ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definition of Vegetation Strata:**

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

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

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

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

Woody vine - All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes ☐ No ☒

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

Sampling Point: 0253

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

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)	%	Color (moist)	%	Tvpe <sup>1</sup>	Loc <sup>2</sup>				
0-4	10YR	4/3	100						Silty Clay Loam	
4-8	10YR	5/4	100						Silty Clay Loam	
8-14	10YR	5/2	95	10YR	5/6	5	C	M	Silty Clay Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:



# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0256  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.253228° **Long.:** -91.355077° **Datum:** WGS 84  
**Soil Map Unit Name:** Jackport silty clay loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

 Sampling Point: 0256

Tree Stratum	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status	
1. _____	0	<input type="checkbox"/>	0.0%		
2. _____	0	<input type="checkbox"/>	0.0%		
3. _____	0	<input type="checkbox"/>	0.0%		
4. _____	0	<input type="checkbox"/>	0.0%		
5. _____	0	<input type="checkbox"/>	0.0%		
6. _____	0	<input type="checkbox"/>	0.0%		
7. _____	0	<input type="checkbox"/>	0.0%		
8. _____	0	<input type="checkbox"/>	0.0%		
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>		<b>= Total Cover</b>		
<b>Sapling or Sapling/Shrub Stratum</b> (Plot size: _____ )					
1. _____	0	<input type="checkbox"/>	0.0%		
2. _____	0	<input type="checkbox"/>	0.0%		
3. _____	0	<input type="checkbox"/>	0.0%		
4. _____	0	<input type="checkbox"/>	0.0%		
5. _____	0	<input type="checkbox"/>	0.0%		
6. _____	0	<input type="checkbox"/>	0.0%		
7. _____	0	<input type="checkbox"/>	0.0%		
8. _____	0	<input type="checkbox"/>	0.0%		
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>		<b>= Total Cover</b>		
<b>Shrub Stratum</b> (Plot size: _____ )					
1. _____	0	<input type="checkbox"/>	0.0%		
2. _____	0	<input type="checkbox"/>	0.0%		
3. _____	0	<input type="checkbox"/>	0.0%		
4. _____	0	<input type="checkbox"/>	0.0%		
5. _____	0	<input type="checkbox"/>	0.0%		
6. _____	0	<input type="checkbox"/>	0.0%		
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>		<b>= Total Cover</b>		
<b>Herb Stratum</b> (Plot size: <u>15'</u> )					
1. <i>Gossypium hirsutum</i>	15	<input checked="" type="checkbox"/>	17.6%	FACU	
2. <i>Lamium amplexicaule</i>	15	<input checked="" type="checkbox"/>	17.6%	UPL	
3. <i>Poa annua</i>	40	<input checked="" type="checkbox"/>	47.1%	FACU	
4. <i>Ranunculus sardous</i>	5	<input type="checkbox"/>	5.9%	FAC	
5. <i>Stellaria media</i>	10	<input type="checkbox"/>	11.8%	FACU	
6. _____	0	<input type="checkbox"/>	0.0%		
7. _____	0	<input type="checkbox"/>	0.0%		
8. _____	0	<input type="checkbox"/>	0.0%		
9. _____	0	<input type="checkbox"/>	0.0%		
10. _____	0	<input type="checkbox"/>	0.0%		
11. _____	0	<input type="checkbox"/>	0.0%		
12. _____	0	<input type="checkbox"/>	0.0%		
50% of Total Cover: <u>42.5</u>	20% of Total Cover: <u>17</u>		<b>= Total Cover</b>		
<b>Woody Vine Stratum</b> (Plot size: _____ )					
1. _____	0	<input type="checkbox"/>	0.0%		
2. _____	0	<input type="checkbox"/>	0.0%		
3. _____	0	<input type="checkbox"/>	0.0%		
4. _____	0	<input type="checkbox"/>	0.0%		
5. _____	0	<input type="checkbox"/>	0.0%		
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>		<b>= Total Cover</b>		

**Dominance Test worksheet:**  
 Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)  
  
 Total Number of Dominant Species Across All Strata: 3 (B)  
  
 Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

**Prevalence Index worksheet:**  
 Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_  
 OBL species 0 x 1 = 0  
 FACW species 0 x 2 = 0  
 FAC species 5 x 3 = 15  
 FACU species 65 x 4 = 260  
 UPL species 15 x 5 = 75  
**Column Totals:** 85 (A) 350 (B)  
  
 Prevalence Index = B/A = 4.118

**Hydrophytic Vegetation Indicators:**  
☐ 1 - Rapid Test for Hydrophytic Vegetation  
☐ 2 - Dominance Test is > 50%  
☐ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
☐ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definition of Vegetation Strata:**  
 Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
 Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
 Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  
  
 Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
 Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
 Woody vine - All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes ☐ No ☒

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

Sampling Point: 0256

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

Depth (inches)	Matrix			Redox Features					Texture	Remarks
	Color (moist)		%	Color (moist)		%	Tvpe <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR	4/3	100						Silty Clay Loam	
4-8	10YR	5/4	100						Silty Clay Loam	
8-14	10YR	5/2	95	10YR	5/6	5	C	M	Silty Clay Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0257  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.253227° **Long.:** -91.353067° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (minimum of 2 required)</b>	
<b>Primary Indicators (minimum of one required; check all that apply)</b>			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
<b>Field Observations:</b>		<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology indicators present.			

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

Dominant Species?					Sampling Point: 0257
Tree Stratum (Plot size: )	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:	
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)	
2. _____	0	<input type="checkbox"/> 0.0%		Total Number of Dominant Species Across All Strata: 2 (B)	
3. _____	0	<input type="checkbox"/> 0.0%		Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)	
4. _____	0	<input type="checkbox"/> 0.0%		Prevalence Index worksheet:	
5. _____	0	<input type="checkbox"/> 0.0%		Total % Cover of: Multiply by:	
6. _____	0	<input type="checkbox"/> 0.0%		OBL species 0 x 1 = 0	
7. _____	0	<input type="checkbox"/> 0.0%		FACW species 0 x 2 = 0	
8. _____	0	<input type="checkbox"/> 0.0%		FAC species 5 x 3 = 15	
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover				FACU species 65 x 4 = 260	
Sapling or Sapling/Shrub Stratum (Plot size: )				UPL species 0 x 5 = 0	
1. _____	0	<input type="checkbox"/> 0.0%		Column Totals: 70 (A) 275 (B)	
2. _____	0	<input type="checkbox"/> 0.0%		Prevalence Index = B/A = 3.929	
3. _____	0	<input type="checkbox"/> 0.0%		Hydrophytic Vegetation Indicators:	
4. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
5. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 2 - Dominance Test is > 50%	
6. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
7. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
8. _____	0	<input type="checkbox"/> 0.0%		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover				Definition of Vegetation Strata:	
Shrub Stratum (Plot size: )				Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).	
1. _____	0	<input type="checkbox"/> 0.0%		Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.	
2. _____	0	<input type="checkbox"/> 0.0%		Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.	
3. _____	0	<input type="checkbox"/> 0.0%		Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
4. _____	0	<input type="checkbox"/> 0.0%		Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.	
5. _____	0	<input type="checkbox"/> 0.0%		Woody vine - All woody vines, regardless of height.	
6. _____	0	<input type="checkbox"/> 0.0%			
7. _____	0	<input type="checkbox"/> 0.0%			
8. _____	0	<input type="checkbox"/> 0.0%			
9. _____	0	<input type="checkbox"/> 0.0%			
10. _____	0	<input type="checkbox"/> 0.0%			
11. _____	0	<input type="checkbox"/> 0.0%			
12. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 35 20% of Total Cover: 14 70 = Total Cover				Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Herb Stratum (Plot size: 15')					
1. <i>Gossypium hirsutum</i>	15	<input checked="" type="checkbox"/> 21.4%	FACU		
2. <i>Poa annua</i>	35	<input checked="" type="checkbox"/> 50.0%	FACU		
3. <i>Ranunculus sardous</i>	5	<input type="checkbox"/> 7.1%	FAC		
4. <i>Stellaria media</i>	10	<input type="checkbox"/> 14.3%	FACU		
5. <i>Plantago lanceolata</i>	5	<input type="checkbox"/> 7.1%	FACU		
6. _____	0	<input type="checkbox"/> 0.0%			
7. _____	0	<input type="checkbox"/> 0.0%			
8. _____	0	<input type="checkbox"/> 0.0%			
9. _____	0	<input type="checkbox"/> 0.0%			
10. _____	0	<input type="checkbox"/> 0.0%			
11. _____	0	<input type="checkbox"/> 0.0%			
12. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 35 20% of Total Cover: 14 70 = Total Cover					
Woody Vine Stratum (Plot size: )					
1. _____	0	<input type="checkbox"/> 0.0%			
2. _____	0	<input type="checkbox"/> 0.0%			
3. _____	0	<input type="checkbox"/> 0.0%			
4. _____	0	<input type="checkbox"/> 0.0%			
5. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover					

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

Sampling Point: 0257

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

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)	%	Color (moist)	%	Tvpe <sup>1</sup>	Loc <sup>2</sup>				
0-4	10YR	4/3	100						Silty Clay Loam	
4-8	10YR	5/4	100						Silty Clay Loam	
8-14	10YR	5/2	95	10YR	5/6	5	C	M	Silty Clay Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0258  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.253238° **Long.:** -91.350299° **Datum:** WGS 84  
**Soil Map Unit Name:** Teksob loam, 1 to 3 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

 Sampling Point: 0258

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>5</u> x 3 = <u>15</u> FACU species <u>70</u> x 4 = <u>280</u> UPL species <u>0</u> x 5 = <u>0</u> <b>Column Totals:</b> <u>75</u> (A) <u>295</u> (B)  Prevalence Index = B/A = <u>3.933</u>
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Herb Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Gossypium hirsutum</u>	30	<input checked="" type="checkbox"/> 40.0%	FACU	<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
2. <u>Poa annua</u>	30	<input checked="" type="checkbox"/> 40.0%	FACU	
3. <u>Ranunculus sardous</u>	5	<input type="checkbox"/> 6.7%	FAC	
4. <u>Stellaria media</u>	10	<input type="checkbox"/> 13.3%	FACU	
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
12. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>37.5</u> 20% of Total Cover: <u>15</u> 75 = <b>Total Cover</b>				
<b>Woody Vine Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				

Remarks: (If observed, list morphological adaptations below).

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



## SOIL

Sampling Point: 0258

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

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)	%	Color (moist)	%	Tvpe <sup>1</sup>	Loc <sup>2</sup>				
0-4	10YR	4/3	100						Silty Clay Loam	
4-8	10YR	5/4	100						Silty Clay Loam	
8-14	10YR	5/2	95	10YR	5/6	5	C	M	Silty Clay Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0259  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.255180° **Long.:** -91.350764° **Datum:** WGS 84  
**Soil Map Unit Name:** Teksob loam, 1 to 3 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

Dominant Species?					Sampling Point: 0259	
Tree Stratum	(Plot size: )	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:	
1.		0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)	
2.		0	<input type="checkbox"/> 0.0%		Total Number of Dominant Species Across All Strata: 3 (B)	
3.		0	<input type="checkbox"/> 0.0%		Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)	
4.		0	<input type="checkbox"/> 0.0%		Prevalence Index worksheet:	
5.		0	<input type="checkbox"/> 0.0%		Total % Cover of: Multiply by:	
6.		0	<input type="checkbox"/> 0.0%		OBL species 0 x 1 = 0	
7.		0	<input type="checkbox"/> 0.0%		FACW species 0 x 2 = 0	
8.		0	<input type="checkbox"/> 0.0%		FAC species 0 x 3 = 0	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover		FACU species 65 x 4 = 260	
Sapling or Sapling/Shrub Stratum (Plot size: )					UPL species 10 x 5 = 50	
1.		0	<input type="checkbox"/> 0.0%		Column Totals: 75 (A) 310 (B)	
2.		0	<input type="checkbox"/> 0.0%		Prevalence Index = B/A = 4.133	
3.		0	<input type="checkbox"/> 0.0%		Hydrophytic Vegetation Indicators:	
4.		0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
5.		0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 2 - Dominance Test is > 50%	
6.		0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
7.		0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
8.		0	<input type="checkbox"/> 0.0%		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover		Definition of Vegetation Strata:	
Shrub Stratum (Plot size: )					Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).	
1.		0	<input type="checkbox"/> 0.0%		Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.	
2.		0	<input type="checkbox"/> 0.0%		Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.	
3.		0	<input type="checkbox"/> 0.0%		Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
4.		0	<input type="checkbox"/> 0.0%		Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.	
5.		0	<input type="checkbox"/> 0.0%		Woody vine - All woody vines, regardless of height.	
6.		0	<input type="checkbox"/> 0.0%			
7.		0	<input type="checkbox"/> 0.0%			
8.		0	<input type="checkbox"/> 0.0%			
9.		0	<input type="checkbox"/> 0.0%			
10.		0	<input type="checkbox"/> 0.0%			
11.		0	<input type="checkbox"/> 0.0%			
12.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 37.5 20% of Total Cover: 15		75	= Total Cover		Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Herb Stratum (Plot size: 15')						
1.	Gossypium hirsutum	20	<input checked="" type="checkbox"/> 26.7%	FACU		
2.	Stellaria media	15	<input checked="" type="checkbox"/> 20.0%	FACU		
3.	Lamium amplexicaule	10	<input type="checkbox"/> 13.3%	UPL		
4.	Poa annua	30	<input checked="" type="checkbox"/> 40.0%	FACU		
5.		0	<input type="checkbox"/> 0.0%			
6.		0	<input type="checkbox"/> 0.0%			
7.		0	<input type="checkbox"/> 0.0%			
8.		0	<input type="checkbox"/> 0.0%			
9.		0	<input type="checkbox"/> 0.0%			
10.		0	<input type="checkbox"/> 0.0%			
11.		0	<input type="checkbox"/> 0.0%			
12.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 37.5 20% of Total Cover: 15		75	= Total Cover			
Woody Vine Stratum (Plot size: )						
1.		0	<input type="checkbox"/> 0.0%			
2.		0	<input type="checkbox"/> 0.0%			
3.		0	<input type="checkbox"/> 0.0%			
4.		0	<input type="checkbox"/> 0.0%			
5.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover			

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

Sampling Point: 0259

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR	5/3	100				Silt Loam	
10-16	10YR	6/2	100				Silt Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0260  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.255174° **Long.:** -91.352377° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (minimum of 2 required)</b>	
<b>Primary Indicators (minimum of one required; check all that apply)</b>			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
<b>Field Observations:</b>			
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology indicators present.			

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

**Sampling Point:** 0260

Tree Stratum		Sapling or Sapling/Shrub Stratum		Shrub Stratum		Herb Stratum		Woody Vine Stratum			
(Plot size: _____ )		(Plot size: _____ )		(Plot size: _____ )		(Plot size: 15' _____ )		(Plot size: _____ )			
Absolute % Cover		Absolute % Cover		Absolute % Cover		Absolute % Cover		Absolute % Cover			
Rel.Strat. Cover		Rel.Strat. Cover		Rel.Strat. Cover		Rel.Strat. Cover		Rel.Strat. Cover			
Indicator Status		Indicator Status		Indicator Status		Indicator Status		Indicator Status			
1.	_____	0	<input type="checkbox"/>	0.0%	_____	1.	_____	0	<input type="checkbox"/>	0.0%	_____
2.	_____	0	<input type="checkbox"/>	0.0%	_____	2.	_____	0	<input type="checkbox"/>	0.0%	_____
3.	_____	0	<input type="checkbox"/>	0.0%	_____	3.	_____	0	<input type="checkbox"/>	0.0%	_____
4.	_____	0	<input type="checkbox"/>	0.0%	_____	4.	_____	0	<input type="checkbox"/>	0.0%	_____
5.	_____	0	<input type="checkbox"/>	0.0%	_____	5.	_____	0	<input type="checkbox"/>	0.0%	_____
6.	_____	0	<input type="checkbox"/>	0.0%	_____	6.	_____	0	<input type="checkbox"/>	0.0%	_____
7.	_____	0	<input type="checkbox"/>	0.0%	_____	7.	_____	0	<input type="checkbox"/>	0.0%	_____
8.	_____	0	<input type="checkbox"/>	0.0%	_____	8.	_____	0	<input type="checkbox"/>	0.0%	_____
50% of Total Cover: 0      20% of Total Cover: 0      0 = Total Cover		50% of Total Cover: 0      20% of Total Cover: 0      0 = Total Cover		50% of Total Cover: 0      20% of Total Cover: 0      0 = Total Cover		50% of Total Cover: 0      20% of Total Cover: 0      0 = Total Cover		50% of Total Cover: 0      20% of Total Cover: 0      0 = Total Cover			
Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)		Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)		Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)		Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)		Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)			
Total Number of Dominant Species Across All Strata: 2 (B)		Total Number of Dominant Species Across All Strata: 2 (B)		Total Number of Dominant Species Across All Strata: 2 (B)		Total Number of Dominant Species Across All Strata: 2 (B)		Total Number of Dominant Species Across All Strata: 2 (B)			
Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)		Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)		Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)		Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)		Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)			
Prevalence Index worksheet:		Prevalence Index worksheet:		Prevalence Index worksheet:		Prevalence Index worksheet:		Prevalence Index worksheet:			
Total % Cover of: 0      Multiply by: 1 = 0		Total % Cover of: 0      Multiply by: 2 = 0		Total % Cover of: 0      Multiply by: 3 = 0		Total % Cover of: 0      Multiply by: 4 = 0		Total % Cover of: 0      Multiply by: 5 = 0			
FACW species 0      x 2 = 0		FACW species 0      x 2 = 0		FACW species 0      x 2 = 0		FACW species 0      x 2 = 0		FACW species 0      x 2 = 0			
FAC species 0      x 3 = 0		FAC species 0      x 3 = 0		FAC species 0      x 3 = 0		FAC species 0      x 3 = 0		FAC species 0      x 3 = 0			
FACU species 65      x 4 = 260		FACU species 65      x 4 = 260		FACU species 65      x 4 = 260		FACU species 65      x 4 = 260		FACU species 65      x 4 = 260			
UPL species 15      x 5 = 75		UPL species 15      x 5 = 75		UPL species 15      x 5 = 75		UPL species 15      x 5 = 75		UPL species 15      x 5 = 75			
Column Totals: 80 (A)      335 (B)		Column Totals: 80 (A)      335 (B)		Column Totals: 80 (A)      335 (B)		Column Totals: 80 (A)      335 (B)		Column Totals: 80 (A)      335 (B)			
Prevalence Index = B/A = 4.188		Prevalence Index = B/A = 4.188		Prevalence Index = B/A = 4.188		Prevalence Index = B/A = 4.188		Prevalence Index = B/A = 4.188			
Hydrophytic Vegetation Indicators:		Hydrophytic Vegetation Indicators:		Hydrophytic Vegetation Indicators:		Hydrophytic Vegetation Indicators:		Hydrophytic Vegetation Indicators:			
<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation			
<input type="checkbox"/> 2 - Dominance Test is > 50%		<input type="checkbox"/> 2 - Dominance Test is > 50%		<input type="checkbox"/> 2 - Dominance Test is > 50%		<input type="checkbox"/> 2 - Dominance Test is > 50%		<input type="checkbox"/> 2 - Dominance Test is > 50%			
<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>		<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>		<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>		<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>		<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>			
<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)		<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)		<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)		<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)		<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)			
<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
Definition of Vegetation Strata:		Definition of Vegetation Strata:		Definition of Vegetation Strata:		Definition of Vegetation Strata:		Definition of Vegetation Strata:			
Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).		Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).		Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).		Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).		Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).			
Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.		Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.		Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6							

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

## SOIL

Sampling Point: 0260

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR	5/3	100				Silt Loam	
10-16	10YR	6/2	100				Silt Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0261  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.255137° **Long.:** -91.355030° **Datum:** WGS 84  
**Soil Map Unit Name:** Jackport silty clay loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		



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

Tree Stratum (Plot size: _____ )					Dominant Species?	Sampling Point: <u>0261</u>
	Absolute % Cover	Rel.Strat. Cover	Indicator Status			
1. _____	0	<input type="checkbox"/> 0.0%				
2. _____	0	<input type="checkbox"/> 0.0%				
3. _____	0	<input type="checkbox"/> 0.0%				
4. _____	0	<input type="checkbox"/> 0.0%				
5. _____	0	<input type="checkbox"/> 0.0%				
6. _____	0	<input type="checkbox"/> 0.0%				
7. _____	0	<input type="checkbox"/> 0.0%				
8. _____	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			
Sapling or Sapling/Shrub Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/> 0.0%				
2. _____	0	<input type="checkbox"/> 0.0%				
3. _____	0	<input type="checkbox"/> 0.0%				
4. _____	0	<input type="checkbox"/> 0.0%				
5. _____	0	<input type="checkbox"/> 0.0%				
6. _____	0	<input type="checkbox"/> 0.0%				
7. _____	0	<input type="checkbox"/> 0.0%				
8. _____	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			
Shrub Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/> 0.0%				
2. _____	0	<input type="checkbox"/> 0.0%				
3. _____	0	<input type="checkbox"/> 0.0%				
4. _____	0	<input type="checkbox"/> 0.0%				
5. _____	0	<input type="checkbox"/> 0.0%				
6. _____	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			
Herb Stratum (Plot size: <u>15'</u> )						
1. <u>Gossypium hirsutum</u>	20	<input checked="" type="checkbox"/> 25.0%	FACU			
2. <u>Lamium amplexicaule</u>	10	<input type="checkbox"/> 12.5%	UPL			
3. <u>Stellaria media</u>	15	<input type="checkbox"/> 18.8%	FACU			
4. <u>Poa annua</u>	30	<input checked="" type="checkbox"/> 37.5%	FACU			
5. <u>Plantago lanceolata</u>	5	<input type="checkbox"/> 6.3%	FACU			
6. _____	0	<input type="checkbox"/> 0.0%				
7. _____	0	<input type="checkbox"/> 0.0%				
8. _____	0	<input type="checkbox"/> 0.0%				
9. _____	0	<input type="checkbox"/> 0.0%				
10. _____	0	<input type="checkbox"/> 0.0%				
11. _____	0	<input type="checkbox"/> 0.0%				
12. _____	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>40</u>	20% of Total Cover: <u>16</u>	80	<b>= Total Cover</b>			
Woody Vine Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/> 0.0%				
2. _____	0	<input type="checkbox"/> 0.0%				
3. _____	0	<input type="checkbox"/> 0.0%				
4. _____	0	<input type="checkbox"/> 0.0%				
5. _____	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			

**Dominance Test worksheet:**  
 Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)  
  
 Total Number of Dominant Species Across All Strata: 2 (B)  
  
 Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

**Prevalence Index worksheet:**  
 Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_  
 OBL species 0 x 1 = 0  
 FACW species 0 x 2 = 0  
 FAC species 0 x 3 = 0  
 FACU species 70 x 4 = 280  
 UPL species 10 x 5 = 50  
**Column Totals:** 80 (A) 330 (B)  
  
 Prevalence Index = B/A = 4.125

**Hydrophytic Vegetation Indicators:**  
☐ 1 - Rapid Test for Hydrophytic Vegetation  
☐ 2 - Dominance Test is > 50%  
☐ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
☐ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definition of Vegetation Strata:**  
 Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
 Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
 Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  
  
 Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
 Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
 Woody vine - All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes ☐ No ☒

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

Sampling Point: 0261

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR	5/3	100				Silty Clay Loam	
10-16	10YR	6/2	100				Silty Clay Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0262  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.255127° **Long.:** -91.356823° **Datum:** WGS 84  
**Soil Map Unit Name:** Grubbs silt loam, 1 to 3 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

Tree Stratum (Plot size: _____ )					Dominant Species?	Sampling Point: <u>0262</u>
	Absolute % Cover	Rel.Strat. Cover	Indicator Status			
1. _____	0	<input type="checkbox"/>	0.0%			
2. _____	0	<input type="checkbox"/>	0.0%			
3. _____	0	<input type="checkbox"/>	0.0%			
4. _____	0	<input type="checkbox"/>	0.0%			
5. _____	0	<input type="checkbox"/>	0.0%			
6. _____	0	<input type="checkbox"/>	0.0%			
7. _____	0	<input type="checkbox"/>	0.0%			
8. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			
Sapling or Sapling/Shrub Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/>	0.0%			
2. _____	0	<input type="checkbox"/>	0.0%			
3. _____	0	<input type="checkbox"/>	0.0%			
4. _____	0	<input type="checkbox"/>	0.0%			
5. _____	0	<input type="checkbox"/>	0.0%			
6. _____	0	<input type="checkbox"/>	0.0%			
7. _____	0	<input type="checkbox"/>	0.0%			
8. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			
Shrub Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/>	0.0%			
2. _____	0	<input type="checkbox"/>	0.0%			
3. _____	0	<input type="checkbox"/>	0.0%			
4. _____	0	<input type="checkbox"/>	0.0%			
5. _____	0	<input type="checkbox"/>	0.0%			
6. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			
Herb Stratum (Plot size: <u>15'</u> )						
1. <u>Gossypium hirsutum</u>	20	<input checked="" type="checkbox"/>	28.6%	FACU		
2. <u>Lamium amplexicaule</u>	10	<input type="checkbox"/>	14.3%	UPL		
3. <u>Stellaria media</u>	15	<input checked="" type="checkbox"/>	21.4%	FACU		
4. <u>Poa annua</u>	25	<input checked="" type="checkbox"/>	35.7%	FACU		
5. _____	0	<input type="checkbox"/>	0.0%			
6. _____	0	<input type="checkbox"/>	0.0%			
7. _____	0	<input type="checkbox"/>	0.0%			
8. _____	0	<input type="checkbox"/>	0.0%			
9. _____	0	<input type="checkbox"/>	0.0%			
10. _____	0	<input type="checkbox"/>	0.0%			
11. _____	0	<input type="checkbox"/>	0.0%			
12. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>35</u>	20% of Total Cover: <u>14</u>	70	<b>= Total Cover</b>			
Woody Vine Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/>	0.0%			
2. _____	0	<input type="checkbox"/>	0.0%			
3. _____	0	<input type="checkbox"/>	0.0%			
4. _____	0	<input type="checkbox"/>	0.0%			
5. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			

**Dominance Test worksheet:**

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

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

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

**Prevalence Index worksheet:**

Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 0 x 3 = 0

FACU species 60 x 4 = 240

UPL species 10 x 5 = 50

Column Totals: 70 (A) 290 (B)

Prevalence Index = B/A = 4.143

**Hydrophytic Vegetation Indicators:**

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤3.0 <sup>1</sup>

☐ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)

<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definition of Vegetation Strata:**

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

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

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

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

Woody vine - All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes ☐ No ☒

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

Sampling Point: 0262

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR	5/3	100				Silt Loam	
10-16	10YR	6/2	100				Silt Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0264  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.250247° **Long.:** -91.357295° **Datum:** WGS 84  
**Soil Map Unit Name:** Jackport silty clay loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

Sampling Point: 0264

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status	<b>Dominance Test worksheet:</b>  Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)  <b>Prevalence Index worksheet:</b> <div style="display: flex; justify-content: space-between;"> <span>Total % Cover of:</span> <span>Multiply by:</span> </div> <div style="display: flex; justify-content: space-between;"> <div> <b>OBL species</b> <u>0</u>  <b>FACW species</b> <u>15</u>  <b>FAC species</b> <u>65</u>  <b>FACU species</b> <u>15</u>  <b>UPL species</b> <u>0</u>  <b>Column Totals:</b> <u>95</u> (A)                         </div> <div> <b>x 1 =</b> <u>0</u>  <b>x 2 =</b> <u>30</u>  <b>x 3 =</b> <u>195</u>  <b>x 4 =</b> <u>60</u>  <b>x 5 =</b> <u>0</u>  <b>(B)</b> <u>285</u> </div> </div> Prevalence Index = B/A = <u>3.000</u>
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			
<b>Shrub Stratum (Plot size: _____ )</b>					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			
<b>Herb Stratum (Plot size: <u>15'</u> )</b>					
1. <u>Andropogon virginicus</u>	35	<input checked="" type="checkbox"/>	36.8%	FAC	
2. <u>Leptochloa fusca ssp. fascicularis</u>	15	<input type="checkbox"/>	15.8%	FACW	
3. <u>Ranunculus sardous</u>	30	<input checked="" type="checkbox"/>	31.6%	FAC	
4. <u>Cardamine hirsuta</u>	10	<input type="checkbox"/>	10.5%	FACU	
5. <u>Amaranthus spinosus</u>	5	<input type="checkbox"/>	5.3%	FACU	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
9. _____	0	<input type="checkbox"/>	0.0%	_____	
10. _____	0	<input type="checkbox"/>	0.0%	_____	
11. _____	0	<input type="checkbox"/>	0.0%	_____	
12. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>47.5</u> 20% of Total Cover: <u>19</u>	95	<b>= Total Cover</b>			
<b>Woody Vine Stratum (Plot size: _____ )</b>					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			

Remarks: (If observed, list morphological adaptations below).

**Hydrophytic Vegetation Present?**    Yes ☒    No ☐

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

## SOIL

**Sampling Point:** 0264

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input checked="" type="checkbox"/> Depleted Matrix (F3)             |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:



# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0265  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.250320° **Long.:** -91.355755° **Datum:** WGS 84  
**Soil Map Unit Name:** Jackport silty clay loam, 0 to 1 percent slopes **NWI classification:** PEM1Cd

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

Dominant Species?					Sampling Point: 0265
Tree Stratum (Plot size: )	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:	
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)	
2. _____	0	<input type="checkbox"/> 0.0%		Total Number of Dominant Species Across All Strata: 3 (B)	
3. _____	0	<input type="checkbox"/> 0.0%		Percent of dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)	
4. _____	0	<input type="checkbox"/> 0.0%		Prevalence Index worksheet:	
5. _____	0	<input type="checkbox"/> 0.0%		Total % Cover of: Multiply by:	
6. _____	0	<input type="checkbox"/> 0.0%		OBL species 0 x 1 = 0	
7. _____	0	<input type="checkbox"/> 0.0%		FACW species 15 x 2 = 30	
8. _____	0	<input type="checkbox"/> 0.0%		FAC species 45 x 3 = 135	
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover				FACU species 15 x 4 = 60	
Sapling or Sapling/Shrub Stratum (Plot size: )				UPL species 0 x 5 = 0	
1. _____	0	<input type="checkbox"/> 0.0%		Column Totals: 75 (A) 225 (B)	
2. _____	0	<input type="checkbox"/> 0.0%		Prevalence Index = B/A = 3.000	
3. _____	0	<input type="checkbox"/> 0.0%		Hydrophytic Vegetation Indicators:	
4. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
5. _____	0	<input type="checkbox"/> 0.0%		<input checked="" type="checkbox"/> 2 - Dominance Test is > 50%	
6. _____	0	<input type="checkbox"/> 0.0%		<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
7. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
8. _____	0	<input type="checkbox"/> 0.0%		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover				Definition of Vegetation Strata:	
Shrub Stratum (Plot size: )				Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).	
1. _____	0	<input type="checkbox"/> 0.0%		Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.	
2. _____	0	<input type="checkbox"/> 0.0%		Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.	
3. _____	0	<input type="checkbox"/> 0.0%		Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
4. _____	0	<input type="checkbox"/> 0.0%		Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.	
5. _____	0	<input type="checkbox"/> 0.0%		Woody vine - All woody vines, regardless of height.	
6. _____	0	<input type="checkbox"/> 0.0%			
7. _____	0	<input type="checkbox"/> 0.0%			
8. _____	0	<input type="checkbox"/> 0.0%			
9. _____	0	<input type="checkbox"/> 0.0%			
10. _____	0	<input type="checkbox"/> 0.0%			
11. _____	0	<input type="checkbox"/> 0.0%			
12. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 37.5 20% of Total Cover: 15 75 = Total Cover				Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Herb Stratum (Plot size: 15' )					
1. <i>Leptochloa fusca ssp. fascicularis</i>	15	<input checked="" type="checkbox"/> 20.0%	FACW		
2. <i>Ranunculus sardous</i>	45	<input checked="" type="checkbox"/> 60.0%	FAC		
3. <i>Cardamine hirsuta</i>	15	<input checked="" type="checkbox"/> 20.0%	FACU		
4. _____	0	<input type="checkbox"/> 0.0%			
5. _____	0	<input type="checkbox"/> 0.0%			
6. _____	0	<input type="checkbox"/> 0.0%			
7. _____	0	<input type="checkbox"/> 0.0%			
8. _____	0	<input type="checkbox"/> 0.0%			
9. _____	0	<input type="checkbox"/> 0.0%			
10. _____	0	<input type="checkbox"/> 0.0%			
11. _____	0	<input type="checkbox"/> 0.0%			
12. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 37.5 20% of Total Cover: 15 75 = Total Cover					
Woody Vine Stratum (Plot size: )					
1. _____	0	<input type="checkbox"/> 0.0%			
2. _____	0	<input type="checkbox"/> 0.0%			
3. _____	0	<input type="checkbox"/> 0.0%			
4. _____	0	<input type="checkbox"/> 0.0%			
5. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover					

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 0265

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input checked="" type="checkbox"/> Depleted Matrix (F3)             |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0266  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** concave **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.249911° **Long.:** -91.355546° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** PEM1Cd

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): <u>1</u> Water Table Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): <u>10</u> Saturation Present? (includes capillary fringe) Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): <u>0</u>	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

 Sampling Point: **0266**

Tree Stratum	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/>	0.0%	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>45</u> x 3 = <u>135</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>0</u> x 5 = <u>0</u> <b>Column Totals:</b> <u>50</u> (A) <u>155</u> (B)  Prevalence Index = B/A = <u>3.100</u>
<b>Sapling or Sapling/Shrub Stratum</b> (Plot size: _____)					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					
<b>Shrub Stratum</b> (Plot size: _____)					
1. _____	0	<input type="checkbox"/>	0.0%	_____	<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					
<b>Herb Stratum</b> (Plot size: <u>15'</u> )					
1. <u>Ranunculus sardous</u>	45	<input checked="" type="checkbox"/>	90.0%	FAC	<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
2. <u>Cardamine hirsuta</u>	5	<input type="checkbox"/>	10.0%	FACU	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
9. _____	0	<input type="checkbox"/>	0.0%	_____	
10. _____	0	<input type="checkbox"/>	0.0%	_____	
11. _____	0	<input type="checkbox"/>	0.0%	_____	
12. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>25</u> 20% of Total Cover: <u>10</u> 50 = <b>Total Cover</b>					
<b>Woody Vine Stratum</b> (Plot size: _____)					
1. _____	0	<input type="checkbox"/>	0.0%	_____	<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 0266

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |   |
|--|---|
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)     |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)           |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)               |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                       |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input checked="" type="checkbox"/> Depleted Matrix (F3)                |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Redox Dark Surface (F6)                        |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Depleted Dark Surface (F7)                     |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Redox Depressions (F8)                         |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Marl (F10) (LRR U)                             |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)               |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)      |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)             |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                  |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)         |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)    |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 150B) |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 1992  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.255144° **Long.:** -91.348800° **Datum:** WGS 84  
**Soil Map Unit Name:** Teksob loam, 3 to 8 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

Dominant Species?

Sampling Point: 1992

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/>	0.0%	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>80</u> x 4 = <u>320</u> UPL species <u>10</u> x 5 = <u>50</u> <b>Column Totals:</b> <u>90</u> (A) <u>370</u> (B)  Prevalence Index = B/A = <u>4.111</u>
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					
<b>Shrub Stratum (Plot size: _____ )</b>					
1. _____	0	<input type="checkbox"/>	0.0%	_____	<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					
<b>Herb Stratum (Plot size: 15' _____ )</b>					
1. <i>Gossypium hirsutum</i>	60	<input checked="" type="checkbox"/>	66.7%	FACU	<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
2. <i>Lamium amplexicaule</i>	10	<input type="checkbox"/>	11.1%	UPL	
3. <i>Amaranthus spinosus</i>	5	<input type="checkbox"/>	5.6%	FACU	
4. <i>Poa annua</i>	15	<input type="checkbox"/>	16.7%	FACU	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
9. _____	0	<input type="checkbox"/>	0.0%	_____	
10. _____	0	<input type="checkbox"/>	0.0%	_____	
11. _____	0	<input type="checkbox"/>	0.0%	_____	
12. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>45</u> 20% of Total Cover: <u>18</u> 90 = <b>Total Cover</b>					
<b>Woody Vine Stratum (Plot size: _____ )</b>					<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					

Remarks: (If observed, list morphological adaptations below).

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



## SOIL

**Sampling Point:** 1992

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 1993  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.253109° **Long.:** -91.348604° **Datum:** WGS 84  
**Soil Map Unit Name:** Teksob loam, 3 to 8 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

Dominant Species?					Sampling Point: 1993	
Tree Stratum	(Plot size: )	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:	
1.		0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)	
2.		0	<input type="checkbox"/> 0.0%		Total Number of Dominant Species Across All Strata: 1 (B)	
3.		0	<input type="checkbox"/> 0.0%		Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)	
4.		0	<input type="checkbox"/> 0.0%		Prevalence Index worksheet:	
5.		0	<input type="checkbox"/> 0.0%			Total % Cover of: Multiply by:
6.		0	<input type="checkbox"/> 0.0%			OBL species 0 x 1 = 0
7.		0	<input type="checkbox"/> 0.0%			FACW species 0 x 2 = 0
8.		0	<input type="checkbox"/> 0.0%			FAC species 0 x 3 = 0
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover					FACU species 75 x 4 = 300	
Sapling or Sapling/Shrub Stratum (Plot size: )					UPL species 5 x 5 = 25	
1.		0	<input type="checkbox"/> 0.0%		Column Totals: 80 (A) 325 (B)	
2.		0	<input type="checkbox"/> 0.0%		Prevalence Index = B/A = 4.063	
3.		0	<input type="checkbox"/> 0.0%		Hydrophytic Vegetation Indicators:	
4.		0	<input type="checkbox"/> 0.0%			<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
5.		0	<input type="checkbox"/> 0.0%			<input type="checkbox"/> 2 - Dominance Test is > 50%
6.		0	<input type="checkbox"/> 0.0%			<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7.		0	<input type="checkbox"/> 0.0%			<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
8.		0	<input type="checkbox"/> 0.0%		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover					Definition of Vegetation Strata:	
Shrub Stratum (Plot size: )						Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
1.		0	<input type="checkbox"/> 0.0%			Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
2.		0	<input type="checkbox"/> 0.0%			Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.
3.		0	<input type="checkbox"/> 0.0%			Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
4.		0	<input type="checkbox"/> 0.0%		Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.	
5.		0	<input type="checkbox"/> 0.0%		Woody vine - All woody vines, regardless of height.	
6.		0	<input type="checkbox"/> 0.0%		Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
7.		0	<input type="checkbox"/> 0.0%			
8.		0	<input type="checkbox"/> 0.0%			
9.		0	<input type="checkbox"/> 0.0%			
10.		0	<input type="checkbox"/> 0.0%			
11.		0	<input type="checkbox"/> 0.0%		Remarks: (If observed, list morphological adaptations below).	
12.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 40 20% of Total Cover: 16 80 = Total Cover						
Woody Vine Stratum (Plot size: )						
1.		0	<input type="checkbox"/> 0.0%			
2.		0	<input type="checkbox"/> 0.0%			
3.		0	<input type="checkbox"/> 0.0%			
4.		0	<input type="checkbox"/> 0.0%			
5.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover						

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 1993

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 1994  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.255087° **Long.:** -91.348012° **Datum:** WGS 84  
**Soil Map Unit Name:** Tuckerman loam, 0 to 1 percent slopes, frequently flooded **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

Tree Stratum (Plot size: _____ )					Dominant Species?	Sampling Point: <u>1994</u>
	Absolute % Cover	Rel.Strat. Cover	Indicator Status			
1. _____	0	<input type="checkbox"/>	0.0%			
2. _____	0	<input type="checkbox"/>	0.0%			
3. _____	0	<input type="checkbox"/>	0.0%			
4. _____	0	<input type="checkbox"/>	0.0%			
5. _____	0	<input type="checkbox"/>	0.0%			
6. _____	0	<input type="checkbox"/>	0.0%			
7. _____	0	<input type="checkbox"/>	0.0%			
8. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			
Sapling or Sapling/Shrub Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/>	0.0%			
2. _____	0	<input type="checkbox"/>	0.0%			
3. _____	0	<input type="checkbox"/>	0.0%			
4. _____	0	<input type="checkbox"/>	0.0%			
5. _____	0	<input type="checkbox"/>	0.0%			
6. _____	0	<input type="checkbox"/>	0.0%			
7. _____	0	<input type="checkbox"/>	0.0%			
8. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			
Shrub Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/>	0.0%			
2. _____	0	<input type="checkbox"/>	0.0%			
3. _____	0	<input type="checkbox"/>	0.0%			
4. _____	0	<input type="checkbox"/>	0.0%			
5. _____	0	<input type="checkbox"/>	0.0%			
6. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			
Herb Stratum (Plot size: <u>15'</u> )						
1. <u>Amaranthus spinosus</u>	25	<input checked="" type="checkbox"/>	35.7%	FACU		
2. <u>Lamium amplexicaule</u>	15	<input checked="" type="checkbox"/>	21.4%	UPL		
3. <u>Poa annua</u>	15	<input checked="" type="checkbox"/>	21.4%	FACU		
4. <u>Stellaria media</u>	10	<input type="checkbox"/>	14.3%	FACU		
5. <u>Plantago lanceolata</u>	5	<input type="checkbox"/>	7.1%	FACU		
6. _____	0	<input type="checkbox"/>	0.0%			
7. _____	0	<input type="checkbox"/>	0.0%			
8. _____	0	<input type="checkbox"/>	0.0%			
9. _____	0	<input type="checkbox"/>	0.0%			
10. _____	0	<input type="checkbox"/>	0.0%			
11. _____	0	<input type="checkbox"/>	0.0%			
12. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>35</u>	20% of Total Cover: <u>14</u>	70	= Total Cover			
Woody Vine Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/>	0.0%			
2. _____	0	<input type="checkbox"/>	0.0%			
3. _____	0	<input type="checkbox"/>	0.0%			
4. _____	0	<input type="checkbox"/>	0.0%			
5. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			

**Dominance Test worksheet:**  
 Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)  
  
 Total Number of Dominant Species Across All Strata: 3 (B)  
  
 Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

**Prevalence Index worksheet:**  
 Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_  
 OBL species 0 x 1 = 0  
 FACW species 0 x 2 = 0  
 FAC species 0 x 3 = 0  
 FACU species 55 x 4 = 220  
 UPL species 15 x 5 = 75  
**Column Totals:** 70 (A) 295 (B)  
  
 Prevalence Index = B/A = 4.214

**Hydrophytic Vegetation Indicators:**  
☐ 1 - Rapid Test for Hydrophytic Vegetation  
☐ 2 - Dominance Test is > 50%  
☐ 3 - Prevalence Index is ≤3.0 <sup>1</sup>  
☐ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)

<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definition of Vegetation Strata:**  
 Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
 Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
 Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  
  
 Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
 Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
 Woody vine - All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes ☐ No ☒

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 1994

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 1995  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.255066° **Long.:** -91.346610° **Datum:** WGS 84  
**Soil Map Unit Name:** Teksob loam, 1 to 3 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		



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

Dominant Species?					Sampling Point: 1995
Tree Stratum	(Plot size: )	Absolute % Cover	Rel.Strat. Cover	Indicator Status	
1.		0	<input type="checkbox"/>	0.0%	
2.		0	<input type="checkbox"/>	0.0%	
3.		0	<input type="checkbox"/>	0.0%	
4.		0	<input type="checkbox"/>	0.0%	
5.		0	<input type="checkbox"/>	0.0%	
6.		0	<input type="checkbox"/>	0.0%	
7.		0	<input type="checkbox"/>	0.0%	
8.		0	<input type="checkbox"/>	0.0%	
50% of Total Cover: 0    20% of Total Cover: 0		0	= Total Cover		
Sapling or Sapling/Shrub Stratum					(Plot size: )
1.		0	<input type="checkbox"/>	0.0%	
2.		0	<input type="checkbox"/>	0.0%	
3.		0	<input type="checkbox"/>	0.0%	
4.		0	<input type="checkbox"/>	0.0%	
5.		0	<input type="checkbox"/>	0.0%	
6.		0	<input type="checkbox"/>	0.0%	
7.		0	<input type="checkbox"/>	0.0%	
8.		0	<input type="checkbox"/>	0.0%	
50% of Total Cover: 0    20% of Total Cover: 0		0	= Total Cover		
Shrub Stratum					(Plot size: )
1.		0	<input type="checkbox"/>	0.0%	
2.		0	<input type="checkbox"/>	0.0%	
3.		0	<input type="checkbox"/>	0.0%	
4.		0	<input type="checkbox"/>	0.0%	
5.		0	<input type="checkbox"/>	0.0%	
6.		0	<input type="checkbox"/>	0.0%	
50% of Total Cover: 0    20% of Total Cover: 0		0	= Total Cover		
Herb Stratum					(Plot size: 15')
1.	Gossypium hirsutum	65	<input checked="" type="checkbox"/>	65.0%	FACU
2.	Amaranthus spinosus	10	<input type="checkbox"/>	10.0%	FACU
3.	Poa annua	20	<input checked="" type="checkbox"/>	20.0%	FACU
4.	Lamium amplexicaule	5	<input type="checkbox"/>	5.0%	UPL
5.		0	<input type="checkbox"/>	0.0%	
6.		0	<input type="checkbox"/>	0.0%	
7.		0	<input type="checkbox"/>	0.0%	
8.		0	<input type="checkbox"/>	0.0%	
9.		0	<input type="checkbox"/>	0.0%	
10.		0	<input type="checkbox"/>	0.0%	
11.		0	<input type="checkbox"/>	0.0%	
12.		0	<input type="checkbox"/>	0.0%	
50% of Total Cover: 50    20% of Total Cover: 20		100	= Total Cover		
Woody Vine Stratum					(Plot size: )
1.		0	<input type="checkbox"/>	0.0%	
2.		0	<input type="checkbox"/>	0.0%	
3.		0	<input type="checkbox"/>	0.0%	
4.		0	<input type="checkbox"/>	0.0%	
5.		0	<input type="checkbox"/>	0.0%	
50% of Total Cover: 0    20% of Total Cover: 0		0	= Total Cover		

**Dominance Test worksheet:**

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

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

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

**Prevalence Index worksheet:**

Total % Cover of: Multiply by:

OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	95	x 4 =	380
UPL species	5	x 5 =	25
Column Totals:	100 (A)		405 (B)

Prevalence Index = B/A = 4.050

**Hydrophytic Vegetation Indicators:**

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤3.0<sup>1</sup>

☐ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definition of Vegetation Strata:**

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

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

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

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

Woody vine - All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes ☐ No ☒

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

Sampling Point: 1995

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10YR	3/4					Sandy Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 1996  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.253074° **Long.:** -91.347329° **Datum:** WGS 84  
**Soil Map Unit Name:** Tuckerman loam, 0 to 1 percent slopes, frequently flooded **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

Dominant Species?					Sampling Point: 1996
Tree Stratum (Plot size: 30')	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:	
1. Liquidambar styraciflua	20	26.7%	FAC	Number of Dominant Species That are OBL, FACW, or FAC: 8 (A)	
2. Quercus phellos	30	40.0%	FACW	Total Number of Dominant Species Across All Strata: 9 (B)	
3. Ulmus americana	25	33.3%	FAC	Percent of dominant Species That Are OBL, FACW, or FAC: 88.9% (A/B)	
4.	0	0.0%		Prevalence Index worksheet:	
5.	0	0.0%		Total % Cover of: Multiply by:	
6.	0	0.0%		OBL species 0 x 1 = 0	
7.	0	0.0%		FACW species 30 x 2 = 60	
8.	0	0.0%		FAC species 125 x 3 = 375	
50% of Total Cover: 37.5 20% of Total Cover: 15 75 = Total Cover				FACU species 10 x 4 = 40	
Sapling or Sapling/Shrub Stratum (Plot size: 30')				UPL species 0 x 5 = 0	
1. Ligustrum sinense	35	58.3%	FAC	Column Totals: 165 (A) 475 (B)	
2. Ulmus americana	25	41.7%	FAC	Prevalence Index = B/A = 2.879	
3.	0	0.0%		Hydrophytic Vegetation Indicators:	
4.	0	0.0%		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
5.	0	0.0%		<input checked="" type="checkbox"/> 2 - Dominance Test is > 50%	
6.	0	0.0%		<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
7.	0	0.0%		<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
8.	0	0.0%		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
50% of Total Cover: 30 20% of Total Cover: 12 60 = Total Cover				Definition of Vegetation Strata:	
Shrub Stratum (Plot size: )				Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).	
1.	0	0.0%		Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.	
2.	0	0.0%		Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.	
3.	0	0.0%		Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
4.	0	0.0%		Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.	
5.	0	0.0%		Woody vine - All woody vines, regardless of height.	
6.	0	0.0%			
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover				Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Herb Stratum (Plot size: 15')					
1. Lonicera japonica	10	100.0%	FACU		
2.	0	0.0%			
3.	0	0.0%			
4.	0	0.0%			
5.	0	0.0%			
6.	0	0.0%			
7.	0	0.0%			
8.	0	0.0%			
9.	0	0.0%			
10.	0	0.0%			
11.	0	0.0%			
12.	0	0.0%			
50% of Total Cover: 5 20% of Total Cover: 2 10 = Total Cover					
Woody Vine Stratum (Plot size: 30')					
1. Bignonia capreolata	5	25.0%	FAC		
2. Toxicodendron radicans	10	50.0%	FAC		
3. Smilax rotundifolia	5	25.0%	FAC		
4.	0	0.0%			
5.	0	0.0%			
50% of Total Cover: 10 20% of Total Cover: 4 20 = Total Cover					

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

Sampling Point: 1996

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2	10YR	4/4	100				Sandy Loam	
2-14	10YR	4/6	100				Sandy Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 1999  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.253079° **Long.:** -91.341539° **Datum:** WGS 84  
**Soil Map Unit Name:** Teksob loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

 Sampling Point: **1999**

Tree Stratum	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status	<b>Dominance Test worksheet:</b>  Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)  <b>Prevalence Index worksheet:</b> Total % Cover of: <u>0</u> Multiply by: <u>1</u> OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>90</u> x 4 = <u>360</u> UPL species <u>10</u> x 5 = <u>50</u> <b>Column Totals:</b> <u>100</u> (A) <u>410</u> (B)  Prevalence Index = B/A = <u>4.100</u>
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> <b>= Total Cover</b>					
<b>Sapling or Sapling/Shrub Stratum</b> (Plot size: _____ )					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> <b>= Total Cover</b>					
<b>Shrub Stratum</b> (Plot size: _____ )					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> <b>= Total Cover</b>					
<b>Herb Stratum</b> (Plot size: <u>15'</u> )					
1. <u>Gossypium hirsutum</u>	60	<input checked="" type="checkbox"/>	60.0%	FACU	
2. <u>Poa annua</u>	25	<input checked="" type="checkbox"/>	25.0%	FACU	
3. <u>Lamium amplexicaule</u>	10	<input type="checkbox"/>	10.0%	UPL	
4. <u>Amaranthus spinosus</u>	5	<input type="checkbox"/>	5.0%	FACU	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
9. _____	0	<input type="checkbox"/>	0.0%	_____	
10. _____	0	<input type="checkbox"/>	0.0%	_____	
11. _____	0	<input type="checkbox"/>	0.0%	_____	
12. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>50</u> 20% of Total Cover: <u>20</u> <b>= Total Cover</b>					
<b>Woody Vine Stratum</b> (Plot size: _____ )					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> <b>= Total Cover</b>					

**Hydrophytic Vegetation Indicators:**  
☐ 1 - Rapid Test for Hydrophytic Vegetation  
☐ 2 - Dominance Test is > 50%  
☐ 3 - Prevalence Index is ≤3.0 <sup>1</sup>  
☐ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  
  
<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definition of Vegetation Strata:**  
 Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
 Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
 Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  
  
 Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
 Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
 Woody vine - All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes ☐ No ☒

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 1999

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:



# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 2000  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.253096° **Long.:** -91.342749° **Datum:** WGS 84  
**Soil Map Unit Name:** Grubbs silt loam, 3 to 8 percent slopes, eroded **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

Tree Stratum (Plot size: _____ )					Dominant Species?	Sampling Point: <u>2000</u>
	Absolute % Cover	Rel.Strat. Cover	Indicator Status			
1. _____	0	<input type="checkbox"/>	0.0%			
2. _____	0	<input type="checkbox"/>	0.0%			
3. _____	0	<input type="checkbox"/>	0.0%			
4. _____	0	<input type="checkbox"/>	0.0%			
5. _____	0	<input type="checkbox"/>	0.0%			
6. _____	0	<input type="checkbox"/>	0.0%			
7. _____	0	<input type="checkbox"/>	0.0%			
8. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			
Sapling or Sapling/Shrub Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/>	0.0%			
2. _____	0	<input type="checkbox"/>	0.0%			
3. _____	0	<input type="checkbox"/>	0.0%			
4. _____	0	<input type="checkbox"/>	0.0%			
5. _____	0	<input type="checkbox"/>	0.0%			
6. _____	0	<input type="checkbox"/>	0.0%			
7. _____	0	<input type="checkbox"/>	0.0%			
8. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			
Shrub Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/>	0.0%			
2. _____	0	<input type="checkbox"/>	0.0%			
3. _____	0	<input type="checkbox"/>	0.0%			
4. _____	0	<input type="checkbox"/>	0.0%			
5. _____	0	<input type="checkbox"/>	0.0%			
6. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			
Herb Stratum (Plot size: <u>15'</u> )						
1. <u>Gossypium hirsutum</u>	60	<input checked="" type="checkbox"/>	54.5%	FACU		
2. <u>Amaranthus spinosus</u>	10	<input type="checkbox"/>	9.1%	FACU		
3. <u>Lamium amplexicaule</u>	15	<input type="checkbox"/>	13.6%	UPL		
4. <u>Poa annua</u>	25	<input checked="" type="checkbox"/>	22.7%	FACU		
5. _____	0	<input type="checkbox"/>	0.0%			
6. _____	0	<input type="checkbox"/>	0.0%			
7. _____	0	<input type="checkbox"/>	0.0%			
8. _____	0	<input type="checkbox"/>	0.0%			
9. _____	0	<input type="checkbox"/>	0.0%			
10. _____	0	<input type="checkbox"/>	0.0%			
11. _____	0	<input type="checkbox"/>	0.0%			
12. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>55</u>	20% of Total Cover: <u>22</u>	110	= Total Cover			
Woody Vine Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/>	0.0%			
2. _____	0	<input type="checkbox"/>	0.0%			
3. _____	0	<input type="checkbox"/>	0.0%			
4. _____	0	<input type="checkbox"/>	0.0%			
5. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			

**Dominance Test worksheet:**  
 Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)  
  
 Total Number of Dominant Species Across All Strata: 2 (B)  
  
 Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

**Prevalence Index worksheet:**  
 Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_  
 OBL species 0 x 1 = 0  
 FACW species 0 x 2 = 0  
 FAC species 0 x 3 = 0  
 FACU species 95 x 4 = 380  
 UPL species 15 x 5 = 75  
**Column Totals:** 110 (A) 455 (B)  
  
 Prevalence Index = B/A = 4.136

**Hydrophytic Vegetation Indicators:**  
☐ 1 - Rapid Test for Hydrophytic Vegetation  
☐ 2 - Dominance Test is > 50%  
☐ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
☐ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definition of Vegetation Strata:**  
 Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
 Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
 Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  
  
 Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
 Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
 Woody vine - All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes ☐ No ☒

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 2000

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 2001  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.253104° **Long.:** -91.344228° **Datum:** WGS 84  
**Soil Map Unit Name:** Teksob loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

Tree Stratum (Plot size: _____ )					Dominant Species?	Sampling Point: <u>2001</u>
	Absolute % Cover	Rel.Strat. Cover	Indicator Status			
1. _____	0	<input type="checkbox"/> 0.0%				
2. _____	0	<input type="checkbox"/> 0.0%				
3. _____	0	<input type="checkbox"/> 0.0%				
4. _____	0	<input type="checkbox"/> 0.0%				
5. _____	0	<input type="checkbox"/> 0.0%				
6. _____	0	<input type="checkbox"/> 0.0%				
7. _____	0	<input type="checkbox"/> 0.0%				
8. _____	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			
Sapling or Sapling/Shrub Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/> 0.0%				
2. _____	0	<input type="checkbox"/> 0.0%				
3. _____	0	<input type="checkbox"/> 0.0%				
4. _____	0	<input type="checkbox"/> 0.0%				
5. _____	0	<input type="checkbox"/> 0.0%				
6. _____	0	<input type="checkbox"/> 0.0%				
7. _____	0	<input type="checkbox"/> 0.0%				
8. _____	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			
Shrub Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/> 0.0%				
2. _____	0	<input type="checkbox"/> 0.0%				
3. _____	0	<input type="checkbox"/> 0.0%				
4. _____	0	<input type="checkbox"/> 0.0%				
5. _____	0	<input type="checkbox"/> 0.0%				
6. _____	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			
Herb Stratum (Plot size: <u>15'</u> )						
1. <u>Gossypium hirsutum</u>	60	<input checked="" type="checkbox"/> 60.0%	FACU			
2. <u>Stellaria media</u>	5	<input type="checkbox"/> 5.0%	FACU			
3. <u>Amaranthus spinosus</u>	5	<input type="checkbox"/> 5.0%	FACU			
4. <u>Lamium amplexicaule</u>	15	<input type="checkbox"/> 15.0%	UPL			
5. <u>Poa annua</u>	15	<input type="checkbox"/> 15.0%	FACU			
6. _____	0	<input type="checkbox"/> 0.0%				
7. _____	0	<input type="checkbox"/> 0.0%				
8. _____	0	<input type="checkbox"/> 0.0%				
9. _____	0	<input type="checkbox"/> 0.0%				
10. _____	0	<input type="checkbox"/> 0.0%				
11. _____	0	<input type="checkbox"/> 0.0%				
12. _____	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>50</u>	20% of Total Cover: <u>20</u>	100	= Total Cover			
Woody Vine Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/> 0.0%				
2. _____	0	<input type="checkbox"/> 0.0%				
3. _____	0	<input type="checkbox"/> 0.0%				
4. _____	0	<input type="checkbox"/> 0.0%				
5. _____	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			

**Dominance Test worksheet:**

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

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

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

**Prevalence Index worksheet:**

Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 0 x 3 = 0

FACU species 85 x 4 = 340

UPL species 15 x 5 = 75

Column Totals: 100 (A) 415 (B)

Prevalence Index = B/A = 4.150

**Hydrophytic Vegetation Indicators:**

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤3.0 <sup>1</sup>

☐ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)

<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definition of Vegetation Strata:**

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

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

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

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

Woody vine - All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes ☐ No ☒

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 2001

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 2002  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.253120° **Long.:** -91.345883° **Datum:** WGS 84  
**Soil Map Unit Name:** Teksob loam, 1 to 3 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

**Sampling Point:** 2002

Species?					
Tree Stratum	(Plot size: _____ )	Absolute % Cover	Rel.Strat. Cover	Indicator Status	
1.	_____	0	<input type="checkbox"/> 0.0%	_____	
2.	_____	0	<input type="checkbox"/> 0.0%	_____	
3.	_____	0	<input type="checkbox"/> 0.0%	_____	
4.	_____	0	<input type="checkbox"/> 0.0%	_____	
5.	_____	0	<input type="checkbox"/> 0.0%	_____	
6.	_____	0	<input type="checkbox"/> 0.0%	_____	
7.	_____	0	<input type="checkbox"/> 0.0%	_____	
8.	_____	0	<input type="checkbox"/> 0.0%	_____	
50% of Total Cover: 0      20% of Total Cover: 0		0	= Total Cover		
<b>Sapling or Sapling/Shrub Stratum</b> (Plot size: _____ )					
1.	_____	0	<input type="checkbox"/> 0.0%	_____	
2.	_____	0	<input type="checkbox"/> 0.0%	_____	
3.	_____	0	<input type="checkbox"/> 0.0%	_____	
4.	_____	0	<input type="checkbox"/> 0.0%	_____	
5.	_____	0	<input type="checkbox"/> 0.0%	_____	
6.	_____	0	<input type="checkbox"/> 0.0%	_____	
7.	_____	0	<input type="checkbox"/> 0.0%	_____	
8.	_____	0	<input type="checkbox"/> 0.0%	_____	
50% of Total Cover: 0      20% of Total Cover: 0		0	= Total Cover		
<b>Shrub Stratum</b> (Plot size: _____ )					
1.	_____	0	<input type="checkbox"/> 0.0%	_____	
2.	_____	0	<input type="checkbox"/> 0.0%	_____	
3.	_____	0	<input type="checkbox"/> 0.0%	_____	
4.	_____	0	<input type="checkbox"/> 0.0%	_____	
5.	_____	0	<input type="checkbox"/> 0.0%	_____	
6.	_____	0	<input type="checkbox"/> 0.0%	_____	
50% of Total Cover: 0      20% of Total Cover: 0		0	= Total Cover		
<b>Herb Stratum</b> (Plot size: 15' _____ )					
1.	Gossypium hirsutum	60	<input checked="" type="checkbox"/> 60.0%	FACU	
2.	Lamium amplexicaule	10	<input type="checkbox"/> 10.0%	UPL	
3.	Poa annua	25	<input checked="" type="checkbox"/> 25.0%	FACU	
4.	Amaranthus spinosus	5	<input type="checkbox"/> 5.0%	FACU	
5.	_____	0	<input type="checkbox"/> 0.0%	_____	
6.	_____	0	<input type="checkbox"/> 0.0%	_____	
7.	_____	0	<input type="checkbox"/> 0.0%	_____	
8.	_____	0	<input type="checkbox"/> 0.0%	_____	
9.	_____	0	<input type="checkbox"/> 0.0%	_____	
10.	_____	0	<input type="checkbox"/> 0.0%	_____	
11.	_____	0	<input type="checkbox"/> 0.0%	_____	
12.	_____	0	<input type="checkbox"/> 0.0%	_____	
50% of Total Cover: 50      20% of Total Cover: 20		100	= Total Cover		
<b>Woody Vine Stratum</b> (Plot size: _____ )					
1.	_____	0	<input type="checkbox"/> 0.0%	_____	
2.	_____	0	<input type="checkbox"/> 0.0%	_____	
3.	_____	0	<input type="checkbox"/> 0.0%	_____	
4.	_____	0	<input type="checkbox"/> 0.0%	_____	
5.	_____	0	<input type="checkbox"/> 0.0%	_____	
50% of Total Cover: 0      20% of Total Cover: 0		0	= Total Cover		

Dominance Test worksheet:			
Number of Dominant Species That are OBL, FACW, or FAC:	0	(A)	
Total Number of Dominant Species Across All Strata:	2	(B)	
Percent of dominant Species That Are OBL, FACW, or FAC:	0.0%	(A/B)	
<b>Prevalence Index worksheet:</b>			
Total % Cover of:	Multiply by:		
OBL species	0 x 1 =	0	
FACW species	0 x 2 =	0	
FAC species	0 x 3 =	0	
FACU species	90 x 4 =	360	
UPL species	10 x 5 =	50	
Column Totals:	100 (A)	410 (B)	
Prevalence Index = B/A =		4.100	
<b>Hydrophytic Vegetation Indicators:</b>			
<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation			
<input type="checkbox"/> 2 - Dominance Test is > 50%			
<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>			
<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)			
<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
<b>Definition of Vegetation Strata:</b>			
Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).			
Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.			
Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.			
Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.			
Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.			
Woody vine - All woody vines, regardless of height.			
<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>			

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



## SOIL

**Sampling Point:** 2002

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 2003  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.253134° **Long.:** -91.346541° **Datum:** WGS 84  
**Soil Map Unit Name:** Teksob loam, 1 to 3 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

 Sampling Point: 2003

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>85</u> x 4 = <u>340</u> UPL species <u>15</u> x 5 = <u>75</u> <b>Column Totals:</b> <u>100</u> (A) <u>415</u> (B)  Prevalence Index = B/A = <u>4.150</u>
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		
<b>Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		
<b>Herb Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Gossypium hirsutum</u>	60	<input checked="" type="checkbox"/> 60.0%	FACU	
2. <u>Lamium amplexicaule</u>	15	<input type="checkbox"/> 15.0%	UPL	
3. <u>Stellaria media</u>	5	<input type="checkbox"/> 5.0%	FACU	
4. <u>Poa annua</u>	15	<input type="checkbox"/> 15.0%	FACU	
5. <u>Amaranthus spinosus</u>	5	<input type="checkbox"/> 5.0%	FACU	
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
12. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>50</u> 20% of Total Cover: <u>20</u>	100	<b>= Total Cover</b>		
<b>Woody Vine Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		

Remarks: (If observed, list morphological adaptations below).

**Hydrophytic Vegetation Indicators:**  
☐ 1 - Rapid Test for Hydrophytic Vegetation  
☐ 2 - Dominance Test is > 50%  
☐ 3 - Prevalence Index is ≤3.0 <sup>1</sup>  
☐ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  
  
<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definition of Vegetation Strata:**  
 Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
 Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
 Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  
  
 Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
 Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
 Woody vine - All woody vines, regardless of height.

**Hydrophytic Vegetation Present?**    Yes ☐    No ☒

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

## SOIL

**Sampling Point:** 2003

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 2004  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.255148° **Long.:** -91.347179° **Datum:** WGS 84  
**Soil Map Unit Name:** Teksob loam, 1 to 3 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

 Sampling Point: 2004

Tree Stratum	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/>	0.0%	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>95</u> x 4 = <u>380</u> UPL species <u>5</u> x 5 = <u>25</u> <b>Column Totals:</b> <u>100</u> (A) <u>405</u> (B)  Prevalence Index = B/A = <u>4.050</u>
<b>Sapling or Sapling/Shrub Stratum</b> (Plot size: _____ )					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			
<b>Shrub Stratum</b> (Plot size: _____ )					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			
<b>Herb Stratum</b> (Plot size: <u>15'</u> )					
1. <u>Gossypium hirsutum</u>	65	<input checked="" type="checkbox"/>	65.0%	FACU	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> <b>1 - Rapid Test for Hydrophytic Vegetation</b> <input type="checkbox"/> <b>2 - Dominance Test is &gt; 50%</b> <input type="checkbox"/> <b>3 - Prevalence Index is ≤3.0<sup>1</sup></b> <input type="checkbox"/> <b>Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)</b>  <sup>1</sup> <b>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</b>
2. <u>Amaranthus spinosus</u>	10	<input type="checkbox"/>	10.0%	FACU	
3. <u>Poa annua</u>	20	<input checked="" type="checkbox"/>	20.0%	FACU	
4. <u>Lamium amplexicaule</u>	5	<input type="checkbox"/>	5.0%	UPL	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
9. _____	0	<input type="checkbox"/>	0.0%	_____	
10. _____	0	<input type="checkbox"/>	0.0%	_____	
11. _____	0	<input type="checkbox"/>	0.0%	_____	
12. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>50</u> 20% of Total Cover: <u>20</u>	100	<b>= Total Cover</b>			
<b>Woody Vine Stratum</b> (Plot size: _____ )					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			

Remarks: (If observed, list morphological adaptations below).

**Hydrophytic Vegetation Present?**    Yes ☐    No ☒

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

## SOIL

**Sampling Point:** 2004

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 2005  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.255121° **Long.:** -91.345078° **Datum:** WGS 84  
**Soil Map Unit Name:** Teksob loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		



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

 Sampling Point: 2005

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>90</u> x 4 = <u>360</u> UPL species <u>10</u> x 5 = <u>50</u> <b>Column Totals:</b> <u>100</u> (A) <u>410</u> (B)  Prevalence Index = B/A = <u>4.100</u>
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Herb Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Gossypium hirsutum</u>	60	<input checked="" type="checkbox"/> 60.0%	FACU	<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
2. <u>Poa annua</u>	25	<input checked="" type="checkbox"/> 25.0%	FACU	
3. <u>Lamium amplexicaule</u>	10	<input type="checkbox"/> 10.0%	UPL	
4. <u>Amaranthus spinosus</u>	5	<input type="checkbox"/> 5.0%	FACU	
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
12. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>50</u> 20% of Total Cover: <u>20</u> 100 = <b>Total Cover</b>				
<b>Woody Vine Stratum (Plot size: _____ )</b>				<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 2005

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 2006  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.255106° **Long.:** -91.343515° **Datum:** WGS 84  
**Soil Map Unit Name:** Teksob loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

 Sampling Point: 2006

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>90</u> x 4 = <u>360</u> UPL species <u>10</u> x 5 = <u>50</u> <b>Column Totals:</b> <u>100</u> (A) <u>410</u> (B)  Prevalence Index = B/A = <u>4.100</u>
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Herb Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Gossypium hirsutum</u>	60	<input checked="" type="checkbox"/> 60.0%	FACU	<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
2. <u>Poa annua</u>	25	<input checked="" type="checkbox"/> 25.0%	FACU	
3. <u>Lamium amplexicaule</u>	10	<input type="checkbox"/> 10.0%	UPL	
4. <u>Amaranthus spinosus</u>	5	<input type="checkbox"/> 5.0%	FACU	
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
12. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>50</u> 20% of Total Cover: <u>20</u> 100 = <b>Total Cover</b>				
<b>Woody Vine Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 2006

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 2007  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.255095° **Long.:** -91.342075° **Datum:** WGS 84  
**Soil Map Unit Name:** Teksob loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

Tree Stratum (Plot size: _____ )					Dominant Species?	Sampling Point: <u>2007</u>
	Absolute % Cover	Rel.Strat. Cover	Indicator Status			
1. _____	0	<input type="checkbox"/>	0.0%			
2. _____	0	<input type="checkbox"/>	0.0%			
3. _____	0	<input type="checkbox"/>	0.0%			
4. _____	0	<input type="checkbox"/>	0.0%			
5. _____	0	<input type="checkbox"/>	0.0%			
6. _____	0	<input type="checkbox"/>	0.0%			
7. _____	0	<input type="checkbox"/>	0.0%			
8. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			
Sapling or Sapling/Shrub Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/>	0.0%			
2. _____	0	<input type="checkbox"/>	0.0%			
3. _____	0	<input type="checkbox"/>	0.0%			
4. _____	0	<input type="checkbox"/>	0.0%			
5. _____	0	<input type="checkbox"/>	0.0%			
6. _____	0	<input type="checkbox"/>	0.0%			
7. _____	0	<input type="checkbox"/>	0.0%			
8. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			
Shrub Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/>	0.0%			
2. _____	0	<input type="checkbox"/>	0.0%			
3. _____	0	<input type="checkbox"/>	0.0%			
4. _____	0	<input type="checkbox"/>	0.0%			
5. _____	0	<input type="checkbox"/>	0.0%			
6. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			
Herb Stratum (Plot size: <u>15'</u> )						
1. <u>Gossypium hirsutum</u>	60	<input checked="" type="checkbox"/>	60.0%	FACU		
2. <u>Lamium amplexicaule</u>	10	<input type="checkbox"/>	10.0%	UPL		
3. <u>Poa annua</u>	25	<input checked="" type="checkbox"/>	25.0%	FACU		
4. <u>Amaranthus spinosus</u>	5	<input type="checkbox"/>	5.0%	FACU		
5. _____	0	<input type="checkbox"/>	0.0%			
6. _____	0	<input type="checkbox"/>	0.0%			
7. _____	0	<input type="checkbox"/>	0.0%			
8. _____	0	<input type="checkbox"/>	0.0%			
9. _____	0	<input type="checkbox"/>	0.0%			
10. _____	0	<input type="checkbox"/>	0.0%			
11. _____	0	<input type="checkbox"/>	0.0%			
12. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>50</u>	20% of Total Cover: <u>20</u>	100	= Total Cover			
Woody Vine Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/>	0.0%			
2. _____	0	<input type="checkbox"/>	0.0%			
3. _____	0	<input type="checkbox"/>	0.0%			
4. _____	0	<input type="checkbox"/>	0.0%			
5. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			

**Dominance Test worksheet:**  
 Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)  
  
 Total Number of Dominant Species Across All Strata: 2 (B)  
  
 Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

**Prevalence Index worksheet:**  
 Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_  
 OBL species 0 x 1 = 0  
 FACW species 0 x 2 = 0  
 FAC species 0 x 3 = 0  
 FACU species 90 x 4 = 360  
 UPL species 10 x 5 = 50  
**Column Totals:** 100 (A) 410 (B)  
  
 Prevalence Index = B/A = 4.100

**Hydrophytic Vegetation Indicators:**  
☐ 1 - Rapid Test for Hydrophytic Vegetation  
☐ 2 - Dominance Test is > 50%  
☐ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
☐ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definition of Vegetation Strata:**  
 Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
 Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
 Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  
  
 Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
 Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
 Woody vine - All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes ☐ No ☒

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 2007

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:



# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 2008  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 7 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.255077° **Long.:** -91.340906° **Datum:** WGS 84  
**Soil Map Unit Name:** Dundee silt loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

 Sampling Point: 2008

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>90</u> x 4 = <u>360</u> UPL species <u>10</u> x 5 = <u>50</u> <b>Column Totals:</b> <u>100</u> (A) <u>410</u> (B)  Prevalence Index = B/A = <u>4.100</u>
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		
<b>Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		
<b>Herb Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Gossypium hirsutum</u>	60	<input checked="" type="checkbox"/> 60.0%	FACU	<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Poa annua</u>	25	<input checked="" type="checkbox"/> 25.0%	FACU	
3. <u>Lamium amplexicaule</u>	10	<input type="checkbox"/> 10.0%	UPL	
4. <u>Amaranthus spinosus</u>	5	<input type="checkbox"/> 5.0%	FACU	
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
12. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>50</u> 20% of Total Cover: <u>20</u>	100	<b>= Total Cover</b>		
<b>Woody Vine Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		

Remarks: (If observed, list morphological adaptations below).

**Definition of Vegetation Strata:**  
 Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
 Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
 Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  
  
 Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
 Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
 Woody vine - All woody vines, regardless of height.

**Hydrophytic Vegetation Present?**    Yes ☐    No ☒

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

## SOIL

**Sampling Point:** 2008

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 2025  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.264431° **Long.:** -91.341054° **Datum:** WGS 84  
**Soil Map Unit Name:** Teksob loam, 1 to 3 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (minimum of 2 required)</b>	
<b>Primary Indicators (minimum of one required; check all that apply)</b>			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
<b>Field Observations:</b>		<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology indicators present.			

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

Sampling Point: 2025

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>80</u> x 4 = <u>320</u> UPL species <u>15</u> x 5 = <u>75</u> <b>Column Totals:</b> <u>95</u> (A) <u>395</u> (B)  Prevalence Index = B/A = <u>4.158</u>
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		
<b>Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		
<b>Herb Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Gossypium hirsutum</u>	60	<input checked="" type="checkbox"/> 63.2%	FACU	<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Amaranthus spinosus</u>	5	<input type="checkbox"/> 5.3%	FACU	
3. <u>Lamium amplexicaule</u>	15	<input type="checkbox"/> 15.8%	UPL	
4. <u>Poa annua</u>	10	<input type="checkbox"/> 10.5%	FACU	
5. <u>Stellaria media</u>	5	<input type="checkbox"/> 5.3%	FACU	
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
12. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>47.5</u> 20% of Total Cover: <u>19</u>	95	<b>= Total Cover</b>		
<b>Woody Vine Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		

Remarks: (If observed, list morphological adaptations below).

**Definition of Vegetation Strata:**  
 Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
 Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
 Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  
  
 Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
 Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
 Woody vine - All woody vines, regardless of height.

**Hydrophytic Vegetation Present?**    Yes ☐    No ☒

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

## SOIL

Sampling Point: 2025

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-13	10YR	4/4	100				Silt Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 2027  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.261153° **Long.:** -91.344282° **Datum:** WGS 84  
**Soil Map Unit Name:** Teksob loam, 1 to 3 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

Dominant Species?

Sampling Point: 2027

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/>	0.0%	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>75</u> x 4 = <u>300</u> UPL species <u>5</u> x 5 = <u>25</u> <b>Column Totals:</b> <u>80</u> (A) <u>325</u> (B)  Prevalence Index = B/A = <u>4.063</u>
<b>Sapling or Sapling/Shrub Stratum</b> (Plot size: _____)					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					
<b>Shrub Stratum</b> (Plot size: _____)					
1. _____	0	<input type="checkbox"/>	0.0%	_____	<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					
<b>Herb Stratum</b> (Plot size: 15' _____)					
1. <i>Gossypium hirsutum</i>	60	<input checked="" type="checkbox"/>	75.0%	FACU	<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
2. <i>Lamium amplexicaule</i>	5	<input type="checkbox"/>	6.3%	UPL	
3. <i>Stellaria media</i>	5	<input type="checkbox"/>	6.3%	FACU	
4. <i>Poa annua</i>	10	<input type="checkbox"/>	12.5%	FACU	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
9. _____	0	<input type="checkbox"/>	0.0%	_____	
10. _____	0	<input type="checkbox"/>	0.0%	_____	
11. _____	0	<input type="checkbox"/>	0.0%	_____	
12. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>40</u> 20% of Total Cover: <u>16</u> 80 = <b>Total Cover</b>					
<b>Woody Vine Stratum</b> (Plot size: _____)					<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					

Remarks: (If observed, list morphological adaptations below).

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



## SOIL

**Sampling Point:** 2027

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 2028  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.261121° **Long.:** -91.341682° **Datum:** WGS 84  
**Soil Map Unit Name:** Teksob loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (minimum of 2 required)</b>	
<b>Primary Indicators (minimum of one required; check all that apply)</b>			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
<b>Field Observations:</b>		<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology indicators present.			

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

Dominant Species?					Sampling Point: 2028
Tree Stratum (Plot size: _____)	Absolute % Cover	Rel.Strat. Cover	Indicator Status		
1. _____	0	<input type="checkbox"/>	0.0%		
2. _____	0	<input type="checkbox"/>	0.0%		
3. _____	0	<input type="checkbox"/>	0.0%		
4. _____	0	<input type="checkbox"/>	0.0%		
5. _____	0	<input type="checkbox"/>	0.0%		
6. _____	0	<input type="checkbox"/>	0.0%		
7. _____	0	<input type="checkbox"/>	0.0%		
8. _____	0	<input type="checkbox"/>	0.0%		
50% of Total Cover: 0    20% of Total Cover: 0	0	= Total Cover			
Sapling or Sapling/Shrub Stratum (Plot size: _____)					
1. _____	0	<input type="checkbox"/>	0.0%		
2. _____	0	<input type="checkbox"/>	0.0%		
3. _____	0	<input type="checkbox"/>	0.0%		
4. _____	0	<input type="checkbox"/>	0.0%		
5. _____	0	<input type="checkbox"/>	0.0%		
6. _____	0	<input type="checkbox"/>	0.0%		
7. _____	0	<input type="checkbox"/>	0.0%		
8. _____	0	<input type="checkbox"/>	0.0%		
50% of Total Cover: 0    20% of Total Cover: 0	0	= Total Cover			
Shrub Stratum (Plot size: _____)					
1. _____	0	<input type="checkbox"/>	0.0%		
2. _____	0	<input type="checkbox"/>	0.0%		
3. _____	0	<input type="checkbox"/>	0.0%		
4. _____	0	<input type="checkbox"/>	0.0%		
5. _____	0	<input type="checkbox"/>	0.0%		
6. _____	0	<input type="checkbox"/>	0.0%		
50% of Total Cover: 0    20% of Total Cover: 0	0	= Total Cover			
Herb Stratum (Plot size: 15')					
1. <i>Gossypium hirsutum</i>	60	<input checked="" type="checkbox"/>	80.0%	FACU	
2. <i>Lamium amplexicaule</i>	5	<input type="checkbox"/>	6.7%	UPL	
3. <i>Poa annua</i>	10	<input type="checkbox"/>	13.3%	FACU	
4. _____	0	<input type="checkbox"/>	0.0%		
5. _____	0	<input type="checkbox"/>	0.0%		
6. _____	0	<input type="checkbox"/>	0.0%		
7. _____	0	<input type="checkbox"/>	0.0%		
8. _____	0	<input type="checkbox"/>	0.0%		
9. _____	0	<input type="checkbox"/>	0.0%		
10. _____	0	<input type="checkbox"/>	0.0%		
11. _____	0	<input type="checkbox"/>	0.0%		
12. _____	0	<input type="checkbox"/>	0.0%		
50% of Total Cover: 37.5    20% of Total Cover: 15	75	= Total Cover			
Woody Vine Stratum (Plot size: _____)					
1. _____	0	<input type="checkbox"/>	0.0%		
2. _____	0	<input type="checkbox"/>	0.0%		
3. _____	0	<input type="checkbox"/>	0.0%		
4. _____	0	<input type="checkbox"/>	0.0%		
5. _____	0	<input type="checkbox"/>	0.0%		
50% of Total Cover: 0    20% of Total Cover: 0	0	= Total Cover			

**Dominance Test worksheet:**

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

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

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

**Prevalence Index worksheet:**

Total % Cover of: 0 Multiply by: 1

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 0 x 3 = 0

FACU species 70 x 4 = 280

UPL species 5 x 5 = 25

Column Totals: 75 (A) 305 (B)

Prevalence Index = B/A = 4.067

**Hydrophytic Vegetation Indicators:**

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤ 3.0<sup>1</sup>

☐ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definition of Vegetation Strata:**

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

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

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

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

Woody vine - All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes ☐ No ☒

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 2028

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 2029  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.258273° **Long.:** -91.341840° **Datum:** WGS 84  
**Soil Map Unit Name:** Teksob loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

**Sampling Point:** 2029

Tree Stratum		Sapling or Sapling/Shrub Stratum		Shrub Stratum		Herb Stratum		Woody Vine Stratum			
(Plot size: _____ )		(Plot size: _____ )		(Plot size: _____ )		(Plot size: 15' _____ )		(Plot size: _____ )			
Absolute % Cover		Absolute % Cover		Absolute % Cover		Absolute % Cover		Absolute % Cover			
Rel.Strat. Cover		Rel.Strat. Cover		Rel.Strat. Cover		Rel.Strat. Cover		Rel.Strat. Cover			
Indicator Status		Indicator Status		Indicator Status		Indicator Status		Indicator Status			
1.	_____	0	<input type="checkbox"/>	0.0%	_____	1.	Gossypium hirsutum	60	<input checked="" type="checkbox"/>	63.2%	FACU
2.	_____	0	<input type="checkbox"/>	0.0%	_____	2.	Poa annua	20	<input checked="" type="checkbox"/>	21.1%	FACU
3.	_____	0	<input type="checkbox"/>	0.0%	_____	3.	Lamium amplexicaule	10	<input type="checkbox"/>	10.5%	UPL
4.	_____	0	<input type="checkbox"/>	0.0%	_____	4.	Amaranthus spinosus	5	<input type="checkbox"/>	5.3%	FACU
5.	_____	0	<input type="checkbox"/>	0.0%	_____	5.	_____	0	<input type="checkbox"/>	0.0%	_____
6.	_____	0	<input type="checkbox"/>	0.0%	_____	6.	_____	0	<input type="checkbox"/>	0.0%	_____
7.	_____	0	<input type="checkbox"/>	0.0%	_____	7.	_____	0	<input type="checkbox"/>	0.0%	_____
8.	_____	0	<input type="checkbox"/>	0.0%	_____	8.	_____	0	<input type="checkbox"/>	0.0%	_____
50% of Total Cover: 0		20% of Total Cover: 0		0 = Total Cover		50% of Total Cover: 47.5		20% of Total Cover: 19		95 = Total Cover	
Sapling or Sapling/Shrub Stratum		Sapling or Sapling/Shrub Stratum		Sapling or Sapling/Shrub Stratum		Sapling or Sapling/Shrub Stratum		Sapling or Sapling/Shrub Stratum			
(Plot size: _____ )		(Plot size: _____ )		(Plot size: _____ )		(Plot size: 15' _____ )		(Plot size: _____ )			
1.	_____	0	<input type="checkbox"/>	0.0%	_____	1.	_____	0	<input type="checkbox"/>	0.0%	_____
2.	_____	0	<input type="checkbox"/>	0.0%	_____	2.	_____	0	<input type="checkbox"/>	0.0%	_____
3.	_____	0	<input type="checkbox"/>	0.0%	_____	3.	_____	0	<input type="checkbox"/>	0.0%	_____
4.	_____	0	<input type="checkbox"/>	0.0%	_____	4.	_____	0	<input type="checkbox"/>	0.0%	_____
5.	_____	0	<input type="checkbox"/>	0.0%	_____	5.	_____	0	<input type="checkbox"/>	0.0%	_____
6.	_____	0	<input type="checkbox"/>	0.0%	_____	6.	_____	0	<input type="checkbox"/>	0.0%	_____
7.	_____	0	<input type="checkbox"/>	0.0%	_____	7.	_____	0	<input type="checkbox"/>	0.0%	_____
8.	_____	0	<input type="checkbox"/>	0.0%	_____	8.	_____	0	<input type="checkbox"/>	0.0%	_____
50% of Total Cover: 0		20% of Total Cover: 0		0 = Total Cover		50% of Total Cover: 47.5		20% of Total Cover: 19		95 = Total Cover	
Shrub Stratum		Shrub Stratum		Shrub Stratum		Shrub Stratum		Shrub Stratum			
(Plot size: _____ )		(Plot size: _____ )		(Plot size: _____ )		(Plot size: 15' _____ )		(Plot size: _____ )			
1.	_____	0	<input type="checkbox"/>	0.0%	_____	1.	_____	0	<input type="checkbox"/>	0.0%	_____
2.	_____	0	<input type="checkbox"/>	0.0%	_____	2.	_____	0	<input type="checkbox"/>	0.0%	_____
3.	_____	0	<input type="checkbox"/>	0.0%	_____	3.	_____	0	<input type="checkbox"/>	0.0%	_____
4.	_____	0	<input type="checkbox"/>	0.0%	_____	4.	_____	0	<input type="checkbox"/>	0.0%	_____
5.	_____	0	<input type="checkbox"/>	0.0%	_____	5.	_____	0	<input type="checkbox"/>	0.0%	_____
6.	_____	0	<input type="checkbox"/>	0.0%	_____	6.	_____	0	<input type="checkbox"/>	0.0%	_____
7.	_____	0	<input type="checkbox"/>	0.0%	_____	7.	_____	0	<input type="checkbox"/>	0.0%	_____
8.	_____	0	<input type="checkbox"/>	0.0%	_____	8.	_____	0	<input type="checkbox"/>	0.0%	_____
50% of Total Cover: 0		20% of Total Cover: 0		0 = Total Cover		50% of Total Cover: 47.5		20% of Total Cover: 19		95 = Total Cover	
Herb Stratum		Herb Stratum		Herb Stratum		Herb Stratum		Herb Stratum			
(Plot size: 15' _____ )		(Plot size: _____ )		(Plot size: _____ )		(Plot size: 15' _____ )		(Plot size: _____ )			
1.	_____	0	<input type="checkbox"/>	0.0%	_____	1.	_____	0	<input type="checkbox"/>	0.0%	_____
2.	_____	0	<input type="checkbox"/>	0.0%	_____	2.	_____	0	<input type="checkbox"/>	0.0%	_____
3.	_____	0	<input type="checkbox"/>	0.0%	_____	3.	_____	0	<input type="checkbox"/>	0.0%	_____
4.	_____	0	<input type="checkbox"/>	0.0%	_____	4.	_____	0	<input type="checkbox"/>	0.0%	_____
5.	_____	0	<input type="checkbox"/>	0.0%	_____	5.	_____	0	<input type="checkbox"/>	0.0%	_____
6.	_____	0	<input type="checkbox"/>	0.0%	_____	6.	_____	0	<input type="checkbox"/>	0.0%	_____
7.	_____	0	<input type="checkbox"/>	0.0%	_____	7.	_____	0	<input type="checkbox"/>	0.0%	_____
8.	_____	0	<input type="checkbox"/>	0.0%	_____	8.	_____	0	<input type="checkbox"/>	0.0%	_____
9.	_____	0	<input type="checkbox"/>	0.0%	_____	9.	_____	0	<input type="checkbox"/>	0.0%	_____
10.	_____	0	<input type="checkbox"/>	0.0%	_____	10.	_____	0	<input type="checkbox"/>	0.0%	_____
11.	_____	0	<input type="checkbox"/>	0.0%	_____	11.	_____</				

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

## SOIL

Sampling Point: 2029

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10YR	4/4	100				Silt Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- |  |   |
|--|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                                       |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                                    |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                                     |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                         |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 2030  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.258289° **Long.:** -91.344115° **Datum:** WGS 84  
**Soil Map Unit Name:** Teksob loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		



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

 Sampling Point: 2030

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>85</u> x 4 = <u>340</u> UPL species <u>10</u> x 5 = <u>50</u> <b>Column Totals:</b> <u>95</u> (A) <u>390</u> (B)  Prevalence Index = B/A = <u>4.105</u>
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Herb Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Gossypium hirsutum</u>	60	<input checked="" type="checkbox"/> 63.2%	FACU	<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
2. <u>Poa annua</u>	20	<input checked="" type="checkbox"/> 21.1%	FACU	
3. <u>Lamium amplexicaule</u>	10	<input type="checkbox"/> 10.5%	UPL	
4. <u>Amaranthus spinosus</u>	5	<input type="checkbox"/> 5.3%	FACU	
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
12. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>47.5</u> 20% of Total Cover: <u>19</u> 95 = <b>Total Cover</b>				
<b>Woody Vine Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 2030

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 2031  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.258324° **Long.:** -91.346605° **Datum:** WGS 84  
**Soil Map Unit Name:** Tuckerman loam, 0 to 1 percent slopes, frequently flooded **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

 Sampling Point: 2031

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>85</u> x 4 = <u>340</u> UPL species <u>10</u> x 5 = <u>50</u> <b>Column Totals:</b> <u>95</u> (A) <u>390</u> (B)  Prevalence Index = B/A = <u>4.105</u>
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		
<b>Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		
<b>Herb Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Gossypium hirsutum</u>	60	<input checked="" type="checkbox"/> 63.2%	FACU	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  <b>Definition of Vegetation Strata:</b> Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
2. <u>Poa annua</u>	20	<input checked="" type="checkbox"/> 21.1%	FACU	
3. <u>Lamium amplexicaule</u>	10	<input type="checkbox"/> 10.5%	UPL	
4. <u>Amaranthus spinosus</u>	5	<input type="checkbox"/> 5.3%	FACU	
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
12. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>47.5</u> 20% of Total Cover: <u>19</u>	95	<b>= Total Cover</b>		
<b>Woody Vine Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

Sampling Point: 2031

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10YR	4/4	100				Silt Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 2035  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.264609° **Long.:** -91.354405° **Datum:** WGS 84  
**Soil Map Unit Name:** Jackport silty clay loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

 Sampling Point: 2035

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>10</u> x 2 = <u>20</u> FAC species <u>45</u> x 3 = <u>135</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> <b>Column Totals:</b> <u>55</u> (A) <u>155</u> (B)  Prevalence Index = B/A = <u>2.818</u>
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is > 50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Herb Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Andropogon virginicus</u>	10	<input type="checkbox"/> 18.2% FAC		<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
2. <u>Ranunculus sardous</u>	30	<input checked="" type="checkbox"/> 54.5% FAC		
3. <u>Setaria parviflora</u>	10	<input type="checkbox"/> 18.2% FACW		
4. <u>Rumex crispus</u>	5	<input type="checkbox"/> 9.1% FAC		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
12. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>27.5</u> 20% of Total Cover: <u>11</u> 55 = <b>Total Cover</b>				
<b>Woody Vine Stratum (Plot size: _____ )</b>				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 2035

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |   |
|--|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)           |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                 |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                     |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                             |
| <input type="checkbox"/> Stratified Layers (A5)                | <input checked="" type="checkbox"/> Depleted Matrix (F3)                      |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                              |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                           |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                               |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                                   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                     |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input checked="" type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T) |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                   |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                        |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)               |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)          |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 150A)       |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches):

Hydric Soil Present? Yes ☒ No ☐

Remarks:



# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 2036  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.264484° **Long.:** -91.353297° **Datum:** WGS 84  
**Soil Map Unit Name:** Jackport silty clay loam, 0 to 1 percent slopes **NWI classification:**

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

 Sampling Point: 2036

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>30</u> x 2 = <u>60</u> FAC species <u>55</u> x 3 = <u>165</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> <b>Column Totals:</b> <u>85</u> (A) <u>225</u> (B)  Prevalence Index = B/A = <u>2.647</u>
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is > 50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤ 3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Herb Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Andropogon virginicus</u>	35	<input checked="" type="checkbox"/> 41.2%	FAC	<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
2. <u>Leptochloa fusca</u>	30	<input checked="" type="checkbox"/> 35.3%	FACW	
3. <u>Ranunculus sardous</u>	20	<input checked="" type="checkbox"/> 23.5%	FAC	
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
12. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>42.5</u> 20% of Total Cover: <u>17</u> 85 = <b>Total Cover</b>				
<b>Woody Vine Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

Sampling Point: 2036

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

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>				
0-2	10YR	4/2	100						Silty Clay Loam	
2-12	10YR	6/2	75	10YR	6/6	20	C	M	Silty Clay Loam	
				5Y	2.5/1	5	C	M	Silty Clay Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☒ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 2037  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.264482° **Long.:** -91.349563° **Datum:** WGS 84  
**Soil Map Unit Name:** Jackport silty clay loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

Dominant Species?					Sampling Point: 2037
Tree Stratum (Plot size: )	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:	
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)	
2. _____	0	<input type="checkbox"/> 0.0%		Total Number of Dominant Species Across All Strata: 3 (B)	
3. _____	0	<input type="checkbox"/> 0.0%		Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)	
4. _____	0	<input type="checkbox"/> 0.0%		Prevalence Index worksheet:	
5. _____	0	<input type="checkbox"/> 0.0%		Total % Cover of: Multiply by:	
6. _____	0	<input type="checkbox"/> 0.0%		OBL species 0 x 1 = 0	
7. _____	0	<input type="checkbox"/> 0.0%		FACW species 30 x 2 = 60	
8. _____	0	<input type="checkbox"/> 0.0%		FAC species 45 x 3 = 135	
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover				FACU species 0 x 4 = 0	
Sapling or Sapling/Shrub Stratum (Plot size: )				UPL species 0 x 5 = 0	
1. _____	0	<input type="checkbox"/> 0.0%		Column Totals: 75 (A) 195 (B)	
2. _____	0	<input type="checkbox"/> 0.0%		Prevalence Index = B/A = 2.600	
3. _____	0	<input type="checkbox"/> 0.0%		Hydrophytic Vegetation Indicators:	
4. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
5. _____	0	<input type="checkbox"/> 0.0%		<input checked="" type="checkbox"/> 2 - Dominance Test is > 50%	
6. _____	0	<input type="checkbox"/> 0.0%		<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
7. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
8. _____	0	<input type="checkbox"/> 0.0%		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover				Definition of Vegetation Strata:	
Shrub Stratum (Plot size: )				Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).	
1. _____	0	<input type="checkbox"/> 0.0%		Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.	
2. _____	0	<input type="checkbox"/> 0.0%		Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.	
3. _____	0	<input type="checkbox"/> 0.0%		Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
4. _____	0	<input type="checkbox"/> 0.0%		Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.	
5. _____	0	<input type="checkbox"/> 0.0%		Woody vine - All woody vines, regardless of height.	
6. _____	0	<input type="checkbox"/> 0.0%			
7. _____	0	<input type="checkbox"/> 0.0%			
8. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover					
Herb Stratum (Plot size: 15')					
1. Andropogon virginicus	25	<input checked="" type="checkbox"/> 33.3%	FAC		
2. Ranunculus sardous	20	<input checked="" type="checkbox"/> 26.7%	FAC		
3. Leptochloa fusca	30	<input checked="" type="checkbox"/> 40.0%	FACW		
4. _____	0	<input type="checkbox"/> 0.0%			
5. _____	0	<input type="checkbox"/> 0.0%			
6. _____	0	<input type="checkbox"/> 0.0%			
7. _____	0	<input type="checkbox"/> 0.0%			
8. _____	0	<input type="checkbox"/> 0.0%			
9. _____	0	<input type="checkbox"/> 0.0%			
10. _____	0	<input type="checkbox"/> 0.0%			
11. _____	0	<input type="checkbox"/> 0.0%			
12. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 37.5 20% of Total Cover: 15 75 = Total Cover					
Woody Vine Stratum (Plot size: )					
1. _____	0	<input type="checkbox"/> 0.0%			
2. _____	0	<input type="checkbox"/> 0.0%			
3. _____	0	<input type="checkbox"/> 0.0%			
4. _____	0	<input type="checkbox"/> 0.0%			
5. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover					
Remarks: (If observed, list morphological adaptations below).					Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>

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

## SOIL

Sampling Point: 2037

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

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)		%	Color (moist)		%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2	10YR	4/2	100						Silty Clay Loam	
2-12	10YR	6/2	75	10YR	6/6	20	C	M	Silty Clay Loam	
				5YR	2.5/1	5	C	M	Silty Clay Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- |  |   |
|--|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   |
| <input type="checkbox"/> Stratified Layers (A5)                | <input checked="" type="checkbox"/> Depleted Matrix (F3)                            |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                                    |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                                     |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input checked="" type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)       |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                         |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 2038  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.264516° **Long.:** -91.347162° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

Dominant Species?					Sampling Point: 2038
Tree Stratum (Plot size: )	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:	
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)	
2. _____	0	<input type="checkbox"/> 0.0%		Total Number of Dominant Species Across All Strata: 2 (B)	
3. _____	0	<input type="checkbox"/> 0.0%		Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)	
4. _____	0	<input type="checkbox"/> 0.0%		Prevalence Index worksheet:	
5. _____	0	<input type="checkbox"/> 0.0%		Total % Cover of: Multiply by:	
6. _____	0	<input type="checkbox"/> 0.0%		OBL species 0 x 1 = 0	
7. _____	0	<input type="checkbox"/> 0.0%		FACW species 0 x 2 = 0	
8. _____	0	<input type="checkbox"/> 0.0%		FAC species 0 x 3 = 0	
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover				FACU species 85 x 4 = 340	
Sapling or Sapling/Shrub Stratum (Plot size: )				UPL species 0 x 5 = 0	
1. _____	0	<input type="checkbox"/> 0.0%		Column Totals: 85 (A) 340 (B)	
2. _____	0	<input type="checkbox"/> 0.0%		Prevalence Index = B/A = 4.000	
3. _____	0	<input type="checkbox"/> 0.0%		Hydrophytic Vegetation Indicators:	
4. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
5. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 2 - Dominance Test is > 50%	
6. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
7. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
8. _____	0	<input type="checkbox"/> 0.0%		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover				Definition of Vegetation Strata:	
Shrub Stratum (Plot size: )				Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).	
1. _____	0	<input type="checkbox"/> 0.0%		Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.	
2. _____	0	<input type="checkbox"/> 0.0%		Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.	
3. _____	0	<input type="checkbox"/> 0.0%		Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
4. _____	0	<input type="checkbox"/> 0.0%		Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.	
5. _____	0	<input type="checkbox"/> 0.0%		Woody vine - All woody vines, regardless of height.	
6. _____	0	<input type="checkbox"/> 0.0%			
7. _____	0	<input type="checkbox"/> 0.0%			
8. _____	0	<input type="checkbox"/> 0.0%			
9. _____	0	<input type="checkbox"/> 0.0%			
10. _____	0	<input type="checkbox"/> 0.0%			
11. _____	0	<input type="checkbox"/> 0.0%			
12. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 42.5 20% of Total Cover: 17 85 = Total Cover				Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Herb Stratum (Plot size: 15')					
1. <i>Gossypium hirsutum</i>	60	<input checked="" type="checkbox"/> 70.6%	FACU		
2. <i>Poa annua</i>	25	<input checked="" type="checkbox"/> 29.4%	FACU		
3. _____	0	<input type="checkbox"/> 0.0%			
4. _____	0	<input type="checkbox"/> 0.0%			
5. _____	0	<input type="checkbox"/> 0.0%			
6. _____	0	<input type="checkbox"/> 0.0%			
7. _____	0	<input type="checkbox"/> 0.0%			
8. _____	0	<input type="checkbox"/> 0.0%			
9. _____	0	<input type="checkbox"/> 0.0%			
10. _____	0	<input type="checkbox"/> 0.0%			
11. _____	0	<input type="checkbox"/> 0.0%			
12. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 42.5 20% of Total Cover: 17 85 = Total Cover					
Woody Vine Stratum (Plot size: )					
1. _____	0	<input type="checkbox"/> 0.0%			
2. _____	0	<input type="checkbox"/> 0.0%			
3. _____	0	<input type="checkbox"/> 0.0%			
4. _____	0	<input type="checkbox"/> 0.0%			
5. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover					

Remarks: (If observed, list morphological adaptations below).

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



## SOIL

**Sampling Point:** 2038

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining, M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches):

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 2039  
**Investigator(s):** SJH/WHG **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.264421° **Long.:** -91.344208° **Datum:** WGS 84  
**Soil Map Unit Name:** Teksob loam, 1 to 3 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

 Sampling Point: 2039

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>105</u> x 4 = <u>420</u> UPL species <u>5</u> x 5 = <u>25</u> <b>Column Totals:</b> <u>110</u> (A) <u>445</u> (B)  Prevalence Index = B/A = <u>4.045</u>
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Herb Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Gossypium hirsutum</u>	60	<input checked="" type="checkbox"/> 54.5%	FACU	<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
2. <u>Stellaria media</u>	15	<input type="checkbox"/> 13.6%	FACU	
3. <u>Poa annua</u>	30	<input checked="" type="checkbox"/> 27.3%	FACU	
4. <u>Lamium amplexicaule</u>	5	<input type="checkbox"/> 4.5%	UPL	
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
12. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>55</u> 20% of Total Cover: <u>22</u> 110 = <b>Total Cover</b>				
<b>Woody Vine Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

Sampling Point: 2039

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-13	10YR	4/4	100				Silt Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0267  
**Investigator(s):** TLG, SJH **Section, Township, Range:** S 12 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.250175° **Long.:** -91.359222° **Datum:** WGS 84  
**Soil Map Unit Name:** Jackport silty clay loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (minimum of 2 required)</b>	
<b>Primary Indicators (minimum of one required; check all that apply)</b>			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
<b>Field Observations:</b>			
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology indicators present.			

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

**Sampling Point:** 0267

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status	
1. _____	0	<input type="checkbox"/>	0.0%		
2. _____	0	<input type="checkbox"/>	0.0%		
3. _____	0	<input type="checkbox"/>	0.0%		
4. _____	0	<input type="checkbox"/>	0.0%		
5. _____	0	<input type="checkbox"/>	0.0%		
6. _____	0	<input type="checkbox"/>	0.0%		
7. _____	0	<input type="checkbox"/>	0.0%		
8. _____	0	<input type="checkbox"/>	0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>					
1. _____	0	<input type="checkbox"/>	0.0%		
2. _____	0	<input type="checkbox"/>	0.0%		
3. _____	0	<input type="checkbox"/>	0.0%		
4. _____	0	<input type="checkbox"/>	0.0%		
5. _____	0	<input type="checkbox"/>	0.0%		
6. _____	0	<input type="checkbox"/>	0.0%		
7. _____	0	<input type="checkbox"/>	0.0%		
8. _____	0	<input type="checkbox"/>	0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			
<b>Shrub Stratum (Plot size: _____ )</b>					
1. _____	0	<input type="checkbox"/>	0.0%		
2. _____	0	<input type="checkbox"/>	0.0%		
3. _____	0	<input type="checkbox"/>	0.0%		
4. _____	0	<input type="checkbox"/>	0.0%		
5. _____	0	<input type="checkbox"/>	0.0%		
6. _____	0	<input type="checkbox"/>	0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			
<b>Herb Stratum (Plot size: <u>15'</u> )</b>					
1. <u>Leptochloa fusca ssp. fascicularis</u>	20	<input checked="" type="checkbox"/>	25.0%	FACW	
2. <u>Andropogon virginicus</u>	15	<input type="checkbox"/>	18.8%	FAC	
3. <u>Ranunculus sardous</u>	40	<input checked="" type="checkbox"/>	50.0%	FAC	
4. <u>Amaranthus spinosus</u>	5	<input type="checkbox"/>	6.3%	FACU	
5. _____	0	<input type="checkbox"/>	0.0%		
6. _____	0	<input type="checkbox"/>	0.0%		
7. _____	0	<input type="checkbox"/>	0.0%		
8. _____	0	<input type="checkbox"/>	0.0%		
9. _____	0	<input type="checkbox"/>	0.0%		
10. _____	0	<input type="checkbox"/>	0.0%		
11. _____	0	<input type="checkbox"/>	0.0%		
12. _____	0	<input type="checkbox"/>	0.0%		
50% of Total Cover: <u>40</u> 20% of Total Cover: <u>16</u>	80	<b>= Total Cover</b>			
<b>Woody Vine Stratum (Plot size: _____ )</b>					
1. _____	0	<input type="checkbox"/>	0.0%		
2. _____	0	<input type="checkbox"/>	0.0%		
3. _____	0	<input type="checkbox"/>	0.0%		
4. _____	0	<input type="checkbox"/>	0.0%		
5. _____	0	<input type="checkbox"/>	0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			

**Dominance Test worksheet:**

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

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

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

**Prevalence Index worksheet:**

Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_

OBL species 0 x 1 = 0

FACW species 20 x 2 = 40

FAC species 55 x 3 = 165

FACU species 5 x 4 = 20

UPL species 0 x 5 = 0

Column Totals: 80 (A) 225 (B)

Prevalence Index = B/A = 2.813

**Hydrophytic Vegetation Indicators:**

☐ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is > 50%

☒ 3 - Prevalence Index is ≤3.0 <sup>1</sup>

☐ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)

<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definition of Vegetation Strata:**

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

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

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

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

Woody vine - All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes ☒ No ☐

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 0267

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input checked="" type="checkbox"/> Depleted Matrix (F3)             |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0268  
**Investigator(s):** TLG, SJH **Section, Township, Range:** S 12 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.250094° **Long.:** -91.360803° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		



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

Dominant Species?					Sampling Point: 0268
Tree Stratum (Plot size: )	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:	
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)	
2. _____	0	<input type="checkbox"/> 0.0%		Total Number of Dominant Species Across All Strata: 3 (B)	
3. _____	0	<input type="checkbox"/> 0.0%		Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)	
4. _____	0	<input type="checkbox"/> 0.0%		Prevalence Index worksheet:	
5. _____	0	<input type="checkbox"/> 0.0%		Total % Cover of: Multiply by:	
6. _____	0	<input type="checkbox"/> 0.0%		OBL species 0 x 1 = 0	
7. _____	0	<input type="checkbox"/> 0.0%		FACW species 20 x 2 = 40	
8. _____	0	<input type="checkbox"/> 0.0%		FAC species 60 x 3 = 180	
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover				FACU species 5 x 4 = 20	
Sapling or Sapling/Shrub Stratum (Plot size: )				UPL species 0 x 5 = 0	
1. _____	0	<input type="checkbox"/> 0.0%		Column Totals: 85 (A) 240 (B)	
2. _____	0	<input type="checkbox"/> 0.0%		Prevalence Index = B/A = 2.824	
3. _____	0	<input type="checkbox"/> 0.0%		Hydrophytic Vegetation Indicators:	
4. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
5. _____	0	<input type="checkbox"/> 0.0%		<input checked="" type="checkbox"/> 2 - Dominance Test is > 50%	
6. _____	0	<input type="checkbox"/> 0.0%		<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
7. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
8. _____	0	<input type="checkbox"/> 0.0%		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover				Definition of Vegetation Strata:	
Shrub Stratum (Plot size: )				Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).	
1. _____	0	<input type="checkbox"/> 0.0%		Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.	
2. _____	0	<input type="checkbox"/> 0.0%		Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.	
3. _____	0	<input type="checkbox"/> 0.0%		Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
4. _____	0	<input type="checkbox"/> 0.0%		Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.	
5. _____	0	<input type="checkbox"/> 0.0%		Woody vine - All woody vines, regardless of height.	
6. _____	0	<input type="checkbox"/> 0.0%			
7. _____	0	<input type="checkbox"/> 0.0%			
8. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover					
Herb Stratum (Plot size: 15' )					
1. <i>Leptochloa fusca ssp. fascicularis</i>	20	<input checked="" type="checkbox"/> 23.5% FACW			
2. <i>Andropogon virginicus</i>	20	<input checked="" type="checkbox"/> 23.5% FAC			
3. <i>Ranunculus sardous</i>	40	<input checked="" type="checkbox"/> 47.1% FAC			
4. <i>Amaranthus spinosus</i>	5	<input type="checkbox"/> 5.9% FACU			
5. _____	0	<input type="checkbox"/> 0.0%			
6. _____	0	<input type="checkbox"/> 0.0%			
7. _____	0	<input type="checkbox"/> 0.0%			
8. _____	0	<input type="checkbox"/> 0.0%			
9. _____	0	<input type="checkbox"/> 0.0%			
10. _____	0	<input type="checkbox"/> 0.0%			
11. _____	0	<input type="checkbox"/> 0.0%			
12. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 42.5 20% of Total Cover: 17 85 = Total Cover					
Woody Vine Stratum (Plot size: )					
1. _____	0	<input type="checkbox"/> 0.0%			
2. _____	0	<input type="checkbox"/> 0.0%			
3. _____	0	<input type="checkbox"/> 0.0%			
4. _____	0	<input type="checkbox"/> 0.0%			
5. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover					

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

Sampling Point: 0268

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

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>				
0-8	10YR	4/2	100						Silt Loam	
8-15	10YR	6/1	80	10YR	5/6	20	C	M	Silt Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0272  
**Investigator(s):** TLG, SJH **Section, Township, Range:** S 12 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.250197° **Long.:** -91.362249° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

**Sampling Point:** 0272

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status	<b>Dominance Test worksheet:</b>  Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)  <b>Prevalence Index worksheet:</b> <div style="display: flex; justify-content: space-between;"> <span>Total % Cover of:</span> <span>Multiply by:</span> </div> <div style="display: flex; justify-content: space-between;"> <div> <b>OBL species</b> <u>0</u>  <b>FACW species</b> <u>35</u>  <b>FAC species</b> <u>35</u>  <b>FACU species</b> <u>10</u>  <b>UPL species</b> <u>0</u>  <b>Column Totals:</b> <u>80</u> (A)                         </div> <div> <b>x 1 =</b> <u>0</u>  <b>x 2 =</b> <u>70</u>  <b>x 3 =</b> <u>105</u>  <b>x 4 =</b> <u>40</u>  <b>x 5 =</b> <u>0</u>  <b>(B)</b> <u>215</u> </div> </div> Prevalence Index = B/A = <u>2.688</u>
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			
<b>Shrub Stratum (Plot size: _____ )</b>					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			
<b>Herb Stratum (Plot size: <u>15'</u> )</b>					
1. <u>Leptochloa fusca ssp. fascicularis</u>	35	<input checked="" type="checkbox"/>	43.8%	FACW	
2. <u>Amaranthus spinosus</u>	10	<input type="checkbox"/>	12.5%	FACU	
3. <u>Ranunculus sardous</u>	25	<input checked="" type="checkbox"/>	31.3%	FAC	
4. <u>Andropogon virginicus</u>	10	<input type="checkbox"/>	12.5%	FAC	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
9. _____	0	<input type="checkbox"/>	0.0%	_____	
10. _____	0	<input type="checkbox"/>	0.0%	_____	
11. _____	0	<input type="checkbox"/>	0.0%	_____	
12. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>40</u> 20% of Total Cover: <u>16</u>	80	<b>= Total Cover</b>			
<b>Woody Vine Stratum (Plot size: _____ )</b>					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			

Remarks: (If observed, list morphological adaptations below).

**Hydrophytic Vegetation Present?**    Yes ☒    No ☐

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

## SOIL

**Sampling Point:** 0272

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input checked="" type="checkbox"/> Depleted Matrix (F3)             |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0273  
**Investigator(s):** TLG, SJH **Section, Township, Range:** S 12 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.253160° **Long.:** -91.362009° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

 Sampling Point: 0273

Tree Stratum	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/>	0.0%	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>35</u> x 2 = <u>70</u> FAC species <u>60</u> x 3 = <u>180</u> FACU species <u>10</u> x 4 = <u>40</u> UPL species <u>5</u> x 5 = <u>25</u> <b>Column Totals:</b> <u>110</u> (A) <u>315</u> (B)  Prevalence Index = B/A = <u>2.864</u>
<b>Sapling or Sapling/Shrub Stratum</b> (Plot size: _____ )					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is > 50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<b>Shrub Stratum</b> (Plot size: _____ )					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
<b>Herb Stratum</b> (Plot size: <u>15'</u> )					
1. <i>Andropogon virginicus</i>	25	<input checked="" type="checkbox"/>	22.7%	FAC	
2. <i>Amaranthus spinosus</i>	10	<input type="checkbox"/>	9.1%	FACU	
3. <i>Leptochloa fusca</i> ssp. <i>fascicularis</i>	30	<input checked="" type="checkbox"/>	27.3%	FACW	
4. <i>Geranium carolinianum</i>	5	<input type="checkbox"/>	4.5%	UPL	
5. <i>Ranunculus sardous</i>	35	<input checked="" type="checkbox"/>	31.8%	FAC	
6. <i>Sesbania herbacea</i>	5	<input type="checkbox"/>	4.5%	FACW	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
9. _____	0	<input type="checkbox"/>	0.0%	_____	
10. _____	0	<input type="checkbox"/>	0.0%	_____	
11. _____	0	<input type="checkbox"/>	0.0%	_____	
12. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>55</u> 20% of Total Cover: <u>22</u> 110 = <b>Total Cover</b>					<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<b>Woody Vine Stratum</b> (Plot size: _____ )					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

Sampling Point: 0273

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

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)	%	Color (moist)	%	Tvpe <sup>1</sup>	Loc <sup>2</sup>				
0-8	10YR	4/3	100						Silt Loam	
8-15	10YR	5/2	95	10YR	3/1	5	C	M	Silt Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:



# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0274  
**Investigator(s):** TLG, SJH **Section, Township, Range:** S 12 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.253149° **Long.:** -91.363420° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

 Sampling Point: 0274

Tree Stratum	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/>	0.0%	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>35</u> x 2 = <u>70</u> FAC species <u>55</u> x 3 = <u>165</u> FACU species <u>10</u> x 4 = <u>40</u> UPL species <u>5</u> x 5 = <u>25</u> <b>Column Totals:</b> <u>105</u> (A) <u>300</u> (B)  Prevalence Index = B/A = <u>2.857</u>
<b>Sapling or Sapling/Shrub Stratum</b> (Plot size: _____ )					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is > 50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<b>Shrub Stratum</b> (Plot size: _____ )					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
<b>Herb Stratum</b> (Plot size: <u>15'</u> )					
1. <i>Andropogon virginicus</i>	25	<input checked="" type="checkbox"/>	23.8%	FAC	
2. <i>Amaranthus spinosus</i>	10	<input type="checkbox"/>	9.5%	FACU	
3. <i>Leptochloa fusca</i> ssp. <i>fascicularis</i>	30	<input checked="" type="checkbox"/>	28.6%	FACW	
4. <i>Geranium carolinianum</i>	5	<input type="checkbox"/>	4.8%	UPL	
5. <i>Ranunculus sardous</i>	30	<input checked="" type="checkbox"/>	28.6%	FAC	
6. <i>Sesbania herbacea</i>	5	<input type="checkbox"/>	4.8%	FACW	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
9. _____	0	<input type="checkbox"/>	0.0%	_____	
10. _____	0	<input type="checkbox"/>	0.0%	_____	
11. _____	0	<input type="checkbox"/>	0.0%	_____	
12. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>52.5</u> 20% of Total Cover: <u>21</u> 105 = <b>Total Cover</b>					<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<b>Woody Vine Stratum</b> (Plot size: _____ )					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 0274

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input checked="" type="checkbox"/> Depleted Matrix (F3)             |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0275  
**Investigator(s):** TLG, SJH **Section, Township, Range:** S 12 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.255182° **Long.:** -91.362084° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (minimum of 2 required)</b>	
<b>Primary Indicators (minimum of one required; check all that apply)</b>			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
<b>Field Observations:</b>		<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology indicators present.			

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

VEGETATION (Five/Four Strata) - Use scientific names of plants.					Sampling Point: 0275	
Tree Stratum	(Plot size: )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:	
1.		0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)	
2.		0	<input type="checkbox"/> 0.0%		Total Number of Dominant Species Across All Strata: 3 (B)	
3.		0	<input type="checkbox"/> 0.0%		Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)	
4.		0	<input type="checkbox"/> 0.0%		Prevalence Index worksheet:	
5.		0	<input type="checkbox"/> 0.0%		Total % Cover of: Multiply by:	
6.		0	<input type="checkbox"/> 0.0%		OBL species 0 x 1 = 0	
7.		0	<input type="checkbox"/> 0.0%		FACW species 30 x 2 = 60	
8.		0	<input type="checkbox"/> 0.0%		FAC species 60 x 3 = 180	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover		FACU species 15 x 4 = 60	
Sapling or Sapling/Shrub Stratum (Plot size: )					UPL species 5 x 5 = 25	
1.		0	<input type="checkbox"/> 0.0%		Column Totals: 110 (A) 325 (B)	
2.		0	<input type="checkbox"/> 0.0%		Prevalence Index = B/A = 2.955	
3.		0	<input type="checkbox"/> 0.0%		Hydrophytic Vegetation Indicators:	
4.		0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
5.		0	<input type="checkbox"/> 0.0%		<input checked="" type="checkbox"/> 2 - Dominance Test is > 50%	
6.		0	<input type="checkbox"/> 0.0%		<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
7.		0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
8.		0	<input type="checkbox"/> 0.0%		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover		Definition of Vegetation Strata:	
Shrub Stratum (Plot size: )					Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).	
1.		0	<input type="checkbox"/> 0.0%		Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.	
2.		0	<input type="checkbox"/> 0.0%		Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.	
3.		0	<input type="checkbox"/> 0.0%		Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
4.		0	<input type="checkbox"/> 0.0%		Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.	
5.		0	<input type="checkbox"/> 0.0%		Woody vine - All woody vines, regardless of height.	
6.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover			
Herb Stratum (Plot size: 15')						
1.	Andropogon virginicus	25	<input checked="" type="checkbox"/> 22.7%	FAC		
2.	Amaranthus spinosus	10	<input type="checkbox"/> 9.1%	FACU		
3.	Leptochloa fusca ssp. fascicularis	30	<input checked="" type="checkbox"/> 27.3%	FACW		
4.	Geranium carolinianum	5	<input type="checkbox"/> 4.5%	UPL		
5.	Ranunculus sardous	35	<input checked="" type="checkbox"/> 31.8%	FAC		
6.	Allium vineale	5	<input type="checkbox"/> 4.5%	FACU		
7.			<input type="checkbox"/> 0.0%			
8.		0	<input type="checkbox"/> 0.0%			
9.		0	<input type="checkbox"/> 0.0%			
10.		0	<input type="checkbox"/> 0.0%			
11.		0	<input type="checkbox"/> 0.0%			
12.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 55 20% of Total Cover: 22		110	= Total Cover			
Woody Vine Stratum (Plot size: )						
1.		0	<input type="checkbox"/> 0.0%			
2.		0	<input type="checkbox"/> 0.0%			
3.		0	<input type="checkbox"/> 0.0%			
4.		0	<input type="checkbox"/> 0.0%			
5.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover			

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 0275

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input checked="" type="checkbox"/> Depleted Matrix (F3)             |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0276  
**Investigator(s):** TLG, SJH **Section, Township, Range:** S 12 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.255165° **Long.:** -91.364174° **Datum:** WGS 84  
**Soil Map Unit Name:** Grubbs silt loam, 1 to 3 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

VEGETATION (Five/Four Strata) - Use scientific names of plants.					Sampling Point: 0276	
Tree Stratum	(Plot size: )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:	
1.		0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)	
2.		0	<input type="checkbox"/> 0.0%		Total Number of Dominant Species Across All Strata: 2 (B)	
3.		0	<input type="checkbox"/> 0.0%		Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)	
4.		0	<input type="checkbox"/> 0.0%		Prevalence Index worksheet:	
5.		0	<input type="checkbox"/> 0.0%		Total % Cover of: Multiply by:	
6.		0	<input type="checkbox"/> 0.0%		OBL species 0 x 1 = 0	
7.		0	<input type="checkbox"/> 0.0%		FACW species 35 x 2 = 70	
8.		0	<input type="checkbox"/> 0.0%		FAC species 35 x 3 = 105	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover		FACU species 10 x 4 = 40	
Sapling or Sapling/Shrub Stratum (Plot size: )					UPL species 15 x 5 = 75	
1.		0	<input type="checkbox"/> 0.0%		Column Totals: 95 (A) 290 (B)	
2.		0	<input type="checkbox"/> 0.0%		Prevalence Index = B/A = 3.053	
3.		0	<input type="checkbox"/> 0.0%		Hydrophytic Vegetation Indicators:	
4.		0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
5.		0	<input type="checkbox"/> 0.0%		<input checked="" type="checkbox"/> 2 - Dominance Test is > 50%	
6.		0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
7.		0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
8.		0	<input type="checkbox"/> 0.0%		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover		Definition of Vegetation Strata:	
Shrub Stratum (Plot size: )					Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).	
1.		0	<input type="checkbox"/> 0.0%		Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.	
2.		0	<input type="checkbox"/> 0.0%		Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.	
3.		0	<input type="checkbox"/> 0.0%		Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
4.		0	<input type="checkbox"/> 0.0%		Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.	
5.		0	<input type="checkbox"/> 0.0%		Woody vine - All woody vines, regardless of height.	
6.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover			
Herb Stratum (Plot size: 15')						
1.	Amaranthus spinosus	10	<input type="checkbox"/> 10.5%	FACU		
2.	Leptochloa fusca ssp. fascicularis	30	<input checked="" type="checkbox"/> 31.6%	FACW		
3.	Geranium carolinianum	5	<input type="checkbox"/> 5.3%	UPL		
4.	Ranunculus sardous	30	<input checked="" type="checkbox"/> 31.6%	FAC		
5.	Sesbania herbacea	5	<input type="checkbox"/> 5.3%	FACW		
6.	Andropogon virginicus	5	<input type="checkbox"/> 5.3%	FAC		
7.	Lamium amplexicaule	10	<input type="checkbox"/> 10.5%	UPL		
8.		0	<input type="checkbox"/> 0.0%			
9.		0	<input type="checkbox"/> 0.0%			
10.		0	<input type="checkbox"/> 0.0%			
11.		0	<input type="checkbox"/> 0.0%			
12.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 47.5 20% of Total Cover: 19		95	= Total Cover			
Woody Vine Stratum (Plot size: )						
1.		0	<input type="checkbox"/> 0.0%			
2.		0	<input type="checkbox"/> 0.0%			
3.		0	<input type="checkbox"/> 0.0%			
4.		0	<input type="checkbox"/> 0.0%			
5.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover			

Remarks: (If observed, list morphological adaptations below).

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



## SOIL

Sampling Point: 0276

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

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)	%	Color (moist)	%	Tvpe <sup>1</sup>	Loc <sup>2</sup>				
0-8	10YR	4/3	100						Silt Loam	
8-15	10YR	5/2	95	10YR	3/1	5	C	M	Silt Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0277  
**Investigator(s):** TLG, SJH **Section, Township, Range:** S 12 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.253153° **Long.:** -91.364529° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

VEGETATION (Five/Four Strata) - Use scientific names of plants.					Sampling Point: 0277	
Tree Stratum (Plot size: )		Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:	
1.		0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)	
2.		0	<input type="checkbox"/> 0.0%		Total Number of Dominant Species Across All Strata: 2 (B)	
3.		0	<input type="checkbox"/> 0.0%		Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)	
4.		0	<input type="checkbox"/> 0.0%		Prevalence Index worksheet:	
5.		0	<input type="checkbox"/> 0.0%		Total % Cover of: Multiply by:	
6.		0	<input type="checkbox"/> 0.0%		OBL species 0 x 1 = 0	
7.		0	<input type="checkbox"/> 0.0%		FACW species 40 x 2 = 80	
8.		0	<input type="checkbox"/> 0.0%		FAC species 35 x 3 = 105	
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover		FACU species 5 x 4 = 20				
Sapling or Sapling/Shrub Stratum (Plot size: )		UPL species 0 x 5 = 0				
1.		0	<input type="checkbox"/> 0.0%		Column Totals: 80 (A) 205 (B)	
2.		0	<input type="checkbox"/> 0.0%		Prevalence Index = B/A = 2.563	
3.		0	<input type="checkbox"/> 0.0%		Hydrophytic Vegetation Indicators:	
4.		0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
5.		0	<input type="checkbox"/> 0.0%		<input checked="" type="checkbox"/> 2 - Dominance Test is > 50%	
6.		0	<input type="checkbox"/> 0.0%		<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
7.		0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
8.		0	<input type="checkbox"/> 0.0%		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover		Definition of Vegetation Strata:				
Shrub Stratum (Plot size: )		Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).				
1.		0	<input type="checkbox"/> 0.0%		Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.	
2.		0	<input type="checkbox"/> 0.0%		Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.	
3.		0	<input type="checkbox"/> 0.0%		Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
4.		0	<input type="checkbox"/> 0.0%		Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.	
5.		0	<input type="checkbox"/> 0.0%		Woody vine - All woody vines, regardless of height.	
6.		0	<input type="checkbox"/> 0.0%			
7.		0	<input type="checkbox"/> 0.0%			
8.		0	<input type="checkbox"/> 0.0%			
9.		0	<input type="checkbox"/> 0.0%			
10.		0	<input type="checkbox"/> 0.0%			
11.		0	<input type="checkbox"/> 0.0%			
12.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 40 20% of Total Cover: 16 80 = Total Cover		Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>				
Herb Stratum (Plot size: )						
1.	Leptochloa fusca ssp. fascicularis	35	<input checked="" type="checkbox"/> 43.8%	FACW		
2.	Amaranthus spinosus	5	<input type="checkbox"/> 6.3%	FACU		
3.	Ranunculus sardous	25	<input checked="" type="checkbox"/> 31.3%	FAC		
4.	Andropogon virginicus	10	<input type="checkbox"/> 12.5%	FAC		
5.	Sesbania herbacea	5	<input type="checkbox"/> 6.3%	FACW		
6.		0	<input type="checkbox"/> 0.0%			
7.		0	<input type="checkbox"/> 0.0%			
8.		0	<input type="checkbox"/> 0.0%			
9.		0	<input type="checkbox"/> 0.0%			
10.		0	<input type="checkbox"/> 0.0%			
11.		0	<input type="checkbox"/> 0.0%			
12.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 40 20% of Total Cover: 16 80 = Total Cover						
Woody Vine Stratum (Plot size: )						
1.		0	<input type="checkbox"/> 0.0%			
2.		0	<input type="checkbox"/> 0.0%			
3.		0	<input type="checkbox"/> 0.0%			
4.		0	<input type="checkbox"/> 0.0%			
5.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover						

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 0277

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input checked="" type="checkbox"/> Depleted Matrix (F3)             |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0278  
**Investigator(s):** TLG, SJH **Section, Township, Range:** S 12 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.250145° **Long.:** -91.365522° **Datum:** WGS 84  
**Soil Map Unit Name:** Wiville fine sandy loam, 1 to 3 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

Sampling Point: 0278

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>45</u> x 3 = <u>135</u> FACU species <u>30</u> x 4 = <u>120</u> UPL species <u>15</u> x 5 = <u>75</u> <b>Column Totals:</b> <u>90</u> (A) <u>330</u> (B)  Prevalence Index = B/A = <u>3.667</u>
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		
<b>Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		
<b>Herb Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Andropogon virginicus</u>	45	<input checked="" type="checkbox"/> 50.0%	FAC	<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
2. <u>Amaranthus spinosus</u>	10	<input type="checkbox"/> 11.1%	FACU	
3. <u>Geranium carolinianum</u>	10	<input type="checkbox"/> 11.1%	UPL	
4. <u>Stellaria media</u>	15	<input checked="" type="checkbox"/> 16.7%	FACU	
5. <u>Vicia sativa</u>	5	<input type="checkbox"/> 5.6%	FACU	
6. <u>Lamium amplexicaule</u>	5	<input type="checkbox"/> 5.6%	UPL	
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
12. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>45</u> 20% of Total Cover: <u>18</u>	90	<b>= Total Cover</b>		
<b>Woody Vine Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 0278

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0279  
**Investigator(s):** TLG, SJH **Section, Township, Range:** S 12 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.250208° **Long.:** -91.364383° **Datum:** WGS 84  
**Soil Map Unit Name:** Wiville fine sandy loam, 1 to 3 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (minimum of 2 required)</b>	
<b>Primary Indicators (minimum of one required; check all that apply)</b>			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
<b>Field Observations:</b>		<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology indicators present.			



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

 Sampling Point: 0279

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>25</u> x 2 = <u>50</u> FAC species <u>45</u> x 3 = <u>135</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>0</u> x 5 = <u>0</u> <b>Column Totals:</b> <u>75</u> (A) <u>205</u> (B)  Prevalence Index = B/A = <u>2.733</u>
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is > 50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Herb Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Andropogon virginicus</u>	5	<input type="checkbox"/> 6.7%	FAC	<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
2. <u>Ranunculus sardous</u>	40	<input checked="" type="checkbox"/> 53.3%	FAC	
3. <u>Sesbania herbacea</u>	5	<input type="checkbox"/> 6.7%	FACW	
4. <u>Leptochloa fusca ssp. fascicularis</u>	20	<input checked="" type="checkbox"/> 26.7%	FACW	
5. <u>Cardamine hirsuta</u>	5	<input type="checkbox"/> 6.7%	FACU	
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
12. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>37.5</u> 20% of Total Cover: <u>15</u> 75 = <b>Total Cover</b>				
<b>Woody Vine Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 0279

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input checked="" type="checkbox"/> Depleted Matrix (F3)             |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0280  
**Investigator(s):** TLG, SJH **Section, Township, Range:** S 12 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.249432° **Long.:** -91.363459° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

Tree Stratum (Plot size: _____ )					Dominant Species?	Sampling Point: <u>0280</u>
	Absolute % Cover	Rel.Strat. Cover	Indicator Status			
1. _____	0	<input type="checkbox"/> 0.0%				
2. _____	0	<input type="checkbox"/> 0.0%				
3. _____	0	<input type="checkbox"/> 0.0%				
4. _____	0	<input type="checkbox"/> 0.0%				
5. _____	0	<input type="checkbox"/> 0.0%				
6. _____	0	<input type="checkbox"/> 0.0%				
7. _____	0	<input type="checkbox"/> 0.0%				
8. _____	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			
Sapling or Sapling/Shrub Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/> 0.0%				
2. _____	0	<input type="checkbox"/> 0.0%				
3. _____	0	<input type="checkbox"/> 0.0%				
4. _____	0	<input type="checkbox"/> 0.0%				
5. _____	0	<input type="checkbox"/> 0.0%				
6. _____	0	<input type="checkbox"/> 0.0%				
7. _____	0	<input type="checkbox"/> 0.0%				
8. _____	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			
Shrub Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/> 0.0%				
2. _____	0	<input type="checkbox"/> 0.0%				
3. _____	0	<input type="checkbox"/> 0.0%				
4. _____	0	<input type="checkbox"/> 0.0%				
5. _____	0	<input type="checkbox"/> 0.0%				
6. _____	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			
Herb Stratum (Plot size: _____ )						
1. <i>Andropogon virginicus</i>	5	<input type="checkbox"/> 6.7%	FAC			
2. <i>Ranunculus sardous</i>	40	<input checked="" type="checkbox"/> 53.3%	FAC			
3. <i>Sesbania herbacea</i>	5	<input type="checkbox"/> 6.7%	FACW			
4. <i>Leptochloa fusca</i> ssp. <i>fascicularis</i>	20	<input checked="" type="checkbox"/> 26.7%	FACW			
5. <i>Cardamine hirsuta</i>	5	<input type="checkbox"/> 6.7%	FACU			
6. _____	0	<input type="checkbox"/> 0.0%				
7. _____	0	<input type="checkbox"/> 0.0%				
8. _____	0	<input type="checkbox"/> 0.0%				
9. _____	0	<input type="checkbox"/> 0.0%				
10. _____	0	<input type="checkbox"/> 0.0%				
11. _____	0	<input type="checkbox"/> 0.0%				
12. _____	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>37.5</u>	20% of Total Cover: <u>15</u>	75	= Total Cover			
Woody Vine Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/> 0.0%				
2. _____	0	<input type="checkbox"/> 0.0%				
3. _____	0	<input type="checkbox"/> 0.0%				
4. _____	0	<input type="checkbox"/> 0.0%				
5. _____	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			

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

**Prevalence Index worksheet:**  
 Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_  
 OBL species 0 x 1 = 0  
 FACW species 25 x 2 = 50  
 FAC species 45 x 3 = 135  
 FACU species 5 x 4 = 20  
 UPL species 0 x 5 = 0  
**Column Totals:** 75 (A) 205 (B)  
  
 Prevalence Index = B/A = 2.733

**Hydrophytic Vegetation Indicators:**  
☐ 1 - Rapid Test for Hydrophytic Vegetation  
☒ 2 - Dominance Test is > 50%  
☒ 3 - Prevalence Index is ≤ 3.0 <sup>1</sup>  
☐ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)

<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definition of Vegetation Strata:**  
 Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
 Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
 Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  
  
 Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
 Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
 Woody vine - All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes ☒ No ☐

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

Sampling Point: 0280

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

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)	%	Color (moist)	%	Tvpe <sup>1</sup>	Loc <sup>2</sup>				
0-8	10YR	4/2	100						Silt Loam	
8-16	10YR	4/1	95	10YR	5/6	5	C	M	Silt Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0281  
**Investigator(s):** TLG, SJH **Section, Township, Range:** S 12 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.247912° **Long.:** -91.365821° **Datum:** WGS 84  
**Soil Map Unit Name:** Bulltown loamy fine sand, 1 to 8 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

 Sampling Point: 0281

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>15</u> x 2 = <u>30</u> FAC species <u>35</u> x 3 = <u>105</u> FACU species <u>11</u> x 4 = <u>44</u> UPL species <u>10</u> x 5 = <u>50</u> <b>Column Totals:</b> <u>71</u> (A) <u>229</u> (B)  Prevalence Index = B/A = <u>3.225</u>
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		
<b>Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		
<b>Herb Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Andropogon virginicus</u>	35	<input checked="" type="checkbox"/> 49.3%	FAC	<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Gamochaeta americana</u>	5	<input type="checkbox"/> 7.0%	UPL	
3. <u>Stellaria media</u>	10	<input type="checkbox"/> 14.1%	FACU	
4. <u>Geranium carolinianum</u>	5	<input type="checkbox"/> 7.0%	UPL	
5. <u>Amaranthus spinosus</u>	1	<input type="checkbox"/> 1.4%	FACU	
6. <u>Leptochloa fusca ssp. fascicularis</u>	15	<input checked="" type="checkbox"/> 21.1%	FACW	
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
12. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>35.5</u> 20% of Total Cover: <u>14.2</u>	71	<b>= Total Cover</b>		
<b>Woody Vine Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>		

Remarks: (If observed, list morphological adaptations below).

**Definition of Vegetation Strata:**  
 Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
 Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
 Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  
  
 Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
 Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
 Woody vine - All woody vines, regardless of height.

**Hydrophytic Vegetation Present?**    Yes ☒    No ☐

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

## SOIL

Sampling Point: 0281

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-15	7.5YR	4/4	100				Fine Sandy Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:



# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0282  
**Investigator(s):** TLG, SJH **Section, Township, Range:** S 12 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.248217° **Long.:** -91.363118° **Datum:** WGS 84  
**Soil Map Unit Name:** Wiville fine sandy loam, 1 to 3 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

Dominant Species?					Sampling Point: 0282	
Tree Stratum	(Plot size: )	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:	
1.		0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)	
2.		0	<input type="checkbox"/> 0.0%		Total Number of Dominant Species Across All Strata: 2 (B)	
3.		0	<input type="checkbox"/> 0.0%		Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)	
4.		0	<input type="checkbox"/> 0.0%		Prevalence Index worksheet:	
5.		0	<input type="checkbox"/> 0.0%		Total % Cover of: Multiply by:	
6.		0	<input type="checkbox"/> 0.0%		OBL species 0 x 1 = 0	
7.		0	<input type="checkbox"/> 0.0%		FACW species 15 x 2 = 30	
8.		0	<input type="checkbox"/> 0.0%		FAC species 35 x 3 = 105	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover		FACU species 20 x 4 = 80	
Sapling or Sapling/Shrub Stratum (Plot size: )					UPL species 10 x 5 = 50	
1.		0	<input type="checkbox"/> 0.0%		Column Totals: 80 (A) 265 (B)	
2.		0	<input type="checkbox"/> 0.0%		Prevalence Index = B/A = 3.313	
3.		0	<input type="checkbox"/> 0.0%		Hydrophytic Vegetation Indicators:	
4.		0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
5.		0	<input type="checkbox"/> 0.0%		<input checked="" type="checkbox"/> 2 - Dominance Test is > 50%	
6.		0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
7.		0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
8.		0	<input type="checkbox"/> 0.0%		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover		Definition of Vegetation Strata:	
Shrub Stratum (Plot size: )					Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).	
1.		0	<input type="checkbox"/> 0.0%		Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.	
2.		0	<input type="checkbox"/> 0.0%		Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.	
3.		0	<input type="checkbox"/> 0.0%		Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
4.		0	<input type="checkbox"/> 0.0%		Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.	
5.		0	<input type="checkbox"/> 0.0%		Woody vine - All woody vines, regardless of height.	
6.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover			
Herb Stratum (Plot size: )						
1.	Andropogon virginicus	35	<input checked="" type="checkbox"/> 43.8%	FAC		
2.	Gamochaeta americana	5	<input type="checkbox"/> 6.3%	UPL		
3.	Stellaria media	10	<input type="checkbox"/> 12.5%	FACU		
4.	Geranium carolinianum	5	<input type="checkbox"/> 6.3%	UPL		
5.	Amaranthus spinosus	10	<input type="checkbox"/> 12.5%	FACU		
6.	Leptochloa fusca ssp. fascicularis	15	<input checked="" type="checkbox"/> 18.8%	FACW		
7.		0	<input type="checkbox"/> 0.0%			
8.		0	<input type="checkbox"/> 0.0%			
9.		0	<input type="checkbox"/> 0.0%			
10.		0	<input type="checkbox"/> 0.0%			
11.		0	<input type="checkbox"/> 0.0%			
12.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 40 20% of Total Cover: 16		80	= Total Cover			
Woody Vine Stratum (Plot size: )						
1.		0	<input type="checkbox"/> 0.0%			
2.		0	<input type="checkbox"/> 0.0%			
3.		0	<input type="checkbox"/> 0.0%			
4.		0	<input type="checkbox"/> 0.0%			
5.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover			

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 0282

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0283  
**Investigator(s):** TLG, SJH **Section, Township, Range:** S 1 T 7N R 4W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.262850° **Long.:** -91.361914° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (minimum of 2 required)</b>	
<b>Primary Indicators (minimum of one required; check all that apply)</b>			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
<b>Field Observations:</b>			
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology indicators present.			

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

 Sampling Point: 0283

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>40</u> x 3 = <u>120</u> FACU species <u>25</u> x 4 = <u>100</u> UPL species <u>0</u> x 5 = <u>0</u> <b>Column Totals:</b> <u>65</u> (A) <u>220</u> (B)  Prevalence Index = B/A = <u>3.385</u>
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Herb Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Ranunculus sardous</u>	40	<input checked="" type="checkbox"/> 61.5%	FAC	<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
2. <u>Allium vineale</u>	0	<input type="checkbox"/> 0.0%	FACU	
3. <u>Cerastium glomeratum</u>	10	<input type="checkbox"/> 15.4%	FACU	
4. <u>Poa annua</u>	15	<input checked="" type="checkbox"/> 23.1%	FACU	
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
12. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>32.5</u> 20% of Total Cover: <u>13</u> 65 = <b>Total Cover</b>				
<b>Woody Vine Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

Sampling Point: 0283

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

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)	%	Color (moist)	%	Tvpe <sup>1</sup>	Loc <sup>2</sup>				
0-8	10YR	4/2							Silt Loam	
8-16	10YR	5/2	90		10YR	5/6	10	C	M	Silt Loam

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0284  
**Investigator(s):** TLG, SJH **Section, Township, Range:** S 1 T 7N R 4W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.261111° **Long.:** -91.361263° **Datum:** WGS 84  
**Soil Map Unit Name:** Grubbs silt loam, 1 to 3 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

 Sampling Point: 0284

Tree Stratum	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/>	0.0%	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>5</u> x 2 = <u>10</u> FAC species <u>85</u> x 3 = <u>255</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> <b>Column Totals:</b> <u>90</u> (A) <u>265</u> (B)  Prevalence Index = B/A = <u>2.944</u>
<b>Sapling or Sapling/Shrub Stratum</b> (Plot size: _____ )					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					
<b>Shrub Stratum</b> (Plot size: _____ )					
1. _____	0	<input type="checkbox"/>	0.0%	_____	<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is > 50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					
<b>Herb Stratum</b> (Plot size: <u>15'</u> )					
1. <u>Ranunculus sardous</u>	80	<input checked="" type="checkbox"/>	88.9%	FAC	<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
2. <u>Sesbania herbacea</u>	5	<input type="checkbox"/>	5.6%	FACW	
3. <u>Xanthium strumarium</u>	5	<input type="checkbox"/>	5.6%	FAC	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
9. _____	0	<input type="checkbox"/>	0.0%	_____	
10. _____	0	<input type="checkbox"/>	0.0%	_____	
11. _____	0	<input type="checkbox"/>	0.0%	_____	
12. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>45</u> 20% of Total Cover: <u>18</u> 90 = <b>Total Cover</b>					
<b>Woody Vine Stratum</b> (Plot size: _____ )					
1. _____	0	<input type="checkbox"/>	0.0%	_____	<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					

Remarks: (If observed, list morphological adaptations below).

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



## SOIL

Sampling Point: 0284

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR	4/2	100				Silt Loam	
8-16	10YR	4/1	100				Silt Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0285  
**Investigator(s):** TLG, SJH **Section, Township, Range:** S 1 T 7N R 4W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.262422° **Long.:** -91.360641° **Datum:** WGS 84  
**Soil Map Unit Name:** Grubbs silt loam, 1 to 3 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (minimum of 2 required)</b>	
<b>Primary Indicators (minimum of one required; check all that apply)</b>			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
<b>Field Observations:</b>			
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology indicators present.			

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

 Sampling Point: 0285

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>40</u> x 3 = <u>120</u> FACU species <u>35</u> x 4 = <u>140</u> UPL species <u>0</u> x 5 = <u>0</u> <b>Column Totals:</b> <u>75</u> (A) <u>260</u> (B)  Prevalence Index = B/A = <u>3.467</u>
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Herb Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Ranunculus sardous</u>	40	<input checked="" type="checkbox"/> 53.3%	FAC	<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
2. <u>Allium vineale</u>	10	<input type="checkbox"/> 13.3%	FACU	
3. <u>Cerastium glomeratum</u>	10	<input type="checkbox"/> 13.3%	FACU	
4. <u>Poa annua</u>	15	<input checked="" type="checkbox"/> 20.0%	FACU	
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
12. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>37.5</u> 20% of Total Cover: <u>15</u> 75 = <b>Total Cover</b>				
<b>Woody Vine Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 0285

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input checked="" type="checkbox"/> Depleted Matrix (F3)             |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0288  
**Investigator(s):** TLG, SJH **Section, Township, Range:** S 1 T 7N R 4W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.264150° **Long.:** -91.360205° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** Pf

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

Dominant Species?					Sampling Point: 0288
Tree Stratum (Plot size: )	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:	
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A)	
2. _____	0	<input type="checkbox"/> 0.0%		Total Number of Dominant Species Across All Strata: <u>1</u> (B)	
3. _____	0	<input type="checkbox"/> 0.0%		Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)	
4. _____	0	<input type="checkbox"/> 0.0%		<b>Prevalence Index worksheet:</b>	
5. _____	0	<input type="checkbox"/> 0.0%		Total % Cover of: _____ Multiply by: _____	
6. _____	0	<input type="checkbox"/> 0.0%		OBL species <u>0</u> x 1 = <u>0</u>	
7. _____	0	<input type="checkbox"/> 0.0%		FACW species <u>15</u> x 2 = <u>30</u>	
8. _____	0	<input type="checkbox"/> 0.0%		FAC species <u>85</u> x 3 = <u>255</u>	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = Total Cover				FACU species <u>5</u> x 4 = <u>20</u>	
<b>Sapling or Sapling/Shrub Stratum (Plot size: )</b>				UPL species <u>2</u> x 5 = <u>10</u>	
1. _____	0	<input type="checkbox"/> 0.0%		Column Totals: <u>107</u> (A) <u>315</u> (B)	
2. _____	0	<input type="checkbox"/> 0.0%		Prevalence Index = B/A = <u>2.944</u>	
3. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Indicators:</b>	
4. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
5. _____	0	<input type="checkbox"/> 0.0%		<input checked="" type="checkbox"/> 2 - Dominance Test is > 50%	
6. _____	0	<input type="checkbox"/> 0.0%		<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
7. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
8. _____	0	<input type="checkbox"/> 0.0%		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = Total Cover				<b>Definition of Vegetation Strata:</b>	
<b>Shrub Stratum (Plot size: )</b>				Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).	
1. _____	0	<input type="checkbox"/> 0.0%		Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.	
2. _____	0	<input type="checkbox"/> 0.0%		Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.	
3. _____	0	<input type="checkbox"/> 0.0%		Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
4. _____	0	<input type="checkbox"/> 0.0%		Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.	
5. _____	0	<input type="checkbox"/> 0.0%		Woody vine - All woody vines, regardless of height.	
6. _____	0	<input type="checkbox"/> 0.0%			
7. _____	0	<input type="checkbox"/> 0.0%			
8. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = Total Cover					
<b>Herb Stratum (Plot size: 15')</b>					
1. <u>Ranunculus sardous</u>	85	<input checked="" type="checkbox"/> 79.4% FAC			
2. <u>Sesbania herbacea</u>	15	<input type="checkbox"/> 14.0% FACW			
3. <u>Amaranthus spinosus</u>	5	<input type="checkbox"/> 4.7% FACU			
4. <u>Glycine max</u>	2	<input type="checkbox"/> 1.9% UPL			
5. _____	0	<input type="checkbox"/> 0.0%			
6. _____	0	<input type="checkbox"/> 0.0%			
7. _____	0	<input type="checkbox"/> 0.0%			
8. _____	0	<input type="checkbox"/> 0.0%			
9. _____	0	<input type="checkbox"/> 0.0%			
10. _____	0	<input type="checkbox"/> 0.0%			
11. _____	0	<input type="checkbox"/> 0.0%			
12. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: <u>53.5</u> 20% of Total Cover: <u>21.4</u> 107 = Total Cover					
<b>Woody Vine Stratum (Plot size: )</b>					
1. _____	0	<input type="checkbox"/> 0.0%			
2. _____	0	<input type="checkbox"/> 0.0%			
3. _____	0	<input type="checkbox"/> 0.0%			
4. _____	0	<input type="checkbox"/> 0.0%			
5. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = Total Cover					
Remarks: (If observed, list morphological adaptations below).					
*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.					

## SOIL

Sampling Point: 0288

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

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)	%	Color (moist)	%	Tvpe <sup>1</sup>	Loc <sup>2</sup>				
0-6	10YR	4/3	100						Silt Loam	
6-16	10YR	6/1	80	10YR	5/6	20	C	M	Silt Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0289  
**Investigator(s):** TLG, SJH **Section, Township, Range:** S 1 T 7N R 4W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.264609° **Long.:** -91.359347° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (minimum of 2 required)</b>	
<b>Primary Indicators (minimum of one required; check all that apply)</b>			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
<b>Field Observations:</b>			
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology indicators present.			



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

**Sampling Point:** 0289

Tree Stratum		Sapling or Sapling/Shrub Stratum		Shrub Stratum		Herb Stratum		Woody Vine Stratum			
(Plot size: _____ )		(Plot size: _____ )		(Plot size: _____ )		(Plot size: 15' _____ )		(Plot size: _____ )			
Absolute % Cover		Absolute % Cover		Absolute % Cover		Absolute % Cover		Absolute % Cover			
Rel.Strat. Cover		Rel.Strat. Cover		Rel.Strat. Cover		Rel.Strat. Cover		Rel.Strat. Cover			
Indicator Status		Indicator Status		Indicator Status		Indicator Status		Indicator Status			
1.	_____	0	<input type="checkbox"/>	0.0%	_____	1.	_____	0	<input type="checkbox"/>	0.0%	_____
2.	_____	0	<input type="checkbox"/>	0.0%	_____	2.	_____	0	<input type="checkbox"/>	0.0%	_____
3.	_____	0	<input type="checkbox"/>	0.0%	_____	3.	_____	0	<input type="checkbox"/>	0.0%	_____
4.	_____	0	<input type="checkbox"/>	0.0%	_____	4.	_____	0	<input type="checkbox"/>	0.0%	_____
5.	_____	0	<input type="checkbox"/>	0.0%	_____	5.	_____	0	<input type="checkbox"/>	0.0%	_____
6.	_____	0	<input type="checkbox"/>	0.0%	_____	6.	_____	0	<input type="checkbox"/>	0.0%	_____
7.	_____	0	<input type="checkbox"/>	0.0%	_____	7.	_____	0	<input type="checkbox"/>	0.0%	_____
8.	_____	0	<input type="checkbox"/>	0.0%	_____	8.	_____	0	<input type="checkbox"/>	0.0%	_____
50% of Total Cover: 0      20% of Total Cover: 0		0 = Total Cover				50% of Total Cover: 0      20% of Total Cover: 0		0 = Total Cover			
Sapling or Sapling/Shrub Stratum		Sapling or Sapling/Shrub Stratum		Sapling or Sapling/Shrub Stratum		Sapling or Sapling/Shrub Stratum		Sapling or Sapling/Shrub Stratum		Sapling or Sapling/Shrub Stratum	
(Plot size: _____ )		(Plot size: _____ )		(Plot size: _____ )		(Plot size: _____ )		(Plot size: _____ )		(Plot size: _____ )	
1.	_____	0	<input type="checkbox"/>	0.0%	_____	1.	_____	0	<input type="checkbox"/>	0.0%	_____
2.	_____	0	<input type="checkbox"/>	0.0%	_____	2.	_____	0	<input type="checkbox"/>	0.0%	_____
3.	_____	0	<input type="checkbox"/>	0.0%	_____	3.	_____	0	<input type="checkbox"/>	0.0%	_____
4.	_____	0	<input type="checkbox"/>	0.0%	_____	4.	_____	0	<input type="checkbox"/>	0.0%	_____
5.	_____	0	<input type="checkbox"/>	0.0%	_____	5.	_____	0	<input type="checkbox"/>	0.0%	_____
6.	_____	0	<input type="checkbox"/>	0.0%	_____	6.	_____	0	<input type="checkbox"/>	0.0%	_____
7.	_____	0	<input type="checkbox"/>	0.0%	_____	7.	_____	0	<input type="checkbox"/>	0.0%	_____
8.	_____	0	<input type="checkbox"/>	0.0%	_____	8.	_____	0	<input type="checkbox"/>	0.0%	_____
50% of Total Cover: 0      20% of Total Cover: 0		0 = Total Cover				50% of Total Cover: 0      20% of Total Cover: 0		0 = Total Cover			
Shrub Stratum		Shrub Stratum		Shrub Stratum		Shrub Stratum		Shrub Stratum		Shrub Stratum	
(Plot size: _____ )		(Plot size: _____ )		(Plot size: _____ )		(Plot size: _____ )		(Plot size: _____ )		(Plot size: _____ )	
1.	_____	0	<input type="checkbox"/>	0.0%	_____	1.	_____	0	<input type="checkbox"/>	0.0%	_____
2.	_____	0	<input type="checkbox"/>	0.0%	_____	2.	_____	0	<input type="checkbox"/>	0.0%	_____
3.	_____	0	<input type="checkbox"/>	0.0%	_____	3.	_____	0	<input type="checkbox"/>	0.0%	_____
4.	_____	0	<input type="checkbox"/>	0.0%	_____	4.	_____	0	<input type="checkbox"/>	0.0%	_____
5.	_____	0	<input type="checkbox"/>	0.0%	_____	5.	_____	0	<input type="checkbox"/>	0.0%	_____
6.	_____	0	<input type="checkbox"/>	0.0%	_____	6.	_____	0	<input type="checkbox"/>	0.0%	_____
50% of Total Cover: 0      20% of Total Cover: 0		0 = Total Cover				50% of Total Cover: 0      20% of Total Cover: 0		0 = Total Cover			
Herb Stratum		Herb Stratum		Herb Stratum		Herb Stratum		Herb Stratum		Herb Stratum	
(Plot size: 15' _____ )		(Plot size: 15' _____ )		(Plot size: 15' _____ )		(Plot size: 15' _____ )		(Plot size: 15' _____ )		(Plot size: 15' _____ )	
1.	Cerastium glomeratum	35	<input checked="" type="checkbox"/>	50.0%	FACU	1.	Cerastium glomeratum	35	<input checked="" type="checkbox"/>	50.0%	FACU
2.	Allium vineale	20	<input checked="" type="checkbox"/>	28.6%	FACU	2.	Allium vineale	20	<input checked="" type="checkbox"/>	28.6%	FACU
3.	Poa annua	10	<input type="checkbox"/>	14.3%	FACU	3.	Poa annua	10	<input type="checkbox"/>	14.3%	FACU
4.	Glycine max	5	<input type="checkbox"/>	7.1%	UPL	4.	Glycine max	5	<input type="checkbox"/>	7.1%	UPL
5.	_____	0	<input type="checkbox"/>	0.0%	_____	5.	_____	0	<input type="checkbox"/>	0.0%	_____
6.	_____	0	<input type="checkbox"/>	0.0%	_____	6.	_____	0	<input type="checkbox"/>	0.0%	_____
7.	_____	0	<input type="checkbox"/>	0.0%	_____	7.	_____	0	<input type="checkbox"/>	0.0%	_____
8.	_____	0	<input type="checkbox"/>	0.0%	_____	8.	_____	0	<input type="checkbox"/>	0.0%	_____
9.	_____	0									

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

## SOIL

Sampling Point: 0289

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	7.5YR	4/4	100				Silt Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0290  
**Investigator(s):** TLG, SJH **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.264566° **Long.:** -91.356900° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

Tree Stratum (Plot size: _____ )					Dominant Species?	Sampling Point: <u>0290</u>
	Absolute % Cover	Rel.Strat. Cover	Indicator Status			
1. _____	0	<input type="checkbox"/>	0.0%			
2. _____	0	<input type="checkbox"/>	0.0%			
3. _____	0	<input type="checkbox"/>	0.0%			
4. _____	0	<input type="checkbox"/>	0.0%			
5. _____	0	<input type="checkbox"/>	0.0%			
6. _____	0	<input type="checkbox"/>	0.0%			
7. _____	0	<input type="checkbox"/>	0.0%			
8. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			
Sapling or Sapling/Shrub Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/>	0.0%			
2. _____	0	<input type="checkbox"/>	0.0%			
3. _____	0	<input type="checkbox"/>	0.0%			
4. _____	0	<input type="checkbox"/>	0.0%			
5. _____	0	<input type="checkbox"/>	0.0%			
6. _____	0	<input type="checkbox"/>	0.0%			
7. _____	0	<input type="checkbox"/>	0.0%			
8. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			
Shrub Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/>	0.0%			
2. _____	0	<input type="checkbox"/>	0.0%			
3. _____	0	<input type="checkbox"/>	0.0%			
4. _____	0	<input type="checkbox"/>	0.0%			
5. _____	0	<input type="checkbox"/>	0.0%			
6. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			
Herb Stratum (Plot size: <u>15'</u> )						
1. <u>Andropogon virginicus</u>	35	<input checked="" type="checkbox"/>	31.8%	FAC		
2. <u>Leptochloa fusca ssp. fascicularis</u>	20	<input type="checkbox"/>	18.2%	FACW		
3. <u>Ranunculus sardous</u>	40	<input checked="" type="checkbox"/>	36.4%	FAC		
4. <u>Solidago canadensis</u>	15	<input type="checkbox"/>	13.6%	FACU		
5. _____	0	<input type="checkbox"/>	0.0%			
6. _____	0	<input type="checkbox"/>	0.0%			
7. _____	0	<input type="checkbox"/>	0.0%			
8. _____	0	<input type="checkbox"/>	0.0%			
9. _____	0	<input type="checkbox"/>	0.0%			
10. _____	0	<input type="checkbox"/>	0.0%			
11. _____	0	<input type="checkbox"/>	0.0%			
12. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>55</u>	20% of Total Cover: <u>22</u>	110	= Total Cover			
Woody Vine Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/>	0.0%			
2. _____	0	<input type="checkbox"/>	0.0%			
3. _____	0	<input type="checkbox"/>	0.0%			
4. _____	0	<input type="checkbox"/>	0.0%			
5. _____	0	<input type="checkbox"/>	0.0%			
50% of Total Cover: <u>0</u>	20% of Total Cover: <u>0</u>	0	= Total Cover			

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

**Prevalence Index worksheet:**  
 Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_  
 OBL species 0 x 1 = 0  
 FACW species 20 x 2 = 40  
 FAC species 75 x 3 = 225  
 FACU species 15 x 4 = 60  
 UPL species 0 x 5 = 0  
**Column Totals:** 110 (A) 325 (B)  
  
 Prevalence Index = B/A = 2.955

**Hydrophytic Vegetation Indicators:**  
☐ 1 - Rapid Test for Hydrophytic Vegetation  
☒ 2 - Dominance Test is > 50%  
☒ 3 - Prevalence Index is ≤ 3.0 <sup>1</sup>  
☐ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)

<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definition of Vegetation Strata:**  
 Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
 Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
 Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  
  
 Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
 Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
 Woody vine - All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes ☒ No ☐

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 0290

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0291  
**Investigator(s):** TLG, SJH **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.266527° **Long.:** -91.356900° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

 Sampling Point: 0291

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>20</u> x 2 = <u>40</u> FAC species <u>75</u> x 3 = <u>225</u> FACU species <u>15</u> x 4 = <u>60</u> UPL species <u>0</u> x 5 = <u>0</u> <b>Column Totals:</b> <u>110</u> (A) <u>325</u> (B)  Prevalence Index = B/A = <u>2.955</u>
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is > 50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Herb Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Andropogon virginicus</u>	35	<input checked="" type="checkbox"/> 31.8%	FAC	<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
2. <u>Leptochloa fusca ssp. fascicularis</u>	20	<input type="checkbox"/> 18.2%	FACW	
3. <u>Ranunculus sardous</u>	40	<input checked="" type="checkbox"/> 36.4%	FAC	
4. <u>Solidago canadensis</u>	15	<input type="checkbox"/> 13.6%	FACU	
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
12. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>55</u> 20% of Total Cover: <u>22</u> 110 = <b>Total Cover</b>				
<b>Woody Vine Stratum (Plot size: _____ )</b>				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 0291

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:



# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0292  
**Investigator(s):** TLG, SJH **Section, Township, Range:** S 1 T 7N R 4W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.266527° **Long.:** -91.359281° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

 Sampling Point: 0292

Tree Stratum	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/>	0.0%	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>65</u> x 4 = <u>260</u> UPL species <u>5</u> x 5 = <u>25</u> <b>Column Totals:</b> <u>70</u> (A) <u>285</u> (B)  Prevalence Index = B/A = <u>4.071</u>
<b>Sapling or Sapling/Shrub Stratum</b> (Plot size: _____ )					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			
<b>Shrub Stratum</b> (Plot size: _____ )					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			
<b>Herb Stratum</b> (Plot size: <u>15'</u> )					
1. <u>Cerastium glomeratum</u>	35	<input checked="" type="checkbox"/>	50.0%	FACU	<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
2. <u>Allium vineale</u>	20	<input checked="" type="checkbox"/>	28.6%	FACU	
3. <u>Poa annua</u>	10	<input type="checkbox"/>	14.3%	FACU	
4. <u>Glycine max</u>	5	<input type="checkbox"/>	7.1%	UPL	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
9. _____	0	<input type="checkbox"/>	0.0%	_____	
10. _____	0	<input type="checkbox"/>	0.0%	_____	
11. _____	0	<input type="checkbox"/>	0.0%	_____	
12. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>35</u> 20% of Total Cover: <u>14</u>	70	<b>= Total Cover</b>			
<b>Woody Vine Stratum</b> (Plot size: _____ )					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	<b>= Total Cover</b>			

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 0292

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0293  
**Investigator(s):** TLG, SJH **Section, Township, Range:** S 1 T 7N R 4W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.261274° **Long.:** -91.358459° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

 Sampling Point: **0293**

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>75</u> x 4 = <u>300</u> UPL species <u>0</u> x 5 = <u>0</u> <b>Column Totals:</b> <u>75</u> (A) <u>300</u> (B)  Prevalence Index = B/A = <u>4.000</u>
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Herb Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Cerastium glomeratum</u>	35	<input checked="" type="checkbox"/> 46.7%	FACU	<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
2. <u>Allium vineale</u>	20	<input checked="" type="checkbox"/> 26.7%	FACU	
3. <u>Poa annua</u>	15	<input checked="" type="checkbox"/> 20.0%	FACU	
4. <u>Amaranthus spinosus</u>	5	<input type="checkbox"/> 6.7%	FACU	
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
12. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>37.5</u> 20% of Total Cover: <u>15</u> 75 = <b>Total Cover</b>				
<b>Woody Vine Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 0293

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 11-Mar-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0294  
**Investigator(s):** TLG, SJH **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.261274° **Long.:** -91.357472° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

 Sampling Point: 0294

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>75</u> x 3 = <u>225</u> FACU species <u>25</u> x 4 = <u>100</u> UPL species <u>0</u> x 5 = <u>0</u> <b>Column Totals:</b> <u>100</u> (A) <u>325</u> (B)  Prevalence Index = B/A = <u>3.250</u>
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Herb Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Andropogon virginicus</u>	35	<input checked="" type="checkbox"/> 35.0%	FAC	<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
2. <u>Ranunculus sardous</u>	40	<input checked="" type="checkbox"/> 40.0%	FAC	
3. <u>Solidago canadensis</u>	15	<input type="checkbox"/> 15.0%	FACU	
4. <u>Cardamine hirsuta</u>	10	<input type="checkbox"/> 10.0%	FACU	
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
12. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>50</u> 20% of Total Cover: <u>20</u> 100 = <b>Total Cover</b>				
<b>Woody Vine Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				

Remarks: (If observed, list morphological adaptations below).

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



## SOIL

**Sampling Point:** 0294

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0186  
**Investigator(s):** TLG/CLB **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Floodplain **Local relief (concave, convex, none):** none **Slope:** 3.0 % / 1.7 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.259235° **Long.:** -91.357001° **Datum:** WGS 84  
**Soil Map Unit Name:** Grubbs silt loam, 3 to 8 percent slopes, eroded **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

Tree Stratum (Plot size: 30' )					Dominant Species?	Sampling Point: 0186
	Absolute % Cover	Rel.Strat. Cover	Indicator Status			
1. <u>Ulmus americana</u>	50	<input checked="" type="checkbox"/> 52.6%	FAC		<b>Dominance Test worksheet:</b> Number of Dominant Species That are OBL, FACW, or FAC: <u>6</u> (A)  Total Number of Dominant Species Across All Strata: <u>6</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)	
2. <u>Quercus phellos</u>	10	<input type="checkbox"/> 10.5%	FACW			
3. <u>Celtis laevigata</u>	25	<input checked="" type="checkbox"/> 26.3%	FACW			
4. <u>Quercus nigra</u>	10	<input type="checkbox"/> 10.5%	FAC			
5. _____	0	<input type="checkbox"/> 0.0%				
6. _____	0	<input type="checkbox"/> 0.0%				
7. _____	0	<input type="checkbox"/> 0.0%				
8. _____	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>47.5</u> 20% of Total Cover: <u>19</u> <b>95 = Total Cover</b>						
Sapling or Sapling/Shrub Stratum (Plot size: 30' )						
1. <u>Ligustrum sinense</u>	15	<input checked="" type="checkbox"/> 42.9%	FAC		<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>45</u> x 2 = <u>90</u> FAC species <u>125</u> x 3 = <u>375</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> <b>Column Totals:</b> <u>170</u> (A) <u>465</u> (B)  Prevalence Index = B/A = <u>2.735</u>	
2. <u>Ulmus americana</u>	20	<input checked="" type="checkbox"/> 57.1%	FAC			
3. _____	0	<input type="checkbox"/> 0.0%				
4. _____	0	<input type="checkbox"/> 0.0%				
5. _____	0	<input type="checkbox"/> 0.0%				
6. _____	0	<input type="checkbox"/> 0.0%				
7. _____	0	<input type="checkbox"/> 0.0%				
8. _____	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>17.5</u> 20% of Total Cover: <u>7</u> <b>35 = Total Cover</b>						
Shrub Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/> 0.0%			<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is > 50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
2. _____	0	<input type="checkbox"/> 0.0%				
3. _____	0	<input type="checkbox"/> 0.0%				
4. _____	0	<input type="checkbox"/> 0.0%				
5. _____	0	<input type="checkbox"/> 0.0%				
6. _____	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> <b>0 = Total Cover</b>				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
Herb Stratum (Plot size: 15' )						
1. <u>Rubus argutus</u>	30	<input checked="" type="checkbox"/> 75.0%	FAC		<b>Definition of Vegetation Strata:</b> Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.	
2. <u>Sesbania herbacea</u>	10	<input checked="" type="checkbox"/> 25.0%	FACW			
3. _____	0	<input type="checkbox"/> 0.0%				
4. _____	0	<input type="checkbox"/> 0.0%				
5. _____	0	<input type="checkbox"/> 0.0%				
6. _____	0	<input type="checkbox"/> 0.0%				
7. _____	0	<input type="checkbox"/> 0.0%				
8. _____	0	<input type="checkbox"/> 0.0%				
9. _____	0	<input type="checkbox"/> 0.0%				
10. _____	0	<input type="checkbox"/> 0.0%				
11. _____	0	<input type="checkbox"/> 0.0%				
12. _____	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>20</u> 20% of Total Cover: <u>8</u> <b>40 = Total Cover</b>						
Woody Vine Stratum (Plot size: _____ )						
1. _____	0	<input type="checkbox"/> 0.0%			<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>	
2. _____	0	<input type="checkbox"/> 0.0%				
3. _____	0	<input type="checkbox"/> 0.0%				
4. _____	0	<input type="checkbox"/> 0.0%				
5. _____	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> <b>0 = Total Cover</b>						

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 0186

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0187  
**Investigator(s):** TLG/CLB **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Depression **Local relief (concave, convex, none):** none **Slope:** 1.0 % / 0.6 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.258516° **Long.:** -91.360001° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** PFO4C

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): 3.5 Water Table Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): 3 Saturation Present? (includes capillary fringe) Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): 0	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

 Sampling Point: 0187

				Dominant Species?		
Tree Stratum (Plot size: <u>30'</u> )		Absolute % Cover	Rel. Strat. Cover	Indicator Status	Dominance Test worksheet:	
1.	<u>Acer rubrum</u>	65	<input checked="" type="checkbox"/> 65.0%	FAC	Number of Dominant Species That are OBL, FACW, or FAC: <u>5</u> (A)	
2.	<u>Pinus taeda</u>	35	<input checked="" type="checkbox"/> 35.0%	FAC	Total Number of Dominant Species Across All Strata: <u>5</u> (B)	
3.		0	<input type="checkbox"/> 0.0%		Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)	
4.		0	<input type="checkbox"/> 0.0%			
5.		0	<input type="checkbox"/> 0.0%			
6.		0	<input type="checkbox"/> 0.0%			
7.		0	<input type="checkbox"/> 0.0%			
8.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: <u>50</u>		20% of Total Cover: <u>20</u>	100	= Total Cover		
Sapling or Sapling/Shrub Stratum (Plot size: <u>30'</u> )					Prevalence Index worksheet:	
1.	<u>Acer rubrum</u>	30	<input checked="" type="checkbox"/> 60.0%	FAC	Total % Cover of: <u>25</u> Multiply by: <u>1</u> = <u>25</u>	
2.	<u>Pinus taeda</u>	20	<input checked="" type="checkbox"/> 40.0%	FAC	OBL species <u>25</u> x 1 = <u>25</u>	
3.		0	<input type="checkbox"/> 0.0%		FACW species <u>0</u> x 2 = <u>0</u>	
4.		0	<input type="checkbox"/> 0.0%		FAC species <u>150</u> x 3 = <u>450</u>	
5.		0	<input type="checkbox"/> 0.0%		FACU species <u>0</u> x 4 = <u>0</u>	
6.		0	<input type="checkbox"/> 0.0%		UPL species <u>0</u> x 5 = <u>0</u>	
7.		0	<input type="checkbox"/> 0.0%		Column Totals: <u>175</u> (A) <u>475</u> (B)	
8.		0	<input type="checkbox"/> 0.0%		Prevalence Index = B/A = <u>2.714</u>	
50% of Total Cover: <u>25</u>		20% of Total Cover: <u>10</u>	50	= Total Cover		
Shrub Stratum (Plot size: <u>          </u> )					Hydrophytic Vegetation Indicators:	
1.		0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
2.		0	<input type="checkbox"/> 0.0%		<input checked="" type="checkbox"/> 2 - Dominance Test is > 50%	
3.		0	<input type="checkbox"/> 0.0%		<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤ 3.0 <sup>1</sup>	
4.		0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
5.		0	<input type="checkbox"/> 0.0%		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
6.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: <u>0</u>		20% of Total Cover: <u>0</u>	0	= Total Cover	Definition of Vegetation Strata:	
Herb Stratum (Plot size: <u>15'</u> )					Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).	
1.	<u>Juncus effusus</u>	25	<input checked="" type="checkbox"/> 100.0%	OBL	Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.	
2.		0	<input type="checkbox"/> 0.0%		Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.	
3.		0	<input type="checkbox"/> 0.0%		Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
4.		0	<input type="checkbox"/> 0.0%		Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.	
5.		0	<input type="checkbox"/> 0.0%		Woody vine - All woody vines, regardless of height.	
6.		0	<input type="checkbox"/> 0.0%			
7.		0	<input type="checkbox"/> 0.0%			
8.		0	<input type="checkbox"/> 0.0%			
9.		0	<input type="checkbox"/> 0.0%			
10.		0	<input type="checkbox"/> 0.0%			
11.		0	<input type="checkbox"/> 0.0%			
12.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: <u>12.5</u>		20% of Total Cover: <u>5</u>	25	= Total Cover		
Woody Vine Stratum (Plot size: <u>          </u> )					Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
1.		0	<input type="checkbox"/> 0.0%			
2.		0	<input type="checkbox"/> 0.0%			
3.		0	<input type="checkbox"/> 0.0%			
4.		0	<input type="checkbox"/> 0.0%			
5.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: <u>0</u>		20% of Total Cover: <u>0</u>	0	= Total Cover		

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 0187

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input checked="" type="checkbox"/> Depleted Matrix (F3)             |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0189  
**Investigator(s):** TLG/CLB **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 1.0 % / 0.6 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.258303° **Long.:** -91.361255° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** PFO4Cd

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		



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

				Sampling Point: <u>0189</u>
<b>Tree Stratum</b> (Plot size: <u>30'</u> )		<b>Absolute % Cover</b>	<b>Dominant Species? Rel.Strat. Cover</b>	<b>Indicator Status</b>
1.	<u>Quercus falcata</u>	<u>30</u>	<input checked="" type="checkbox"/> 24.0%	FACU
2.	<u>Quercus nigra</u>	<u>30</u>	<input checked="" type="checkbox"/> 24.0%	FAC
3.	<u>Pinus taeda</u>	<u>25</u>	<input checked="" type="checkbox"/> 20.0%	FAC
4.	<u>Juniperus virginiana</u>	<u>10</u>	<input type="checkbox"/> 8.0%	FACU
5.	<u>Celtis laevigata</u>	<u>20</u>	<input type="checkbox"/> 16.0%	FACW
6.	<u>Platanus occidentalis</u>	<u>10</u>	<input type="checkbox"/> 8.0%	FACW
7.		<u>0</u>	<input type="checkbox"/> 0.0%	
8.		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>62.5</u> 20% of Total Cover: <u>25</u>		<u>125</u>	<b>= Total Cover</b>	
<b>Sapling or Sapling/Shrub Stratum</b> (Plot size: <u>30'</u> )				
1.	<u>Celtis laevigata</u>	<u>20</u>	<input checked="" type="checkbox"/> 100.0%	FACW
2.		<u>0</u>	<input type="checkbox"/> 0.0%	
3.		<u>0</u>	<input type="checkbox"/> 0.0%	
4.		<u>0</u>	<input type="checkbox"/> 0.0%	
5.		<u>0</u>	<input type="checkbox"/> 0.0%	
6.		<u>0</u>	<input type="checkbox"/> 0.0%	
7.		<u>0</u>	<input type="checkbox"/> 0.0%	
8.		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>10</u> 20% of Total Cover: <u>4</u>		<u>20</u>	<b>= Total Cover</b>	
<b>Shrub Stratum</b> (Plot size: _____ )				
1.		<u>0</u>	<input type="checkbox"/> 0.0%	
2.		<u>0</u>	<input type="checkbox"/> 0.0%	
3.		<u>0</u>	<input type="checkbox"/> 0.0%	
4.		<u>0</u>	<input type="checkbox"/> 0.0%	
5.		<u>0</u>	<input type="checkbox"/> 0.0%	
6.		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		<u>0</u>	<b>= Total Cover</b>	
<b>Herb Stratum</b> (Plot size: <u>10'</u> )				
1.	<u>Lonicera japonica</u>	<u>5</u>	<input checked="" type="checkbox"/> 100.0%	FACU
2.		<u>0</u>	<input type="checkbox"/> 0.0%	
3.		<u>0</u>	<input type="checkbox"/> 0.0%	
4.		<u>0</u>	<input type="checkbox"/> 0.0%	
5.		<u>0</u>	<input type="checkbox"/> 0.0%	
6.		<u>0</u>	<input type="checkbox"/> 0.0%	
7.		<u>0</u>	<input type="checkbox"/> 0.0%	
8.		<u>0</u>	<input type="checkbox"/> 0.0%	
9.		<u>0</u>	<input type="checkbox"/> 0.0%	
10.		<u>0</u>	<input type="checkbox"/> 0.0%	
11.		<u>0</u>	<input type="checkbox"/> 0.0%	
12.		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>2.5</u> 20% of Total Cover: <u>1</u>		<u>5</u>	<b>= Total Cover</b>	
<b>Woody Vine Stratum</b> (Plot size: _____ )				
1.		<u>0</u>	<input type="checkbox"/> 0.0%	
2.		<u>0</u>	<input type="checkbox"/> 0.0%	
3.		<u>0</u>	<input type="checkbox"/> 0.0%	
4.		<u>0</u>	<input type="checkbox"/> 0.0%	
5.		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		<u>0</u>	<b>= Total Cover</b>	

**Dominance Test worksheet:**

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

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 60.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_

OBL species 0 x 1 = 0

FACW species 50 x 2 = 100

FAC species 55 x 3 = 165

FACU species 45 x 4 = 180

UPL species 0 x 5 = 0

Column Totals: 150 (A) 445 (B)

Prevalence Index = B/A = 2.967

**Hydrophytic Vegetation Indicators:**

☐ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is > 50%

☒ 3 - Prevalence Index is ≤3.0 <sup>1</sup>

☐ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)

<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definition of Vegetation Strata:**

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

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

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

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

Woody vine - All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes ☒ No ☐

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

Sampling Point: 0189

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR	3/2	100				Clay	
6-14	10YR	5/6	100				Clay	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0191  
**Investigator(s):** TLG/CLB **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.258291° **Long.:** -91.355240° **Datum:** WGS 84  
**Soil Map Unit Name:** Jackport silty clay loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

**Sampling Point:** 0191

Tree Stratum (Plot size: _____ )		Absolute % Cover	Species? Rel.Strat. Cover	Indicator Status
1.	_____	0	<input type="checkbox"/> 0.0%	_____
2.	_____	0	<input type="checkbox"/> 0.0%	_____
3.	_____	0	<input type="checkbox"/> 0.0%	_____
4.	_____	0	<input type="checkbox"/> 0.0%	_____
5.	_____	0	<input type="checkbox"/> 0.0%	_____
6.	_____	0	<input type="checkbox"/> 0.0%	_____
7.	_____	0	<input type="checkbox"/> 0.0%	_____
8.	_____	0	<input type="checkbox"/> 0.0%	_____
50% of Total Cover: _____ 20% of Total Cover: _____		0	= Total Cover	
Sapling or Sapling/Shrub Stratum (Plot size: _____ )		Absolute % Cover	Species? Rel.Strat. Cover	Indicator Status
1.	_____	0	<input type="checkbox"/> 0.0%	_____
2.	_____	0	<input type="checkbox"/> 0.0%	_____
3.	_____	0	<input type="checkbox"/> 0.0%	_____
4.	_____	0	<input type="checkbox"/> 0.0%	_____
5.	_____	0	<input type="checkbox"/> 0.0%	_____
6.	_____	0	<input type="checkbox"/> 0.0%	_____
7.	_____	0	<input type="checkbox"/> 0.0%	_____
8.	_____	0	<input type="checkbox"/> 0.0%	_____
50% of Total Cover: _____ 20% of Total Cover: _____		0	= Total Cover	
Shrub Stratum (Plot size: _____ )		Absolute % Cover	Species? Rel.Strat. Cover	Indicator Status
1.	_____	0	<input type="checkbox"/> 0.0%	_____
2.	_____	0	<input type="checkbox"/> 0.0%	_____
3.	_____	0	<input type="checkbox"/> 0.0%	_____
4.	_____	0	<input type="checkbox"/> 0.0%	_____
5.	_____	0	<input type="checkbox"/> 0.0%	_____
6.	_____	0	<input type="checkbox"/> 0.0%	_____
50% of Total Cover: _____ 20% of Total Cover: _____		0	= Total Cover	
Herb Stratum (Plot size: 15' _____ )		Absolute % Cover	Species? Rel.Strat. Cover	Indicator Status
1.	Andropogon virginicus	35	<input checked="" type="checkbox"/> 46.7%	FAC
2.	Sesbania herbacea	20	<input checked="" type="checkbox"/> 26.7%	FACW
3.	Leptochloa fusca ssp. fascicularis	20	<input checked="" type="checkbox"/> 26.7%	FACW
4.	_____	0	<input type="checkbox"/> 0.0%	_____
5.	_____	0	<input type="checkbox"/> 0.0%	_____
6.	_____	0	<input type="checkbox"/> 0.0%	_____
7.	_____	0	<input type="checkbox"/> 0.0%	_____
8.	_____	0	<input type="checkbox"/> 0.0%	_____
9.	_____	0	<input type="checkbox"/> 0.0%	_____
10.	_____	0	<input type="checkbox"/> 0.0%	_____
11.	_____	0	<input type="checkbox"/> 0.0%	_____
12.	_____	0	<input type="checkbox"/> 0.0%	_____
50% of Total Cover: 37.5 20% of Total Cover: 15		75	= Total Cover	
Woody Vine Stratum (Plot size: _____ )		Absolute % Cover	Species? Rel.Strat. Cover	Indicator Status
1.	_____	0	<input type="checkbox"/> 0.0%	_____
2.	_____	0	<input type="checkbox"/> 0.0%	_____
3.	_____	0	<input type="checkbox"/> 0.0%	_____
4.	_____	0	<input type="checkbox"/> 0.0%	_____
5.	_____	0	<input type="checkbox"/> 0.0%	_____
50% of Total Cover: _____ 20% of Total Cover: _____		0	= Total Cover	

**Dominance Test worksheet:**

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

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

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

**Prevalence Index worksheet:**

Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_

OBL species \_\_\_\_\_ 0 x 1 = \_\_\_\_\_ 0

FACW species \_\_\_\_\_ 40 x 2 = \_\_\_\_\_ 80

FAC species \_\_\_\_\_ 35 x 3 = \_\_\_\_\_ 105

FACU species \_\_\_\_\_ 0 x 4 = \_\_\_\_\_ 0

UPL species \_\_\_\_\_ 0 x 5 = \_\_\_\_\_ 0

Column Totals: \_\_\_\_\_ 75 (A) \_\_\_\_\_ 185 (B)

Prevalence Index = B/A = \_\_\_\_\_ 2.467

**Hydrophytic Vegetation Indicators:**

☐ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is > 50%

☒ 3 - Prevalence Index is ≤ 3.0 <sup>1</sup>

☐ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)

<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definition of Vegetation Strata:**

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

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

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

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

Woody vine - All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes ☒ No ☐

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

## SOIL

Sampling Point: 0191

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR	4/2	100				Silty Clay Loam	
10-14	10YR	6/2	100				Silty Clay Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0192  
**Investigator(s):** TLG/CLB **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.258304° **Long.:** -91.352868° **Datum:** WGS 84  
**Soil Map Unit Name:** Jackport silty clay loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

Dominant Species?					Sampling Point: 0192
Tree Stratum (Plot size: )	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:	
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)	
2. _____	0	<input type="checkbox"/> 0.0%		Total Number of Dominant Species Across All Strata: 2 (B)	
3. _____	0	<input type="checkbox"/> 0.0%		Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)	
4. _____	0	<input type="checkbox"/> 0.0%		Prevalence Index worksheet:	
5. _____	0	<input type="checkbox"/> 0.0%		Total % Cover of: Multiply by:	
6. _____	0	<input type="checkbox"/> 0.0%		OBL species 0 x 1 = 0	
7. _____	0	<input type="checkbox"/> 0.0%		FACW species 50 x 2 = 100	
8. _____	0	<input type="checkbox"/> 0.0%		FAC species 0 x 3 = 0	
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover				FACU species 0 x 4 = 0	
Sapling or Sapling/Shrub Stratum (Plot size: )				UPL species 0 x 5 = 0	
1. _____	0	<input type="checkbox"/> 0.0%		Column Totals: 50 (A) 100 (B)	
2. _____	0	<input type="checkbox"/> 0.0%		Prevalence Index = B/A = 2.000	
3. _____	0	<input type="checkbox"/> 0.0%		Hydrophytic Vegetation Indicators:	
4. _____	0	<input type="checkbox"/> 0.0%		<input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
5. _____	0	<input type="checkbox"/> 0.0%		<input checked="" type="checkbox"/> 2 - Dominance Test is > 50%	
6. _____	0	<input type="checkbox"/> 0.0%		<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
7. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
8. _____	0	<input type="checkbox"/> 0.0%		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover				Definition of Vegetation Strata:	
Shrub Stratum (Plot size: )				Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).	
1. _____	0	<input type="checkbox"/> 0.0%		Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.	
2. _____	0	<input type="checkbox"/> 0.0%		Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.	
3. _____	0	<input type="checkbox"/> 0.0%		Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
4. _____	0	<input type="checkbox"/> 0.0%		Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.	
5. _____	0	<input type="checkbox"/> 0.0%		Woody vine - All woody vines, regardless of height.	
6. _____	0	<input type="checkbox"/> 0.0%			
7. _____	0	<input type="checkbox"/> 0.0%			
8. _____	0	<input type="checkbox"/> 0.0%			
9. _____	0	<input type="checkbox"/> 0.0%			
10. _____	0	<input type="checkbox"/> 0.0%			
11. _____	0	<input type="checkbox"/> 0.0%			
12. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 25 20% of Total Cover: 10 50 = Total Cover				Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Herb Stratum (Plot size: 15')					
1. Sesbania herbacea	10	<input checked="" type="checkbox"/> 20.0%	FACW		
2. Leptochloa fusca	40	<input checked="" type="checkbox"/> 80.0%	FACW		
3. _____	0	<input type="checkbox"/> 0.0%			
4. _____	0	<input type="checkbox"/> 0.0%			
5. _____	0	<input type="checkbox"/> 0.0%			
6. _____	0	<input type="checkbox"/> 0.0%			
7. _____	0	<input type="checkbox"/> 0.0%			
8. _____	0	<input type="checkbox"/> 0.0%			
9. _____	0	<input type="checkbox"/> 0.0%			
10. _____	0	<input type="checkbox"/> 0.0%			
11. _____	0	<input type="checkbox"/> 0.0%			
12. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 25 20% of Total Cover: 10 50 = Total Cover					
Woody Vine Stratum (Plot size: )					
1. _____	0	<input type="checkbox"/> 0.0%			
2. _____	0	<input type="checkbox"/> 0.0%			
3. _____	0	<input type="checkbox"/> 0.0%			
4. _____	0	<input type="checkbox"/> 0.0%			
5. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover					

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 0192

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |   |
|--|---|
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)           |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                 |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                     |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                             |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input checked="" type="checkbox"/> Depleted Matrix (F3)                      |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Redox Dark Surface (F6)                              |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Depleted Dark Surface (F7)                           |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Redox Depressions (F8)                               |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Marl (F10) (LRR U)                                   |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                     |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)            |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                        |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)               |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)          |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 150A, 150B) |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:



# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0193  
**Investigator(s):** TLG/CLB **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.258253° **Long.:** -91.351350° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (minimum of 2 required)</b>	
<b>Primary Indicators (minimum of one required; check all that apply)</b>			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
<b>Field Observations:</b>		<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology indicators present.			

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

 Sampling Point: **0193**

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/>	0.0%	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>60</u> x 4 = <u>240</u> UPL species <u>0</u> x 5 = <u>0</u> <b>Column Totals:</b> <u>60</u> (A) <u>240</u> (B)  Prevalence Index = B/A = <u>4.000</u>
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					
<b>Shrub Stratum (Plot size: _____ )</b>					
1. _____	0	<input type="checkbox"/>	0.0%	_____	<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					
<b>Herb Stratum (Plot size: 15' _____ )</b>					
1. <i>Gossypium hirsutum</i>	40	<input checked="" type="checkbox"/>	66.7%	FACU	<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
2. <i>Poa annua</i>	20	<input checked="" type="checkbox"/>	33.3%	FACU	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
9. _____	0	<input type="checkbox"/>	0.0%	_____	
10. _____	0	<input type="checkbox"/>	0.0%	_____	
11. _____	0	<input type="checkbox"/>	0.0%	_____	
12. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>30</u> 20% of Total Cover: <u>12</u> 60 = <b>Total Cover</b>					
<b>Woody Vine Stratum (Plot size: _____ )</b>					
1. _____	0	<input type="checkbox"/>	0.0%	_____	<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 0193

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input checked="" type="checkbox"/> Depleted Matrix (F3)             |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0194  
**Investigator(s):** TLG/CLB **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.258206° **Long.:** -91.348314° **Datum:** WGS 84  
**Soil Map Unit Name:** Teksob loam, 3 to 8 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (minimum of 2 required)</b>	
<b>Primary Indicators (minimum of one required; check all that apply)</b>			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
<b>Field Observations:</b>		<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology indicators present.			

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

Dominant Species?					Sampling Point: 0194
Tree Stratum (Plot size: )	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:	
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)	
2. _____	0	<input type="checkbox"/> 0.0%		Total Number of Dominant Species Across All Strata: 2 (B)	
3. _____	0	<input type="checkbox"/> 0.0%		Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)	
4. _____	0	<input type="checkbox"/> 0.0%		Prevalence Index worksheet:	
5. _____	0	<input type="checkbox"/> 0.0%		Total % Cover of: Multiply by:	
6. _____	0	<input type="checkbox"/> 0.0%		OBL species 0 x 1 = 0	
7. _____	0	<input type="checkbox"/> 0.0%		FACW species 0 x 2 = 0	
8. _____	0	<input type="checkbox"/> 0.0%		FAC species 0 x 3 = 0	
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover				FACU species 70 x 4 = 280	
Sapling or Sapling/Shrub Stratum (Plot size: )				UPL species 0 x 5 = 0	
1. _____	0	<input type="checkbox"/> 0.0%		Column Totals: 70 (A) 280 (B)	
2. _____	0	<input type="checkbox"/> 0.0%		Prevalence Index = B/A = 4.000	
3. _____	0	<input type="checkbox"/> 0.0%		Hydrophytic Vegetation Indicators:	
4. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
5. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 2 - Dominance Test is > 50%	
6. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
7. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
8. _____	0	<input type="checkbox"/> 0.0%		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover				Definition of Vegetation Strata:	
Shrub Stratum (Plot size: )				Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).	
1. _____	0	<input type="checkbox"/> 0.0%		Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.	
2. _____	0	<input type="checkbox"/> 0.0%		Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.	
3. _____	0	<input type="checkbox"/> 0.0%		Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
4. _____	0	<input type="checkbox"/> 0.0%		Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.	
5. _____	0	<input type="checkbox"/> 0.0%		Woody vine - All woody vines, regardless of height.	
6. _____	0	<input type="checkbox"/> 0.0%			
7. _____	0	<input type="checkbox"/> 0.0%			
8. _____	0	<input type="checkbox"/> 0.0%			
9. _____	0	<input type="checkbox"/> 0.0%			
10. _____	0	<input type="checkbox"/> 0.0%			
11. _____	0	<input type="checkbox"/> 0.0%			
12. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 35 20% of Total Cover: 14 70 = Total Cover				Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Herb Stratum (Plot size: 15')					
1. <i>Gossypium hirsutum</i>	40	<input checked="" type="checkbox"/> 57.1%	FACU		
2. <i>Poa annua</i>	30	<input checked="" type="checkbox"/> 42.9%	FACU		
3. _____	0	<input type="checkbox"/> 0.0%			
4. _____	0	<input type="checkbox"/> 0.0%			
5. _____	0	<input type="checkbox"/> 0.0%			
6. _____	0	<input type="checkbox"/> 0.0%			
7. _____	0	<input type="checkbox"/> 0.0%			
8. _____	0	<input type="checkbox"/> 0.0%			
9. _____	0	<input type="checkbox"/> 0.0%			
10. _____	0	<input type="checkbox"/> 0.0%			
11. _____	0	<input type="checkbox"/> 0.0%			
12. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 35 20% of Total Cover: 14 70 = Total Cover					
Woody Vine Stratum (Plot size: )					
1. _____	0	<input type="checkbox"/> 0.0%			
2. _____	0	<input type="checkbox"/> 0.0%			
3. _____	0	<input type="checkbox"/> 0.0%			
4. _____	0	<input type="checkbox"/> 0.0%			
5. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover					

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

**Sampling Point:** 0194

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                        |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0195  
**Investigator(s):** TLG/CLB **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.261379° **Long.:** -91.354146° **Datum:** WGS 84  
**Soil Map Unit Name:** Grubbs silt loam, 3 to 8 percent slopes, eroded **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology indicators present.		

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

 Sampling Point: **0195**

Tree Stratum	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/>	0.0%	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> <b>Column Totals:</b> <u>0</u> (A) <u>0</u> (B)  Prevalence Index = B/A = <u>0.000</u>
<b>Sapling or Sapling/Shrub Stratum</b> (Plot size: _____)					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> <b>1 - Rapid Test for Hydrophytic Vegetation</b> <input type="checkbox"/> <b>2 - Dominance Test is &gt; 50%</b> <input type="checkbox"/> <b>3 - Prevalence Index is ≤3.0<sup>1</sup></b> <input type="checkbox"/> <b>Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)</b>  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<b>Shrub Stratum</b> (Plot size: _____)					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
<b>Herb Stratum</b> (Plot size: _____)					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
9. _____	0	<input type="checkbox"/>	0.0%	_____	
10. _____	0	<input type="checkbox"/>	0.0%	_____	
11. _____	0	<input type="checkbox"/>	0.0%	_____	
12. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
<b>Woody Vine Stratum</b> (Plot size: _____)					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>					

 Remarks: (If observed, list morphological adaptations below).  
 Harvested field contains rice stubble, no other vegetation growing.

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



## SOIL

**Sampling Point:** 0195

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

[illegible]

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

### Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)            |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                    |
| <input type="checkbox"/> Stratified Layers (A5)                | <input checked="" type="checkbox"/> Depleted Matrix (F3)             |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                     |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                      |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)                          |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)            |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)          |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)    | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)      |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |  |

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0196  
**Investigator(s):** TLG/CLB **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.261396° **Long.:** -91.352332° **Datum:** WGS 84  
**Soil Map Unit Name:** Grubbs silt loam, 1 to 3 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (minimum of one required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of 2 required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

 Sampling Point: 0196

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				<b>Prevalence Index worksheet:</b>  Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>50</u> x 2 = <u>100</u> FAC species <u>20</u> x 3 = <u>60</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> <b>Column Totals:</b> <u>70</u> (A) <u>160</u> (B)  Prevalence Index = B/A = <u>2.286</u>
<b>Sapling or Sapling/Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Shrub Stratum (Plot size: _____ )</b>				
1. _____	0	<input type="checkbox"/> 0.0%		<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is > 50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				
<b>Herb Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Sesbania herbacea</u>	10	<input type="checkbox"/> 14.3% FACW		<b>Definition of Vegetation Strata:</b>  Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.  Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine - All woody vines, regardless of height.
2. <u>Ranunculus sardous</u>	15	<input checked="" type="checkbox"/> 21.4% FAC		
3. <u>Andropogon virginicus</u>	5	<input type="checkbox"/> 7.1% FAC		
4. <u>Leptochloa fusca</u>	40	<input checked="" type="checkbox"/> 57.1% FACW		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
12. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>35</u> 20% of Total Cover: <u>14</u> 70 = <b>Total Cover</b>				
<b>Woody Vine Stratum (Plot size: _____ )</b>				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> 0 = <b>Total Cover</b>				

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

Sampling Point: 0196

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

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)	%	Color (moist)	%	Tvpe <sup>1</sup>	Loc <sup>2</sup>				
0-8	10YR	3/2	100						Silt Loam	
8-14	10YR	6/2	95	10YR	5/8	5	C	M	Silt Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0197  
**Investigator(s):** TLG/CLB **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.261439° **Long.:** -91.350380° **Datum:** WGS 84  
**Soil Map Unit Name:** Overcup silt loam, 0 to 1 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (minimum of 2 required)</b>	
<b>Primary Indicators (minimum of one required; check all that apply)</b>			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
<b>Field Observations:</b>			
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology indicators present.			

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

Dominant Species?					Sampling Point: 0197
Tree Stratum	(Plot size: )	Absolute % Cover	Rel.Strat. Cover	Indicator Status	
1.		0	<input type="checkbox"/> 0.0%		
2.		0	<input type="checkbox"/> 0.0%		
3.		0	<input type="checkbox"/> 0.0%		
4.		0	<input type="checkbox"/> 0.0%		
5.		0	<input type="checkbox"/> 0.0%		
6.		0	<input type="checkbox"/> 0.0%		
7.		0	<input type="checkbox"/> 0.0%		
8.		0	<input type="checkbox"/> 0.0%		
50% of Total Cover: 0		20% of Total Cover: 0	0	= Total Cover	
Sapling or Sapling/Shrub Stratum					(Plot size: )
1.		0	<input type="checkbox"/> 0.0%		
2.		0	<input type="checkbox"/> 0.0%		
3.		0	<input type="checkbox"/> 0.0%		
4.		0	<input type="checkbox"/> 0.0%		
5.		0	<input type="checkbox"/> 0.0%		
6.		0	<input type="checkbox"/> 0.0%		
7.		0	<input type="checkbox"/> 0.0%		
8.		0	<input type="checkbox"/> 0.0%		
50% of Total Cover: 0		20% of Total Cover: 0	0	= Total Cover	
Shrub Stratum					(Plot size: )
1.		0	<input type="checkbox"/> 0.0%		
2.		0	<input type="checkbox"/> 0.0%		
3.		0	<input type="checkbox"/> 0.0%		
4.		0	<input type="checkbox"/> 0.0%		
5.		0	<input type="checkbox"/> 0.0%		
6.		0	<input type="checkbox"/> 0.0%		
50% of Total Cover: 0		20% of Total Cover: 0	0	= Total Cover	
Herb Stratum					(Plot size: 15')
1.	Gossypium hirsutum	60	<input checked="" type="checkbox"/> 46.2%	FACU	
2.	Poa annua	70	<input checked="" type="checkbox"/> 53.8%	FACU	
3.		0	<input type="checkbox"/> 0.0%		
4.		0	<input type="checkbox"/> 0.0%		
5.		0	<input type="checkbox"/> 0.0%		
6.		0	<input type="checkbox"/> 0.0%		
7.		0	<input type="checkbox"/> 0.0%		
8.		0	<input type="checkbox"/> 0.0%		
9.		0	<input type="checkbox"/> 0.0%		
10.		0	<input type="checkbox"/> 0.0%		
11.		0	<input type="checkbox"/> 0.0%		
12.		0	<input type="checkbox"/> 0.0%		
50% of Total Cover: 65		20% of Total Cover: 26	130	= Total Cover	
Woody Vine Stratum					(Plot size: )
1.		0	<input type="checkbox"/> 0.0%		
2.		0	<input type="checkbox"/> 0.0%		
3.		0	<input type="checkbox"/> 0.0%		
4.		0	<input type="checkbox"/> 0.0%		
5.		0	<input type="checkbox"/> 0.0%		
50% of Total Cover: 0		20% of Total Cover: 0	0	= Total Cover	

### Dominance Test worksheet:

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

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

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

### Prevalence Index worksheet:

Total % Cover of: Multiply by:

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 0 x 3 = 0

FACU species 130 x 4 = 520

UPL species 0 x 5 = 0

Column Totals: 130 (A) 520 (B)

Prevalence Index = B/A = 4.000

### Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤3.0<sup>1</sup>

☐ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

### Definition of Vegetation Strata:

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

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

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

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

Woody vine - All woody vines, regardless of height.

### Hydrophytic Vegetation Present?

Yes ☐ No ☒

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

Sampling Point: 0197

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

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>				
0-6	10YR	4/3	100						Silt Loam	
6-14	10YR	5/2	90	10YR	5/8	7	C	M	Silt Loam	
				10YR	3/1	3	C	M	Silt Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

# WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

**Project/Site:** Augusta Property **City/County:** Augusta/Woodruff County **Sampling Date:** 13-Jan-21  
**Applicant/Owner:** Arkansas Electric Cooperative Corporation **State:** AR **Sampling Point:** 0198  
**Investigator(s):** TLG/CLB **Section, Township, Range:** S 6 T 7N R 3W  
**Landform (hillslope, terrace, etc.):** Flat **Local relief (concave, convex, none):** none **Slope:** 0.0 % / 0.0 °  
**Subregion (LRR or MLRA):** LRR O **Lat.:** 35.261377° **Long.:** -91.346091° **Datum:** WGS 84  
**Soil Map Unit Name:** Teksob loam, 3 to 8 percent slopes **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ☒ No ☐ (If no, explain in Remarks.)  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐  
**Are Vegetation** ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area</b> <b>within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (minimum of 2 required)</b>	
<b>Primary Indicators (minimum of one required; check all that apply)</b>			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
<b>Field Observations:</b>		<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology indicators present.			



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

Dominant Species?					Sampling Point: 0198
Tree Stratum (Plot size: )	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:	
1. _____	0	<input type="checkbox"/> 0.0%		Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)	
2. _____	0	<input type="checkbox"/> 0.0%		Total Number of Dominant Species Across All Strata: 2 (B)	
3. _____	0	<input type="checkbox"/> 0.0%		Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)	
4. _____	0	<input type="checkbox"/> 0.0%		Prevalence Index worksheet:	
5. _____	0	<input type="checkbox"/> 0.0%		Total % Cover of: Multiply by:	
6. _____	0	<input type="checkbox"/> 0.0%		OBL species 0 x 1 = 0	
7. _____	0	<input type="checkbox"/> 0.0%		FACW species 0 x 2 = 0	
8. _____	0	<input type="checkbox"/> 0.0%		FAC species 0 x 3 = 0	
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover				FACU species 80 x 4 = 320	
Sapling or Sapling/Shrub Stratum (Plot size: )				UPL species 0 x 5 = 0	
1. _____	0	<input type="checkbox"/> 0.0%		Column Totals: 80 (A) 320 (B)	
2. _____	0	<input type="checkbox"/> 0.0%		Prevalence Index = B/A = 4.000	
3. _____	0	<input type="checkbox"/> 0.0%		Hydrophytic Vegetation Indicators:	
4. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
5. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 2 - Dominance Test is > 50%	
6. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
7. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
8. _____	0	<input type="checkbox"/> 0.0%		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover				Definition of Vegetation Strata:	
Shrub Stratum (Plot size: )				Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).	
1. _____	0	<input type="checkbox"/> 0.0%		Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.	
2. _____	0	<input type="checkbox"/> 0.0%		Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.	
3. _____	0	<input type="checkbox"/> 0.0%		Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
4. _____	0	<input type="checkbox"/> 0.0%		Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.	
5. _____	0	<input type="checkbox"/> 0.0%		Woody vine - All woody vines, regardless of height.	
6. _____	0	<input type="checkbox"/> 0.0%			
7. _____	0	<input type="checkbox"/> 0.0%			
8. _____	0	<input type="checkbox"/> 0.0%			
9. _____	0	<input type="checkbox"/> 0.0%			
10. _____	0	<input type="checkbox"/> 0.0%			
11. _____	0	<input type="checkbox"/> 0.0%			
12. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 40 20% of Total Cover: 16 80 = Total Cover				Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Herb Stratum (Plot size: 15')					
1. <i>Gossypium hirsutum</i>	60	<input checked="" type="checkbox"/> 75.0%	FACU		
2. <i>Poa annua</i>	20	<input checked="" type="checkbox"/> 25.0%	FACU		
3. _____	0	<input type="checkbox"/> 0.0%			
4. _____	0	<input type="checkbox"/> 0.0%			
5. _____	0	<input type="checkbox"/> 0.0%			
6. _____	0	<input type="checkbox"/> 0.0%			
7. _____	0	<input type="checkbox"/> 0.0%			
8. _____	0	<input type="checkbox"/> 0.0%			
9. _____	0	<input type="checkbox"/> 0.0%			
10. _____	0	<input type="checkbox"/> 0.0%			
11. _____	0	<input type="checkbox"/> 0.0%			
12. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 40 20% of Total Cover: 16 80 = Total Cover					
Woody Vine Stratum (Plot size: )					
1. _____	0	<input type="checkbox"/> 0.0%			
2. _____	0	<input type="checkbox"/> 0.0%			
3. _____	0	<input type="checkbox"/> 0.0%			
4. _____	0	<input type="checkbox"/> 0.0%			
5. _____	0	<input type="checkbox"/> 0.0%			
50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover					

Remarks: (If observed, list morphological adaptations below).

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

## SOIL

Sampling Point: 0198

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10YR	4/6	100				Loam	

<sup>1</sup> Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

## Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☐ No ☒

Remarks:

## **Attachment 3**

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### Photo Log

Streams



Stream 1 (S-1) in the agricultural fields on the north side of the property.



Additional view of Stream 1 (S-1) in the forested area on the south side of the property.





Stream 2 (S-2)



Stream 3 (S-3)





Stream 4 (S-4)



Stream 5 (S-5)



Stream 6 (S-6)



Stream 7 (S-7)



**Wetlands**



Wetland 1 (W-1)



Wetland 2 (W-2)





Wetland 3 (W-3)

## **Attachment 4**

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### Stream Identification Forms

# S-1 (Wpts 0227, 0228, 1997, 2026, & 2032) NC DWQ Stream Identification Form Version 4.11

<b>Date:</b> 01-13-21	<b>Project/Site:</b> Agusta Property	<b>Latitude:</b> 35.258176°
<b>Evaluator:</b> SJH/WHG	<b>County:</b> Woodruff County	<b>Longitude:</b> -91.347522°
<b>Total Points:</b> 22.5 <i>Stream is at least intermittent if <math>\geq 19</math> or perennial if <math>\geq 30</math>*</i>	<b>Stream Determination (circle one)</b> Ephemeral <u>Intermittent</u> Perennial	<b>Other</b> e.g. Quad Name:

A. Geomorphology (Subtotal = 13.5 )	Absent	Weak	Moderate	Strong
1. Continuity of channel bed and bank	0	1	2	③
2. Sinuosity of channel along thalweg	0	①	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	①	2	3
4. Particle size of stream substrate	0	①	2	3
5. Active/relict floodplain	①	1	2	3
6. Depositional bars or benches	0	①	2	3
7. Recent alluvial deposits	0	①	2	3
8. Headcuts	0	1	②	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	①	0.5	1	1.5
11. Second or greater order channel	No = 0		Yes = ③	

\*artificial ditches are not rated; see discussions in manual

## B. Hydrology (Subtotal = 6 )

12. Presence of Baseflow	0	1	②	3
13. Iron oxidizing bacteria	①	1	2	3
14. Leaf litter	①.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	①.5
16. Organic debris lines or piles	0	0.5	①	1.5
17. Soil-based evidence of high water table?	No = ①		Yes = 3	

## C. Biology (Subtotal = 3 )

18. Fibrous roots in streambed	3	2	①	0
19. Rooted upland plants in streambed	3	2	①	0
20. Macroinvertebrates (note diversity and abundance)	①	1	2	3
21. Aquatic Mollusks	①	1	2	3
22. Fish	①	0.5	1	1.5
23. Crayfish	0	①.5	1	1.5
24. Amphibians	0	①.5	1	1.5
25. Algae	①	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = ①			

\*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

## S-2 (Wpts 2040 & 2041) NC DWQ Stream Identification Form Version 4.11

<b>Date:</b> 01-13-21	<b>Project/Site:</b> Woodlands Edge North Slope Property	<b>Latitude:</b> 35.261017°
<b>Evaluator:</b> SJH/WHG	<b>County:</b> Woodruff County	<b>Longitude:</b> -91.331576°
<b>Total Points:</b> 4 <i>Stream is at least intermittent if <math>\geq 19</math> or perennial if <math>\geq 30^*</math></i>	<b>Stream Determination (circle one)</b> <u>Ephemeral</u> Intermittent Perennial	<b>Other</b> e.g. Quad Name:

A. Geomorphology (Subtotal = 1 )	Absent	Weak	Moderate	Strong
1. Continuity of channel bed and bank	0	①	2	3
2. Sinuosity of channel along thalweg	①	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	①	1	2	3
4. Particle size of stream substrate	①	1	2	3
5. Active/relict floodplain	①	1	2	3
6. Depositional bars or benches	①	1	2	3
7. Recent alluvial deposits	①	1	2	3
8. Headcuts	①	1	2	3
9. Grade control	①	0.5	1	1.5
10. Natural valley	①	0.5	1	1.5
11. Second or greater order channel	No = ①		Yes = 3	

artificial ditches are not rated; see discussions in manual

### B. Hydrology (Subtotal = 1 )

12. Presence of Baseflow	①	1	2	3
13. Iron oxidizing bacteria	①	1	2	3
14. Leaf litter	1.5	1	①.5	0
15. Sediment on plants or debris	0	0.5	①	1.5
16. Organic debris lines or piles	0	①.5	1	1.5
17. Soil-based evidence of high water table?	No = ①		Yes = 3	

### C. Biology (Subtotal = 2 )

18. Fibrous roots in streambed	3	2	①	0
19. Rooted upland plants in streambed	3	2	①	0
20. Macrobenthos (note diversity and abundance)	①	1	2	3
21. Aquatic Mollusks	①	1	2	3
22. Fish	①	0.5	1	1.5
23. Crayfish	①	0.5	1	1.5
24. Amphibians	①	0.5	1	1.5
25. Algae	①	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = ①			

\*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

# S-3 (Wpt 0185) NC DWQ Stream Identification Form Version 4.11

<b>Date:</b> 01-13-21	<b>Project/Site:</b> Woodlands Edge North Slope Property	<b>Latitude:</b> 35.259443°
<b>Evaluator:</b> TLG/CLB	<b>County:</b> Woodruff County	<b>Longitude:</b> -91.356386°
<b>Total Points:</b> 29 <i>Stream is at least intermittent if <math>\geq 19</math> or perennial if <math>\geq 30^*</math></i>	<b>Stream Determination (circle one)</b> Ephemeral <u>Intermittent</u> Perennial	<b>Other</b> e.g. Quad Name:

A. Geomorphology (Subtotal = 19 )	Absent	Weak	Moderate	Strong
1. Continuity of channel bed and bank	0	1	2	③
2. Sinuosity of channel along thalweg	0	①	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	②	3
4. Particle size of stream substrate	0	1	②	3
5. Active/relict floodplain	0	1	②	3
6. Depositional bars or benches	0	1	②	3
7. Recent alluvial deposits	0	①	2	3
8. Headcuts	0	1	②	3
9. Grade control	0	①.5	1	1.5
10. Natural valley	0	①.5	1	1.5
11. Second or greater order channel	No = 0		Yes = ③	

\* artificial ditches are not rated; see discussions in manual

## B. Hydrology (Subtotal = 5 )

12. Presence of Baseflow	0	1	②	3
13. Iron oxidizing bacteria	①	1	2	3
14. Leaf litter	①.5	1	0.5	0
15. Sediment on plants or debris	0	①.5	1	1.5
16. Organic debris lines or piles	0	0.5	①	1.5
17. Soil-based evidence of high water table?	No = ①		Yes = 3	

## C. Biology (Subtotal = 5 )

18. Fibrous roots in streambed	3	②	1	0
19. Rooted upland plants in streambed	3	②	1	0
20. Macroinvertebrates (note diversity and abundance)	①	1	2	3
21. Aquatic Mollusks	①	1	2	3
22. Fish	①	0.5	1	1.5
23. Crayfish	0	①.5	1	1.5
24. Amphibians	0	①.5	1	1.5
25. Algae	①	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = ①			

\*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

# S-4 (Wpts 0249)

## NC DWQ Stream Identification Form Version 4.11

<b>Date:</b> 03-11-21	<b>Project/Site:</b> Woodlands Edge North Slope Property	<b>Latitude:</b> 35.255848°
<b>Evaluator:</b> SJH/TLG	<b>County:</b> Woodruff County	<b>Longitude:</b> -91.357133°
<b>Total Points:</b> 7.5 <i>Stream is at least intermittent if <math>\geq 19</math> or perennial if <math>\geq 30^*</math></i>	<b>Stream Determination (circle one)</b> <u>Ephemeral</u> Intermittent Perennial	<b>Other</b> e.g. Quad Name:

A. Geomorphology (Subtotal = 2 )	Absent	Weak	Moderate	Strong
1. Continuity of channel bed and bank-Artificial ditches are not rated	0	1	②	3
2. Sinuosity of channel along thalweg	①	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	①	1	2	3
4. Particle size of stream substrate	①	1	2	3
5. Active/relict floodplain	①	1	2	3
6. Depositional bars or benches	①	1	2	3
7. Recent alluvial deposits	①	1	2	3
8. Headcuts	①	1	2	3
9. Grade control	①	0.5	1	1.5
10. Natural valley	①	0.5	1	1.5
11. Second or greater order channel	No = ①		Yes = 3	

artificial ditches are not rated; see discussions in manual

### B. Hydrology (Subtotal = 1.5 )

12. Presence of Baseflow	①	1	2	3
13. Iron oxidizing bacteria	①	1	2	3
14. Leaf litter	①.5	1	0.5	0
15. Sediment on plants or debris	①	0.5	1	1.5
16. Organic debris lines or piles	①	0.5	1	1.5
17. Soil-based evidence of high water table?	No = ①		Yes = 3	

### C. Biology (Subtotal = 4 )

18. Fibrous roots in streambed	3	②	1	0
19. Rooted upland plants in streambed	3	②	1	0
20. Macroinvertebrates (note diversity and abundance)	①	1	2	3
21. Aquatic Mollusks	①	1	2	3
22. Fish	①	0.5	1	1.5
23. Crayfish	①	0.5	1	1.5
24. Amphibians	①	0.5	1	1.5
25. Algae	①	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = ①			

\*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

# S-5 (Wpts 0254)

## NC DWQ Stream Identification Form Version 4.11

<b>Date:</b> 03-11-21	<b>Project/Site:</b> Woodlands Edge North Slope Property	<b>Latitude:</b> 35.253019°
<b>Evaluator:</b> SJH/TLG	<b>County:</b> Woodruff County	<b>Longitude:</b> -91.356098°
<b>Total Points:</b> 6.5 <i>Stream is at least intermittent if <math>\geq 19</math> or perennial if <math>\geq 30^*</math></i>	<b>Stream Determination (circle one)</b> <u>Ephemeral</u> Intermittent Perennial	<b>Other</b> e.g. Quad Name:

A. Geomorphology (Subtotal = 1 )	Absent	Weak	Moderate	Strong
1. Continuity of channel bed and bank-Artificial ditches are not rated	0	①	2	3
2. Sinuosity of channel along thalweg	①	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	①	1	2	3
4. Particle size of stream substrate	①	1	2	3
5. Active/relict floodplain	①	1	2	3
6. Depositional bars or benches	①	1	2	3
7. Recent alluvial deposits	①	1	2	3
8. Headcuts	①	1	2	3
9. Grade control	①	0.5	1	1.5
10. Natural valley	①	0.5	1	1.5
11. Second or greater order channel	No = ①		Yes = 3	

artificial ditches are not rated; see discussions in manual

### B. Hydrology (Subtotal = 1.5 )

12. Presence of Baseflow	①	1	2	3
13. Iron oxidizing bacteria	①	1	2	3
14. Leaf litter	①.5	1	0.5	0
15. Sediment on plants or debris	①	0.5	1	1.5
16. Organic debris lines or piles	①	0.5	1	1.5
17. Soil-based evidence of high water table?	No = ①		Yes = 3	

### C. Biology (Subtotal = 4 )

18. Fibrous roots in streambed	3	②	1	0
19. Rooted upland plants in streambed	3	②	1	0
20. Macrobenthos (note diversity and abundance)	①	1	2	3
21. Aquatic Mollusks	①	1	2	3
22. Fish	①	0.5	1	1.5
23. Crayfish	①	0.5	1	1.5
24. Amphibians	①	0.5	1	1.5
25. Algae	①	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = ①			

\*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

# S-6 (Wpts 0263)

## NC DWQ Stream Identification Form Version 4.11

<b>Date:</b> 03-11-21	<b>Project/Site:</b> Woodlands Edge North Slope Property	<b>Latitude:</b> 35.253592°
<b>Evaluator:</b> SJH/TLG	<b>County:</b> Woodruff County	<b>Longitude:</b> -91.355859°
<b>Total Points:</b> 6.5 <i>Stream is at least intermittent if <math>\geq 19</math> or perennial if <math>\geq 30</math>*</i>	<b>Stream Determination (circle one)</b> <u>Ephemeral</u> Intermittent Perennial	<b>Other</b> e.g. Quad Name:

A. Geomorphology (Subtotal = 2 )	Absent	Weak	Moderate	Strong
1. Continuity of channel bed and bank-Artificial ditches are not rated	0	①	2	3
2. Sinuosity of channel along thalweg	①	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	①	1	2	3
4. Particle size of stream substrate	①	1	2	3
5. Active/relict floodplain	①	1	2	3
6. Depositional bars or benches	①	1	2	3
7. Recent alluvial deposits	①	1	2	3
8. Headcuts	①	1	2	3
9. Grade control	①	0.5	1	1.5
10. Natural valley	①	0.5	1	1.5
11. Second or greater order channel	No = ①		Yes = 3	

artificial ditches are not rated; see discussions in manual

### B. Hydrology (Subtotal = 1.5 )

12. Presence of Baseflow	①	1	2	3
13. Iron oxidizing bacteria	①	1	2	3
14. Leaf litter	①.5	1	0.5	0
15. Sediment on plants or debris	①	0.5	1	1.5
16. Organic debris lines or piles	①	0.5	1	1.5
17. Soil-based evidence of high water table?	No = ①		Yes = 3	

### C. Biology (Subtotal = 4 )

18. Fibrous roots in streambed	3	②	1	0
19. Rooted upland plants in streambed	3	②	1	0
20. Macrobenthos (note diversity and abundance)	①	1	2	3
21. Aquatic Mollusks	①	1	2	3
22. Fish	①	0.5	1	1.5
23. Crayfish	①	0.5	1	1.5
24. Amphibians	①	0.5	1	1.5
25. Algae	①	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = ①			

\*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:



# S-7 (Wpts 0269 & 0270) NC DWQ Stream Identification Form Version 4.11

<b>Date:</b> 03-11-21	<b>Project/Site:</b> Woodlands Edge North Slope Property	<b>Latitude:</b> 35.249906°
<b>Evaluator:</b> SJH/TLG	<b>County:</b> Woodruff County	<b>Longitude:</b> -91.361523°
<b>Total Points:</b> 6.5 <i>Stream is at least intermittent if <math>\geq 19</math> or perennial if <math>\geq 30^*</math></i>	<b>Stream Determination (circle one)</b> <u>Ephemeral</u> Intermittent Perennial	<b>Other</b> e.g. Quad Name:

A. Geomorphology (Subtotal = 2 )	Absent	Weak	Moderate	Strong
1. Continuity of channel bed and bank-Artificial ditches are not rated	0	1	(2)	3
2. Sinuosity of channel along thalweg	(0)	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	(0)	1	2	3
4. Particle size of stream substrate	(0)	1	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	(0)	0.5	1	1.5
11. Second or greater order channel	No = (0)		Yes = 3	

artificial ditches are not rated; see discussions in manual

## B. Hydrology (Subtotal = 0.5 )

12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	(0.5)	0
15. Sediment on plants or debris	(0)	0.5	1	1.5
16. Organic debris lines or piles	(0)	0.5	1	1.5
17. Soil-based evidence of high water table?	No = (0)		Yes = 3	

## C. Biology (Subtotal = 4 )

18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macroinvertebrates (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = (0)			

\*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: