

June 16, 2026

shelley@arkadelphiaalliance.com

Ms. Shelley Short
President & CEO – Arkadelphia Regional Economic Development Alliance & Area Chamber of Commerce
CEO – Economic Development Corporation of Clark County, Arkansas
201 North 26th Street
Arkadelphia, AR 71923

RE: Section 404 Delineation – Transmittal Cover Letter
CCIC - McClellan – Gum Springs, Clark County, Arkansas
ECCI Project # 5213-3004

Dear Ms. Short:

Please find enclosed the Section 404 delineation report for the CCIC - McClellan project.

During the delineation, ECCI observed one wetland feature (0.54 acre) and one relatively permanent water (RPW) stream channel (46 linear feet).

Federal jurisdiction over surface waters is determined according to the pre-2015 regulatory regime, consistent with the Supreme Court's decision in *Sackett v. EPA* (No. 21-454; May 25, 2023) and subsequent *Memorandum to the Field Between the U.S. Department of the Army, U.S. Army Corp of Engineers, and the U.S. Environmental Protection Agency Concerning the Proper Implementation of "Continuous Surface connection" Under the Definition of "Waters of the United States" Under the Clean Water Act* (March 12, 2025).

The onsite wetland area appears to have a continuous surface hydrologic connection to a downstream regulated water, i.e., the RPW stream channel, which is a mapped tributary to Waggle Creek, and ultimately to the Ouachita River, a Traditionally Navigable Water (TNW).

Based on the Section 404 delineation and in light of the most recent information regarding jurisdiction issued by the United States Army Corps of Engineers (USACE) / Environmental Protection Agency (EPA), it is the opinion of ECCI that the observed onsite wetland area and the RPW stream channel will likely be considered jurisdictional under Section 404 of the Clean Water Act (CWA). Projects impacting aquatic features that are jurisdictional under Section 404 of the CWA require authorization from the USACE Regulatory Division. This jurisdictional assessment is based on feature classification and the continuity of waters of the United States extending from these onsite aquatic features to a TNW.



These findings are offered based on our best professional judgement and recent informal discussions with USACE personnel. We offer our comments with regard to onsite features having the potential for USACE regulation under Section 404 of the CWA. However, until approved by the USACE, the information provided is considered unofficial. The USACE allows consultants to prepare information for submittal to the USACE for approval, but only the USACE can make official decisions with regard to jurisdiction of aquatic features under Section 404 of the CWA. Therefore, if an official decision regarding jurisdiction is desired, the enclosed delineation report may be provided to the USACE with a request for an Approved Jurisdictional Determination.

We thank you for the opportunity to provide information regarding your project. If you have any questions or need additional information regarding our findings presented in the delineation report, please do not hesitate to contact me or Lisa Willis at 501-975-8100.

Respectfully submitted,
ECCI

Jimmy Rogers
Project Manager

enclosure

SECTION 404 DELINEATION CCIC – McCLELLAN SITE CLARK COUNTY, ARKANSAS

JUNE 16, 2026

Prepared for:
**ECONOMIC DEVELOPMENT CORPORATION OF CLARK COUNTY, ARKANSAS
ATTN: SHELLEY SHORT
201 NORTH 26TH STREET
ARKADELPHIA, AR 72923**

Prepared by:



ENGINEERING | COMPLIANCE | CONSTRUCTION
13000 CANTRELL ROAD
LITTLE ROCK, ARKANSAS 72223-1637
TELEPHONE: (501) 975-8100

ECCI Project No. 5213-3004

TABLE OF CONTENTS

1.0 INTRODUCTION	1
2.0 MATERIALS AND METHODS.....	2
3.0 FINDINGS AND RESULTS.....	3
3.1 General Site Description	3
3.2 Wetlands	3
3.2.1 Vegetation	3
3.2.2 Wetland Hydrology.....	4
3.2.3 Soils.....	4
3.3 Other Waters of the US.....	5
3.4 Downstream Hydrologic Connectivity	6
4.0 FEMA 100-YEAR FLOODPLAIN AND FLOODWAY ISSUES	7
5.0 SUMMARY AND CONCLUSIONS	8

LIST OF TABLES

Table 1. Summary of Soil Map Units	5
Table 2. Summary of Findings at each of the 3 Sampling Point Locations.....	5

LIST OF FIGURES

Figure 1	Map showing project vicinity overlaid on ESRI World Street Maps.
Figure 2	Map showing project area overlaid on USGS TNM Topo Base Map.
Figure 3	Map showing project details overlaid on USGS TNM Topo Base Map.
Figure 4	Map showing project details overlaid on 2023 9-inch aerial imagery.

LIST OF ATTACHMENTS

ATTACHMENT A:	Sampling Point Data Sheets
ATTACHMENT B:	Representative Photos
ATTACHMENT C:	Reference Maps

1.0 INTRODUCTION

The Economic Development Corporation of Clark County, Arkansas contracted with Engineering Compliance and Construction, Inc. (ECCI) of Little Rock, Arkansas, to delineate Section 404 wetlands and other waters of the United States (WOTUS) within the proposed project site of approximately 4.5 acres. The project site is located immediately south of McClellan Blvd. in Gum Springs, Clark County, Arkansas (Figure 1). The area of the delineation is mapped on the USGS *The National Map* Topo basemap for quadrangle Arkadelphia, AR (7.5-minute series) (Figures 2 and 3). The project area is located in part of the southern ½ of Section 12, Township 8 South, Range 20 West. Approximate central coordinates of the project area are 34.04934°N, -93.09588°W.

2.0 MATERIALS AND METHODS

ECCI conducted a Level 3, routine wetland delineation as described in the US Army Corps of Engineers (USACE) *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987). Field investigations for the delineation were conducted during May 2026. ECCI evaluated the area of the delineation for potential Section 404 jurisdictional areas, i.e., wetlands and other WOTUS, and complied with the USACE 1987 Manual and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region Version 2.0* (Engineer Research and Development Center 2010).

Sampling point locations were selected to evaluate areas appearing to have at least some potential for USACE regulation under Section 404 of the Clean Water Act (CWA), and to evaluate the project area for the purpose of collecting data regarding vegetative community type(s). Three (3) sampling point locations were established within the project area; data were collected on vegetation, hydrology, and soils at each location (Table 2; Figures 3 and 4; Attachment A).

The *Keys to the Flora of Arkansas* (Smith 1994) was used to confirm certain plant identifications and the *USACE Cold Regions Research and Engineering Laboratory's Atlantic and Gulf Coastal Plain Regional Wetland Plant List* (2022) was used to determine wetland indicator status for the dominant species. Soil pits were dug with a sharpshooter shovel to a depth of approximately 16 to 18 inches, where possible, and soil colors were determined with the aid of Munsell color charts. Soil survey data from the Natural Resources Conservation Service's (NRCS) *Web Soil Survey* (2019) were used to determine the map units for the area. Also, the NRCS (Soil Data Access) *Clark County, Arkansas Hydric Soils Map List and Map Units with Hydric Inclusions* was used to assist in the selection of sampling points appearing to have a potential for the occurrence of hydric soils.

A smartphone using ARCGIS collector paired with a Geode GPS with sub-meter accuracy was used for marking sampling site locations and potential Section 404 feature boundaries.

3.0 FINDINGS AND RESULTS

3.1 General Site Description

Topography of the project site gently slopes toward the east. Three primary plant communities were observed within the project area, as described in Section 3.2.1 below. One wetland, one stream channel, and no other aquatic features were observed within the project area. Figures 1 through 4 provide maps of the project area. Attachment A provides completed sampling point data sheets. Attachment B provides representative photos of the project area. Attachment C provides various reference maps of the project area.

Historic aerial images indicate that the western portion of the delineation area has been maintained as herbaceous since at least 1956 (earliest aerial image reviewed). The eastern portion of the delineation area included a variety of cover (tree, shrub, and herbaceous) between 1956 through 1968; since 1983 the eastern portion of the delineation area appears to have been continuously forested.

3.2 Wetlands

ECCI observed one feature, WET-MC-A totaling 0.54 acre, that meets the technical criteria for classification as a wetland (Figures 3 and 4; Attachment B, Photo 5). WET-MC-A is located in the southeastern portion of the site. The observed wetland feature is generally a low-lying forested area, with some herbaceous coverage, that abuts a mapped tributary (RPW-MC-1) to the east/southeast. Based on the direct hydrologic connection to a tributary, this wetland feature will likely be considered jurisdictional under the current interpretation of Section 404 of the CWA.

3.2.1 Vegetation

The project area consists of three primary vegetation communities, i.e., a maintained field community, a forested upland community, and a forested (with some herbaceous cover) riparian wetland community.

The maintained field community was observed throughout the western ~1/2 of the project site. This community was observed to be dominated by perennial rye grass (*Lolium perenne*), Indian-hemp (*Apocynum cannabinum*), and Japanese chess (*Bromus japonicus*) (Attachment B, Photo 3).

The forested upland community, comprising the majority of the eastern ~1/2 of the project site, was observed to be dominated by pignut hickory (*Carya glabra*), loblolly pine (*Pinus taeda*), winged elm (*Ulmus alata*), Chinese privet (*Ligustrum sinense*), groundsel tree (*Baccharis halimifolia*), saw greenbrier (*Smilax bona-nox*), and Virginia-creeper (*Parthenocissus quinquefolia*) (Attachment B, Photo 4).

The forested (with some herbaceous cover) riparian wetland community, located in the southeastern portion of the project area, is dominated by sugarberry (*Celtis laevigata*), winged elm, American elm (*Ulmus americana*), Chinese privet, and white woodland aster (*Symphyotrichum lateriflorum*) (Attachment B, Photo 5).

Positive indicators of hydrophytic vegetation were only observed within the onsite delineated wetland, i.e., sampling point location A-03 (Table 2; Attachment A).

3.2.2 Wetland Hydrology

Hydrology within the onsite wetland areas appears to be primarily associated with seasonal runoff and short-term inundation during and following periods of rainfall. Hydrologic indicators observed within the onsite wetland feature include water-stained leaves and drainage patterns.

Positive indicators of hydrology were only observed within the onsite delineated wetland, i.e., sampling point location A-03 (Table 2; Attachment A).

3.2.3 Soils

Table 1 summarizes soils mapped within the project site by the NRCS *Web Soil Survey* 3.4 (Attachment C). Hydric soil status of each soil map unit is taken from the NRCS hydric soils lists for Clark County, Arkansas. Positive indicators of hydric soils were observed at each of the three sampling point locations (Table 2; Attachment A). Although hydric soils were observed in

upland areas, this is believed to be due to the nature of Blackland Prairie soils, which can present as hydric based on coloration but may not receive the hydrology that leads to the development of hydric soils under typical conditions.

Table 1. Summary of Soil Map Units

Soil Map Unit Name	Description	Hydric
Clark County, Arkansas		
Houston Clay, 3 to 8 percent slopes, eroded	Moderately well drained soils found on Blackland prairie coastal plains	Yes
Terouge silty clay, 1 to 3 percent slopes	Somewhat poorly drained soils found on Blackland prairie fluvial terraces	Yes

Table 2. Summary of Findings at each of the 3 Sampling Point Locations

Sampling Point	Hydrophytic Vegetation	Hydric Soils	Wetland Hydrology	Technical Wetland
A-01	No	Yes	No	No
A-02	No	Yes	No	No
A-03	Yes	Yes	Yes	Yes

3.3 Other Waters of the US

The reviewed USGS topographic maps (1960, 1975, 1977, 2014, 2017, 2020, and 2024) illustrate a single aquatic feature onsite, i.e., a stream channel near the eastern edge of the project area. Similarly, the NWI maps this same stream channel (Attachment C). The stream channel is classified by NWI within the project area as R4SBC (a riverine, intermittent streambed, seasonally flooded). The mapped stream channel is a tributary of Waggle Creek.

The mapped channel was observed to be a relatively permanent water (RPW) tributary (Attachment B, Photo 6). This channel, designated RPW-MC-1 for this delineation report, was observed extending 46 linear feet within the southeastern corner of the project area. RPW-MC-1 was observed to have a substrate consisting of silt and gravel and was visually estimated to average approximately six feet wide with a depth of approximately one foot between the stream bottom and the ordinary high water mark.

Other than RPW-MC-1, field observations confirmed a lack of other WOTUS, e.g., ponds, lakes, streams, rivers, etc., within the project area.

3.4 Downstream Hydrologic Connectivity

Drainage from the site generally flows toward the east to RPW-MC-1. RPW-MC-1 is a mapped tributary that flows generally southeast to Waggle Creek; Waggle Creek flows generally south and flows to Terre Noire Creek; Terre Noire Creek flows generally southeast to the Little Missouri River; the Little Missouri River flows east to the Ouachita River, a Traditionally Navigable Water.

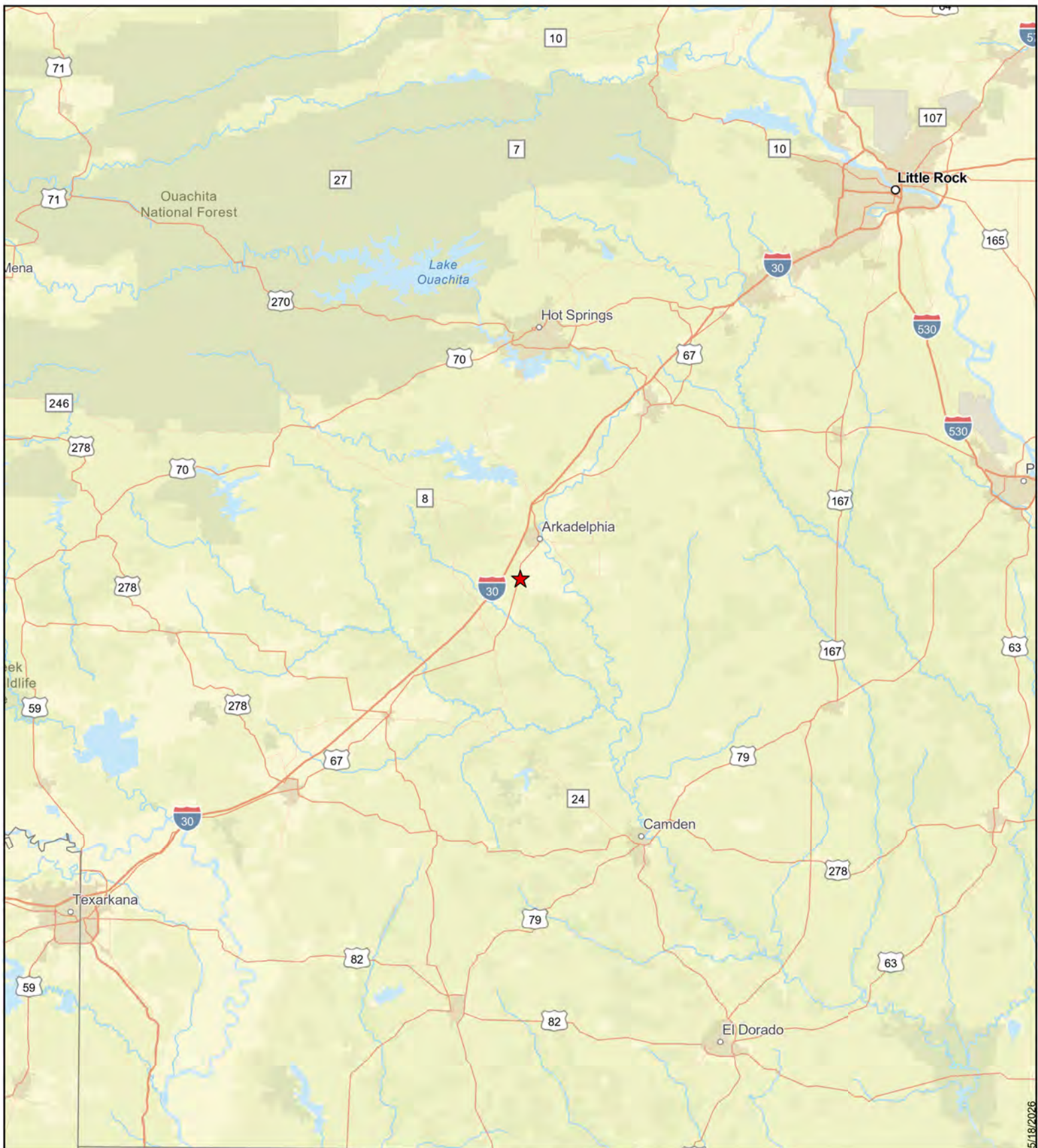
4.0 FEMA 100-YEAR FLOODPLAIN AND FLOODWAY ISSUES

The Federal Emergency Management Agency (FEMA) maps the western ~1/2 of the project area as unshaded Zone X. Unshaded Zone X is a FEMA designation for areas of minimal flood hazard that are outside the 0.2 percent annual-chance flood. FEMA maps the eastern ~1/2 of the project area as a Zone A floodplain associated with the mapped tributary, i.e., RPW-MC-1, to Waggle Creek. Zone A is a FEMA designation for a special flood hazard area without base flood elevations determined. A FEMA FIRMette is provided in Attachment C.

5.0 SUMMARY AND CONCLUSIONS

- ECCI observed one wetland feature, totaling 0.54 acre within the project area.
- ECCI observed one stream channel, an RPW tributary extending 46 linear feet within the project area.
- FEMA maps the eastern ~1/2 of the project area within a 0.2 percent annual-flood chance floodplain.

Figures



CCIC - McClellan



★ Project Area

30

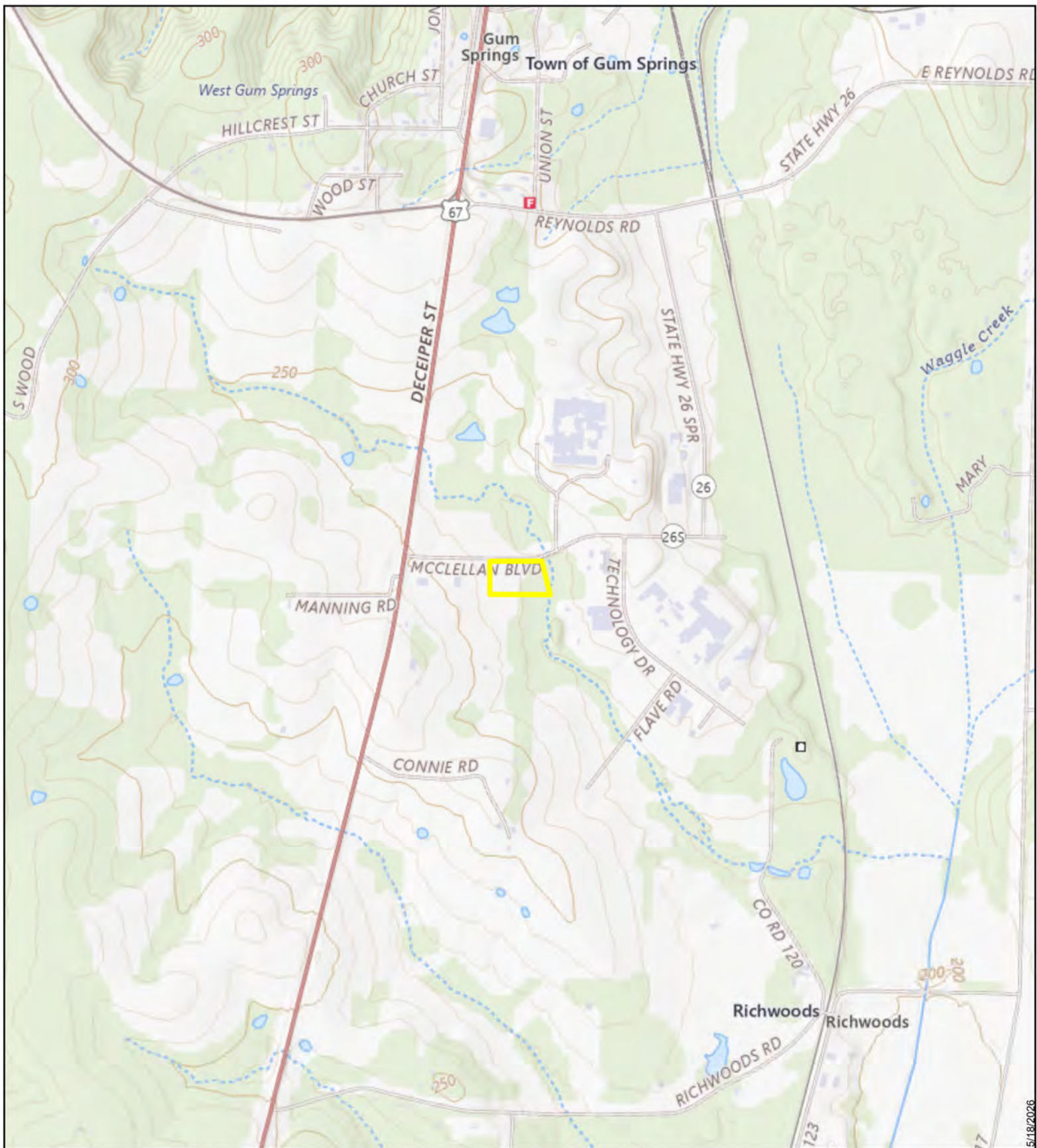
Miles



Background: Esri, DeLorme, HERE, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom

C:\Users\GMikel\Documents\ArcGIS\Projects\5213-3004_CCIC - McClellan\5213-3004_CCIC - McClellan.aprx

Figure 1. Map showing project vicinity overlaid on ESRI World Street Maps.



CCIC - McClellan



Project Area

0.5

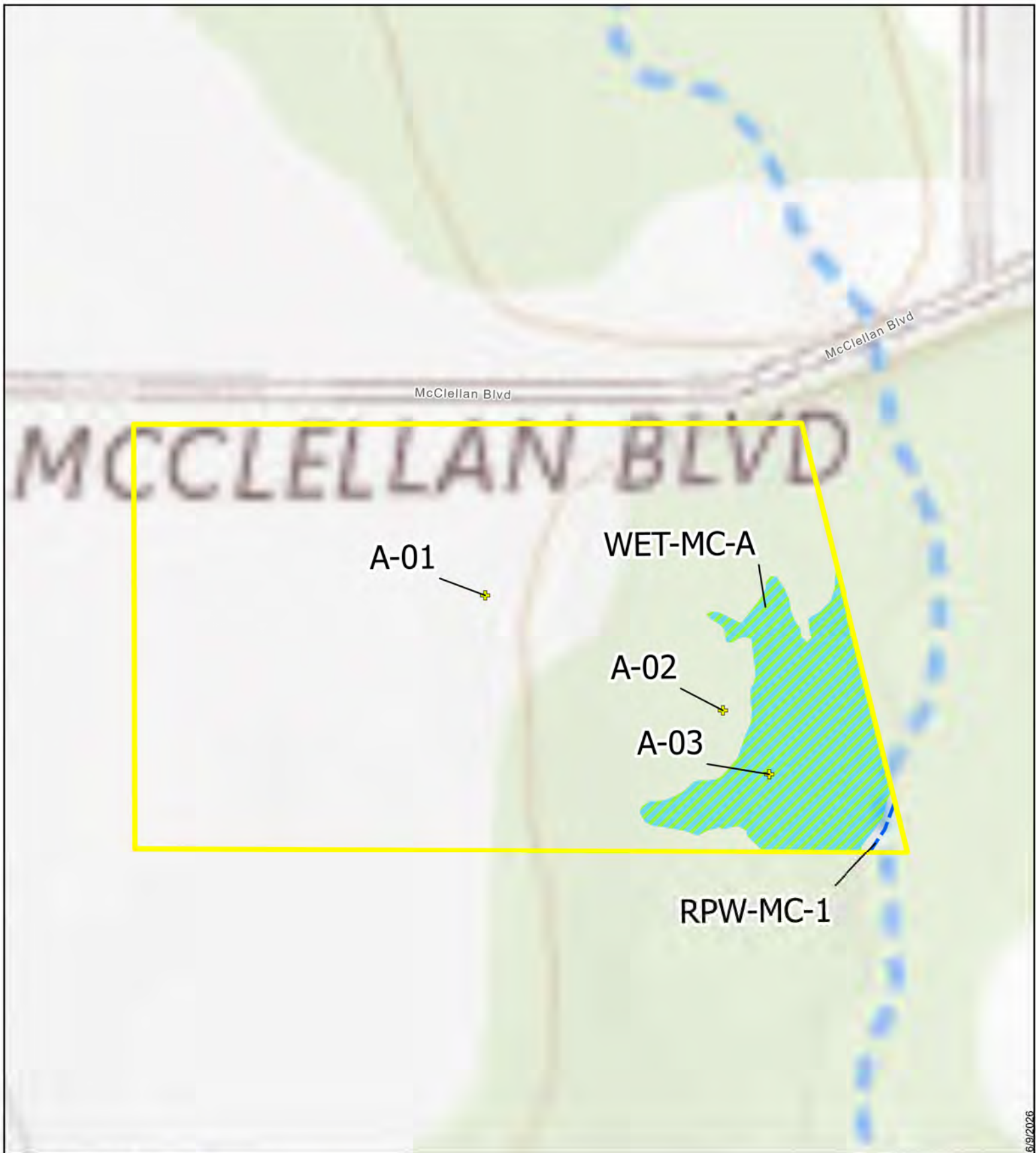
Miles



C:\Users\GMike\Documents\ArcGIS\Projects\5213-3004_CCIC - McClellan\5213-3004_CCIC - McClellan.aprx

Background: USGS The National Map

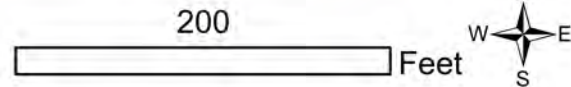
Figure 2. Map showing project area overlaid on USGS TNM Topo Base Map.



CCIC - McClellan



- Project Area
- RPW
- Wetland
- Sample Point



C:\Users\GMike\Documents\ArcGIS\Projects\5213-3004_CCIC - McClellan\5213-3004_CCIC - McClellan.aprx

Background: USGS The National Map

Figure 3. Map showing project details overlaid on USGS TNM Topo Base Map.



Figure 4. Map showing project details overlaid on 2023 9-inch aerial imagery.

Attachment A

Sampling Point Data Sheets

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region See ERDC/EL TR-10-20; the proponent agency is CECW-COR	OMB Control #: 0710-0024, Exp: 09/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
---	---

Project/Site: EDCCC - CCIC - McClellan City/County: Clark County Sampling Date: 2026-05-13
Applicant/Owner: Economic Development Corporation of Clark County State: Arkansas Sampling Point: A-01
Investigator(s): Jimmy Rogers Section, Township, Range: S12 T8S R20W
Landform (hillside, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 2
Subregion (LRR or MLRA): P 135B Lat: 34.04946 Long: -93.09588 Datum: WGS 84
Soil Map Unit Name: 28 - Houston clay, 3 to 8 percent slopes, eroded 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 _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes ☒ No _____	
Wetland Hydrology Present? Yes _____ No ☒	

Remarks:
Maintained (periodically mowed) field.

HYDROLOGY

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

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

 Sampling Point: A-01

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>13</u></td> <td>x 3 = <u>39</u></td> </tr> <tr> <td>FACU species <u>66</u></td> <td>x 4 = <u>264</u></td> </tr> <tr> <td>UPL species <u>3</u></td> <td>x 5 = <u>15</u></td> </tr> <tr> <td>Column Totals: <u>82</u> (A)</td> <td><u>318</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.87</u></td> </tr> </table>	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>13</u>	x 3 = <u>39</u>	FACU species <u>66</u>	x 4 = <u>264</u>	UPL species <u>3</u>	x 5 = <u>15</u>	Column Totals: <u>82</u> (A)	<u>318</u> (B)	Prevalence Index = B/A = <u>3.87</u>	
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>13</u>	x 3 = <u>39</u>																			
FACU species <u>66</u>	x 4 = <u>264</u>																			
UPL species <u>3</u>	x 5 = <u>15</u>																			
Column Totals: <u>82</u> (A)	<u>318</u> (B)																			
Prevalence Index = B/A = <u>3.87</u>																				
50% of total cover: _____ 20% of total cover: _____																				
Sapling/Shrub Stratum (Plot size: <u>30 ft r</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
_____ = Total Cover																				
50% of total cover: _____ 20% of total cover: _____																				
Herb Stratum (Plot size: <u>10 ft r</u>)																				
1. <u>Lolium perenne</u>	<u>30</u>	<u>✓</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain)																
2. <u>Apocynum cannabinum</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>																	
3. <u>Bromus japonicus</u>	<u>15</u>	<u>✓</u>																		
4. <u>Briza minor</u>	<u>5</u>		<u>FAC</u>																	
5. <u>Erigeron annuus</u>	<u>5</u>		<u>FACU</u>																	
6. <u>Ipomoea pandurata</u>	<u>5</u>		<u>FACU</u>																	
7. <u>Rumex crispus</u>	<u>5</u>		<u>FAC</u>																	
8. <u>Carex sp.</u>	<u>3</u>																			
9. <u>Daucus carota</u>	<u>3</u>		<u>UPL</u>																	
10. <u>Elymus virginicus</u>	<u>3</u>		<u>FAC</u>																	
11. <u>Lonicera japonica</u>	<u>3</u>		<u>FACU</u>																	
12. <u>Triodanis perfoliata</u>	<u>2</u>		<u>FACU</u>																	
_____ = Total Cover																				
50% of total cover: <u>50.00</u> 20% of total cover: <u>20.00</u>																				
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
_____ = Total Cover 20%																				
50% of total cover: _____ of total cover: _____																				
Remarks: (If observed, list morphological adaptations below.)																				

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

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

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ✓

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

 Sampling Point: **A-01**

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height.
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____		20% of total cover: _____		
<u>Sapling/Shrub Stratum</u>				
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____		20% of total cover: _____		
<u>Herb Stratum</u>				
13. <i>Vicia sativa</i>	1		FACU	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
23. _____	_____	_____	_____	
24. _____	_____	_____	_____	
100 = Total Cover				
50% of total cover: 50.00		20% of total cover: 20.00		
<u>Woody Vine Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: _____		20% of total cover: _____		

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

SOIL

Sampling Point: **A-01****Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 5	10YR 4/2	100					Silty Clay	
5 - 16	10YR 4/1	95	10YR 4/4	5	C	M	Clay	
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

☐ Histosol (A1)	☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Histic Epipedon (A2)	☐ Barrier Islands 1 cm Muck (S12)
☐ Black Histic (A3)	(MLRA 153B, 153D)
☐ Hydrogen Sulfide (A4)	☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Stratified Layers (A5)	☐ Loamy Gleyed Matrix (F2)
☐ Organic Bodies (A6) (LRR P, T, U)	☒ Depleted Matrix (F3)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)	☐ Redox Dark Surface (F6)
☐ Muck Presence (A8) (LRR U)	☐ Depleted Dark Surface (F7)
☐ 1 cm Muck (A9) (LRR P, T)	☐ Redox Depressions (F8)
☐ Depleted Below Dark Surface (A11)	☐ Marl (F10) (LRR U)
☐ Thick Dark Surface (A12)	☐ Depleted Ochric (F11) (MLRA 151)
☐ Coast Prairie Redox (A16) (MLRA 150A)	☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Iron Monosulfide (A18)	☐ Umbric Surface (F13) (LRR P, T, U)
☐ Sandy Mucky Mineral (S1) (LRR O, S)	☐ Delta Ochric (F17) (MLRA 151)
☐ Sandy Gleyed Matrix (S4)	☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Sandy Redox (S5)	☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Stripped Matrix (S6)	☐ Anomalous Bright Floodplain Soils (F20)
☐ Dark Surface (S7) (LRR P, S, T, U)	(MLRA 149A, 153C, 153D)
☐ Polyvalue Below Surface (S8)	☐ Very Shallow Dark Surface (F22)
(LRR S, T, U)	(MLRA 138, 152A in FL, 154)

Indicators for Problematic Hydric Soils³:

☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Coast Prairie Redox (A16)
(outside MLRA 150A)
☐ Reduced Vertic (F18)
(outside MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (LRR P, T)
☐ Anomalous Bright Floodplain Soils (F20)
(MLRA 153B)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (F22)
(outside MLRA 138, 152A in FL, 154)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation andwetland hydrology must be present,
unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

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

 Sampling Point: A-02

Tree Stratum (Plot size: <u>20 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Carya glabra</u>	<u>10</u>	☒	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>8</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)																
2. <u>Pinus taeda</u>	<u>10</u>	☒	<u>FAC</u>																	
3. <u>Quercus falcata</u>	<u>5</u>		<u>FACU</u>																	
4. <u>Ulmus alata</u>	<u>5</u>		<u>FACU</u>																	
5. <u>Cercis canadensis</u>	<u>3</u>		<u>UPL</u>																	
6. <u>Ulmus americana</u>	<u>3</u>		<u>FAC</u>																	
7. _____	_____		_____																	
8. _____	_____		_____																	
		<u>36</u>	=Total Cover	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>4</u></td> <td>x 2 = <u>8</u></td> </tr> <tr> <td>FAC species <u>26</u></td> <td>x 3 = <u>78</u></td> </tr> <tr> <td>FACU species <u>49</u></td> <td>x 4 = <u>196</u></td> </tr> <tr> <td>UPL species <u>3</u></td> <td>x 5 = <u>15</u></td> </tr> <tr> <td>Column Totals: <u>82</u> (A)</td> <td><u>297</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.62</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>4</u>	x 2 = <u>8</u>	FAC species <u>26</u>	x 3 = <u>78</u>	FACU species <u>49</u>	x 4 = <u>196</u>	UPL species <u>3</u>	x 5 = <u>15</u>	Column Totals: <u>82</u> (A)	<u>297</u> (B)	Prevalence Index = B/A = <u>3.62</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>4</u>	x 2 = <u>8</u>																			
FAC species <u>26</u>	x 3 = <u>78</u>																			
FACU species <u>49</u>	x 4 = <u>196</u>																			
UPL species <u>3</u>	x 5 = <u>15</u>																			
Column Totals: <u>82</u> (A)	<u>297</u> (B)																			
Prevalence Index = B/A = <u>3.62</u>																				
50% of total cover: <u>18.00</u>		20% of total cover: <u>7.20</u>																		
Sapling/Shrub Stratum (Plot size: <u>20 ft r</u>)																				
1. <u>Carya glabra</u>	<u>10</u>	☒	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)																
2. <u>Ligustrum sinense</u>	<u>5</u>	☒	<u>FAC</u>																	
3. <u>Celtis laevigata</u>	<u>3</u>		<u>FACW</u>																	
4. <u>Ulmus alata</u>	<u>3</u>		<u>FACU</u>																	
5. <u>Quercus nigra</u>	<u>1</u>		<u>FAC</u>																	
6. _____	_____		_____																	
7. _____	_____		_____																	
8. _____	_____		_____																	
		<u>22</u>	=Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
50% of total cover: <u>11.00</u>		20% of total cover: <u>4.40</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																				
1. <u>Ageratina altissima</u>	<u>2</u>	☒	<u>FACU</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height.																
2. <u>Elymus virginicus</u>	<u>2</u>	☒	<u>FAC</u>																	
3. <u>Arisaema dracontium</u>	<u>1</u>		<u>FACW</u>																	
4. <u>Polygonatum biflorum</u>	<u>1</u>		<u>FACU</u>																	
5. <u>Viola sp.</u>	<u>1</u>		_____																	
6. _____	_____		_____																	
7. _____	_____		_____																	
8. _____	_____		_____																	
9. _____	_____		_____																	
10. _____	_____		_____																	
11. _____	_____		_____																	
12. _____	_____		_____																	
		<u>7</u>	=Total Cover																	
50% of total cover: <u>3.50</u>		20% of total cover: <u>1.40</u>																		
Woody Vine Stratum (Plot size: <u>15 ft r</u>)																				
1. <u>Parthenocissus quinquefolia</u>	<u>10</u>	☒	<u>FACU</u>	Hydrophytic Vegetation Present? Yes <u> </u> No ☒																
2. <u>Smilax bona-nox</u>	<u>5</u>	☒	<u>FAC</u>																	
3. <u>Menispermum canadense</u>	<u>3</u>		<u>FACU</u>																	
4. _____	_____		_____																	
5. _____	_____		_____																	
		<u>18</u>	=Total Cover 20%																	
50% of total cover: <u>9.00</u>		of total cover: <u>3.60</u>																		

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

SOIL

Sampling Point: **A-02**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	10YR 2/2	100					Silty Clay	
3 - 16	10YR 4/2	95	10YR 4/4	5	C	M	Silty Clay	
-								
-								
-								
-								
-								
-								
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) ☐ Histosol (A1) ☐ Thin Dark Surface (S9) (LRR S, T, U) ☐ Histic Epipedon (A2) ☐ Barrier Islands 1 cm Muck (S12) ☐ Black Histic (A3) (MLRA 153B, 153D) ☐ Hydrogen Sulfide (A4) ☐ Loamy Mucky Mineral (F1) (LRR O) ☐ Stratified Layers (A5) ☐ Loamy Gleyed Matrix (F2) ☐ Organic Bodies (A6) (LRR P, T, U) ☒ Depleted Matrix (F3) ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U) ☐ Redox Dark Surface (F6) ☐ Muck Presence (A8) (LRR U) ☐ Depleted Dark Surface (F7) ☐ 1 cm Muck (A9) (LRR P, T) ☐ Redox Depressions (F8) ☐ Depleted Below Dark Surface (A11) ☐ Marl (F10) (LRR U) ☐ Thick Dark Surface (A12) ☐ Depleted Ochric (F11) (MLRA 151) ☐ Coast Prairie Redox (A16) (MLRA 150A) ☐ Iron-Manganese Masses (F12) (LRR O, P, T) ☐ Iron Monosulfide (A18) ☐ Umbric Surface (F13) (LRR P, T, U) ☐ Sandy Mucky Mineral (S1) (LRR O, S) ☐ Delta Ochric (F17) (MLRA 151) ☐ Sandy Gleyed Matrix (S4) ☐ Reduced Vertic (F18) (MLRA 150A, 150B) ☐ Sandy Redox (S5) ☐ Piedmont Floodplain Soils (F19) (MLRA 149A) ☐ Stripped Matrix (S6) ☐ Anomalous Bright Floodplain Soils (F20) ☐ Dark Surface (S7) (LRR P, S, T, U) (MLRA 149A, 153C, 153D) ☐ Polyvalue Below Surface (S8) ☐ Very Shallow Dark Surface (F22) (LRR S, T, U) (MLRA 138, 152A in FL, 154) Indicators for Problematic Hydric Soils³: ☐ 1 cm Muck (A9) (LRR O) ☐ 2 cm Muck (A10) (LRR S) ☐ Coast Prairie Redox (A16) (outside MLRA 150A) ☐ Reduced Vertic (F18) (outside MLRA 150A, 150B) ☐ Piedmont Floodplain Soils (F19) (LRR P, T) ☐ Anomalous Bright Floodplain Soils (F20) (MLRA 153B) ☐ Red Parent Material (F21) ☐ Very Shallow Dark Surface (F22) (outside MLRA 138, 152A in FL, 154) ☐ Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.								
Restrictive Layer (if observed): Type: _____ Depth (inches): _____							Hydric Soil Present? Yes ☒ No ☐	
Remarks:								

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

 Sampling Point: **A-03**

Tree Stratum (Plot size: <u>15 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Celtis laevigata</u>	<u>10</u>	☒	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.66</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>15</u></td> <td>x 2 = <u>30</u></td> </tr> <tr> <td>FAC species <u>72</u></td> <td>x 3 = <u>216</u></td> </tr> <tr> <td>FACU species <u>15</u></td> <td>x 4 = <u>60</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>102</u> (A)</td> <td><u>306</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.00</u></td> </tr> </table>	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>72</u>	x 3 = <u>216</u>	FACU species <u>15</u>	x 4 = <u>60</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>102</u> (A)	<u>306</u> (B)	Prevalence Index = B/A = <u>3.00</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>15</u>	x 2 = <u>30</u>																			
FAC species <u>72</u>	x 3 = <u>216</u>																			
FACU species <u>15</u>	x 4 = <u>60</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>102</u> (A)	<u>306</u> (B)																			
Prevalence Index = B/A = <u>3.00</u>																				
2. <u>Ulmus alata</u>	<u>10</u>	☒	<u>FACU</u>																	
3. <u>Ulmus americana</u>	<u>10</u>	☒	<u>FAC</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
<u>30</u> = Total Cover																				
50% of total cover: <u>15.00</u>		20% of total cover: <u>6.00</u>																		
Sapling/Shrub Stratum (Plot size: <u>15 in ft r</u>)																				
1. <u>Celtis laevigata</u>	<u>5</u>	☒	<u>FACW</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)																
2. <u>Ulmus alata</u>	<u>5</u>	☒	<u>FACU</u>																	
3. <u>Ligustrum sinense</u>	<u>2</u>	_____	<u>FAC</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
<u>12</u> = Total Cover																				
50% of total cover: <u>6.00</u>		20% of total cover: <u>2.40</u>																		
Herb Stratum (Plot size: <u>5 ft r</u>)																				
1. <u>Symphytotrichum lateriflorum</u>	<u>60</u>	☒	<u>FAC</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes ☒ No _____																
2. <u>Carex sp.</u>	<u>5</u>	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>65</u> = Total Cover																				
50% of total cover: <u>32.50</u>		20% of total cover: <u>13.00</u>																		
Woody Vine Stratum (Plot size: <u>15 ft r</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
_____ = Total Cover 20%																				
50% of total cover: _____		of total cover: _____																		

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

SOIL

Sampling Point: **A-03****Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	10YR 2/2	100					Silty Clay	
3 - 16	10YR 4/2	95	10YR 4/4	5	C	M	Silty Clay	
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

☐ Histosol (A1)	☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Histic Epipedon (A2)	☐ Barrier Islands 1 cm Muck (S12)
☐ Black Histic (A3)	(MLRA 153B, 153D)
☐ Hydrogen Sulfide (A4)	☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Stratified Layers (A5)	☐ Loamy Gleyed Matrix (F2)
☐ Organic Bodies (A6) (LRR P, T, U)	☒ Depleted Matrix (F3)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)	☐ Redox Dark Surface (F6)
☐ Muck Presence (A8) (LRR U)	☐ Depleted Dark Surface (F7)
☐ 1 cm Muck (A9) (LRR P, T)	☐ Redox Depressions (F8)
☐ Depleted Below Dark Surface (A11)	☐ Marl (F10) (LRR U)
☐ Thick Dark Surface (A12)	☐ Depleted Ochric (F11) (MLRA 151)
☐ Coast Prairie Redox (A16) (MLRA 150A)	☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Iron Monosulfide (A18)	☐ Umbric Surface (F13) (LRR P, T, U)
☐ Sandy Mucky Mineral (S1) (LRR O, S)	☐ Delta Ochric (F17) (MLRA 151)
☐ Sandy Gleyed Matrix (S4)	☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Sandy Redox (S5)	☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Stripped Matrix (S6)	☐ Anomalous Bright Floodplain Soils (F20)
☐ Dark Surface (S7) (LRR P, S, T, U)	(MLRA 149A, 153C, 153D)
☐ Polyvalue Below Surface (S8)	☐ Very Shallow Dark Surface (F22)
(LRR S, T, U)	(MLRA 138, 152A in FL, 154)

Indicators for Problematic Hydric Soils³:

☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Coast Prairie Redox (A16)
(outside MLRA 150A)
☐ Reduced Vertic (F18)
(outside MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (LRR P, T)
☐ Anomalous Bright Floodplain Soils (F20)
(MLRA 153B)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (F22)
(outside MLRA 138, 152A in FL, 154)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation andwetland hydrology must be present,
unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

Attachment B

Representative Photos



Photo 1: Overview of project area (looking north) (UAS image).



Photo 2: Overview of project area (looking south) (UAS image).



Photo 3: Maintained field community (A-01, looking west)



Photo 4: Maintained field community (A-02, looking north)



Photo 5: Riparian wetland community; WET-MC-A) (A-03, looking west)



Photo 6: RPW stream channel; RPW-MC-1 (looking south)

Attachment C

Reference Maps



U.S. Fish and Wildlife Service

National Wetlands Inventory

CCIC - McClellan



February 2, 2026

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

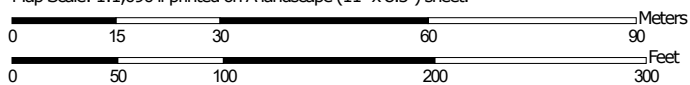
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Soil Map—Clark County, Arkansas



Map Scale: 1:1,090 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84



**Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

5/26/2026
Page 1 of 3

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Clark County, Arkansas

Survey Area Data: Version 7, Sep 10, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 22, 2023—Feb 17, 2023

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
28	Houston clay, 3 to 8 percent slopes, eroded	3.7	81.5%
82	Terouge silty clay, 1 to 3 percent slopes	0.8	18.5%
Totals for Area of Interest		4.5	100.0%

National Flood Hazard Layer FIRMette



93°6'3"W 34°3'13"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

93°5'26"W 34°2'43"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/2/2026 at 2:55 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.