



July 6, 2022

William McFarland  
U.S. Army Corps of Engineers  
ATTN: CESWL-RD  
P.O. Box 867  
Little Rock, AR 72203

Re: Additional Information for a Preliminary Jurisdictional Determination (PJD)  
Clark County Supersite, Gum Springs, AR

Mr. McFarland:

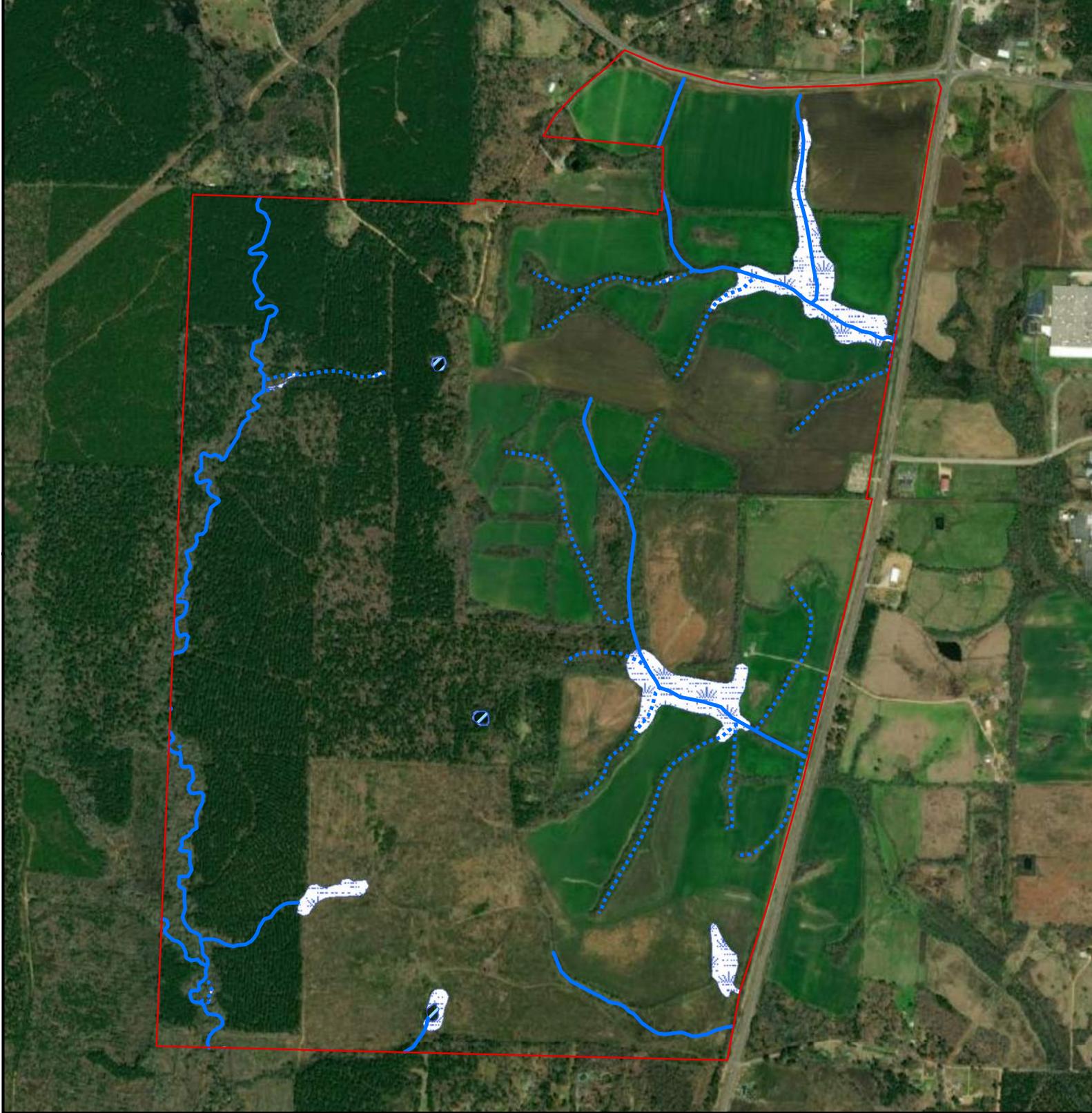
Crafton Tull has been contracted by the Economic Development Corporation of Clark County to complete a delineation of wetlands and waters on a 1,223 acre site in Gum Springs Arkansas, as well as coordinate a jurisdictional determination with the Army Corps of Engineers. A Preliminary Jurisdictional Determination (PJD) application was submitted to your office on November 23, 2021 (Corps # MVK-2021-993), and a site visit was conducted with the Corps on February 8, 2022. As requested by your office on February 8, 2022, Crafton Tull has collected additional data regarding the delineation of aquatic resources potentially under the jurisdiction of the Army Corps of Engineers.

Please see the enclosed documents following this letter, and let me know if I can provide any additional detail. I can be reached at 479-544-2445 or at [Austin.Dartez@CraftonTull.com](mailto:Austin.Dartez@CraftonTull.com)

Sincerely,

Austin Dartez  
Environmental Scientist

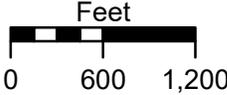
Attached:  
WOTUS Maps  
Waters Table  
Site Photographs  
Data Points



# Gum Springs Supersite

Economic Development  
 Corporation of Clark County  
 1,223-acre Project Site

**Figure 1**

  
**Crafton Tull**

**Legend**

-  Project Site
-  Perennial Tributaries
-  Ephemeral Tributaries
-  Ponds
-  Wetlands

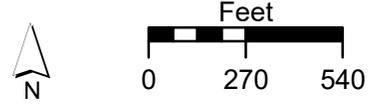
Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



# Gum Springs Supersite

Economic Development  
 Corporation of Clark County  
 1,223-acre Project Site

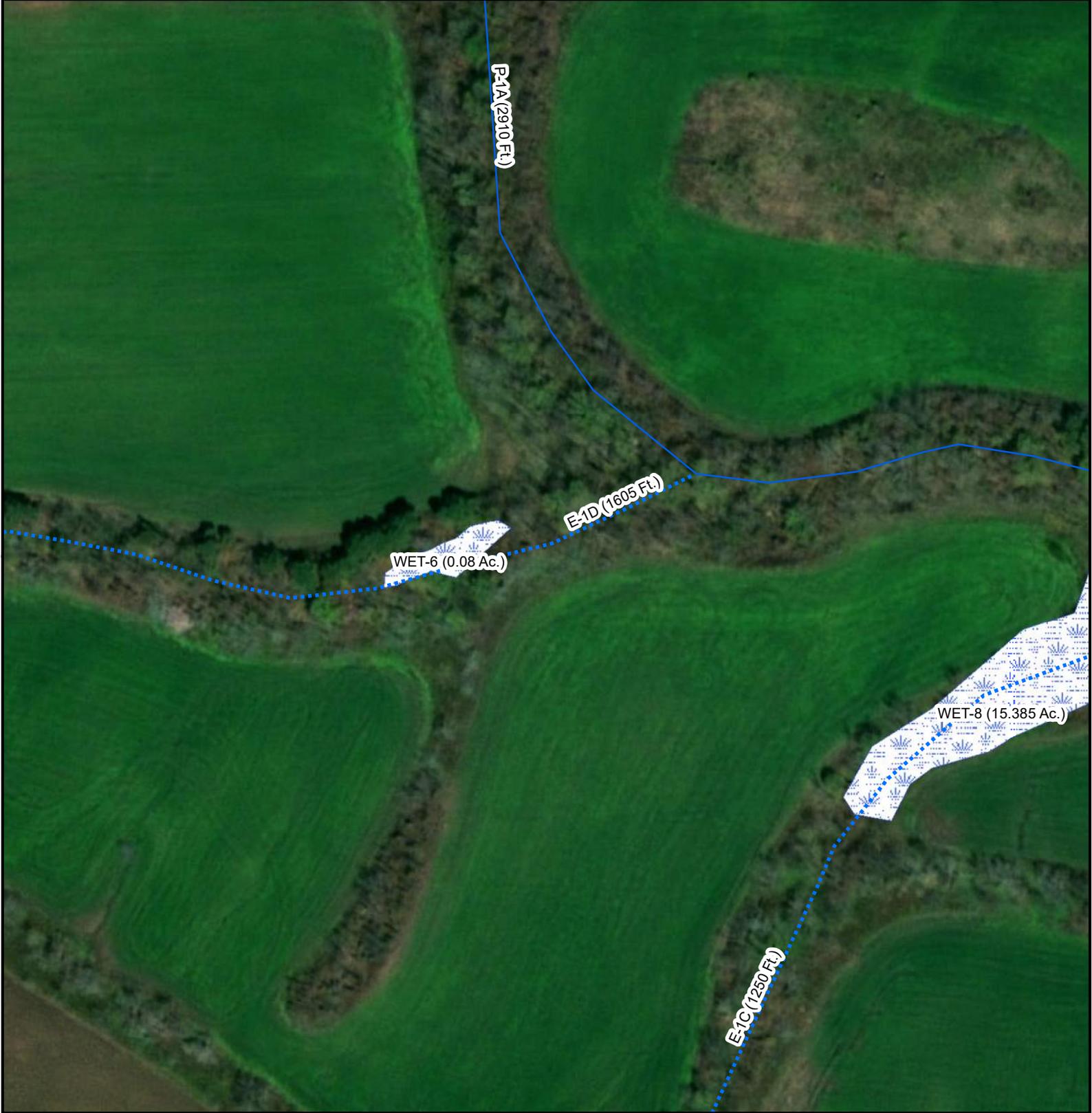
**Figure 2**



**Legend**

- Project Site
- Perennial Tributaries
- Ephemeral Tributaries
- Ponds
- Wetlands

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



# Gum Springs Supersite

Economic Development  
 Corporation of Clark County  
 1,223-acre Project Site

**Figure 3**

Feet  
 0 70 140

N



**Crafton Tull**

**Legend**

- Project Site
- Perennial Tributaries
- Ephemeral Tributaries
- Ponds
- Wetlands

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



# Gum Springs Supersite

Economic Development  
 Corporation of Clark County  
 1,223-acre Project Site

**Figure 4**

Feet  
 0 300 600

**Crafton Tull**

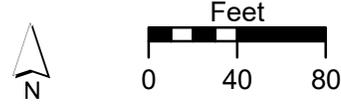
**Legend**

- Project Site
- Perennial Tributaries
- Ephemeral Tributaries
- Ponds
- Wetlands

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



**Gum Springs Supersite**  
 Economic Development  
 Corporation of Clark County  
 1,223-acre Project Site



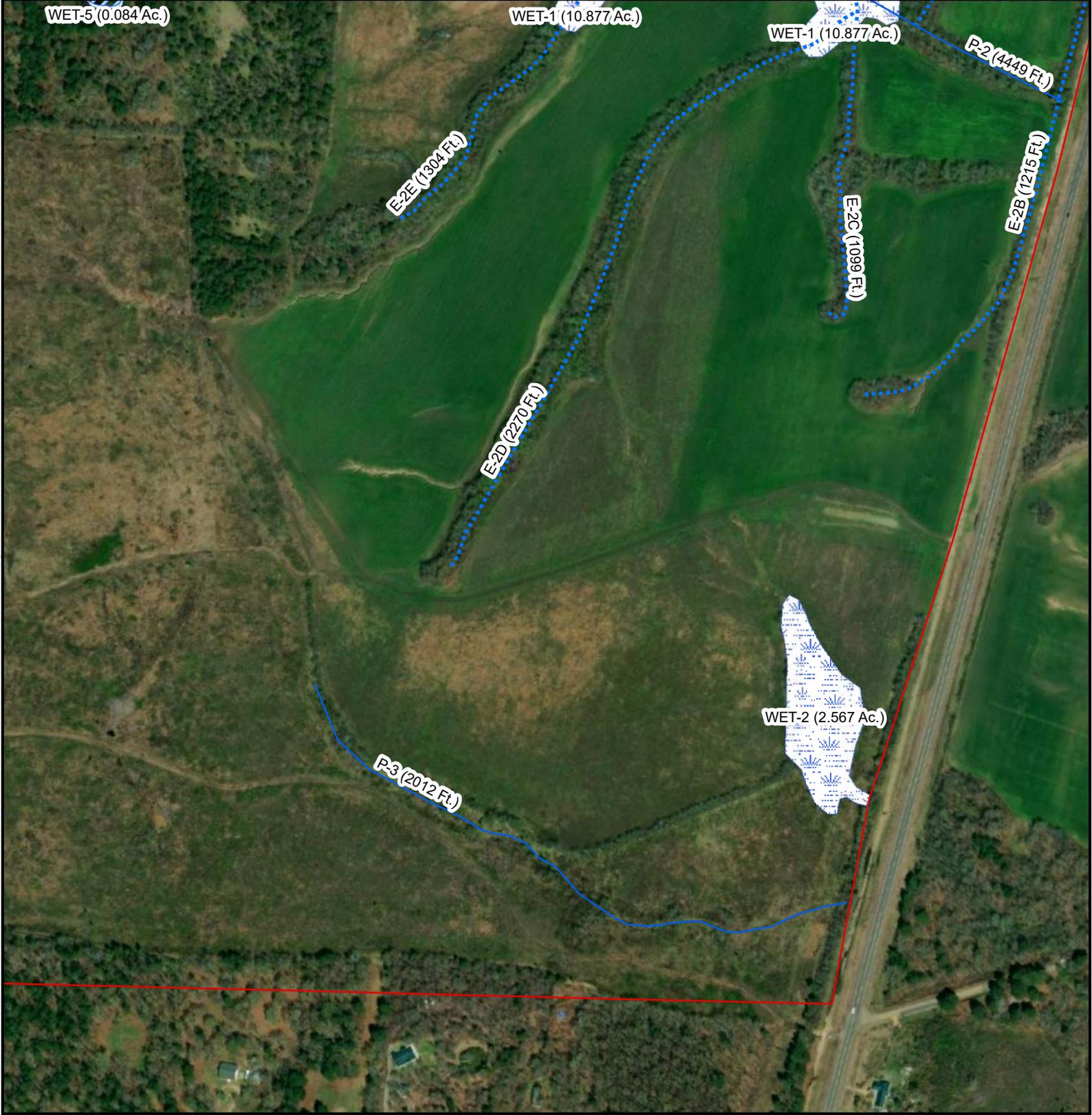
**Crafton Tull**

**Legend**

- Project Site
- Perennial Tributaries
- Ephemeral Tributaries
- Ponds
- Wetlands

**Figure 5**

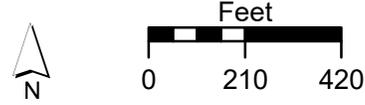
Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



# Gum Springs Supersite

Economic Development  
 Corporation of Clark County  
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**Figure 6**

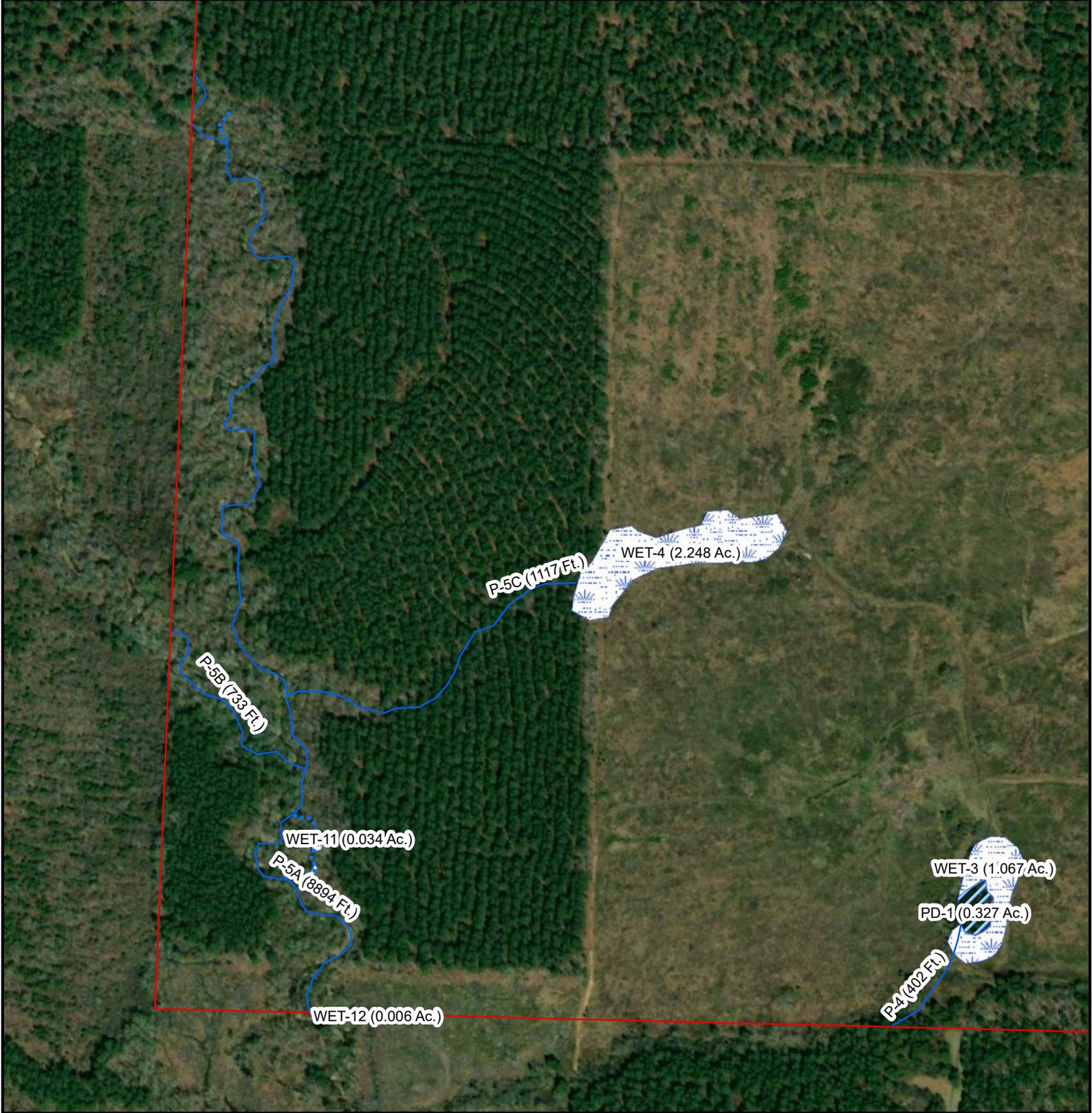


**Crafton Tull**

**Legend**

- Project Site
- Perennial Tributaries
- Ephemeral Tributaries
- Ponds
- Wetlands

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# Gum Springs Supersite

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 Corporation of Clark County  
 1,223-acre Project Site

**Figure 7**

Feet  
 0      210      420

N



**Crafton Tull**

**Legend**

- Project Site
- Perennial Tributaries
- Ephemeral Tributaries
- Ponds
- Wetlands

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



**Gum Springs Supersite**  
 Economic Development  
 Corporation of Clark County  
 1,223-acre Project Site

**Figure 8**

Feet  
 0 60 120

N

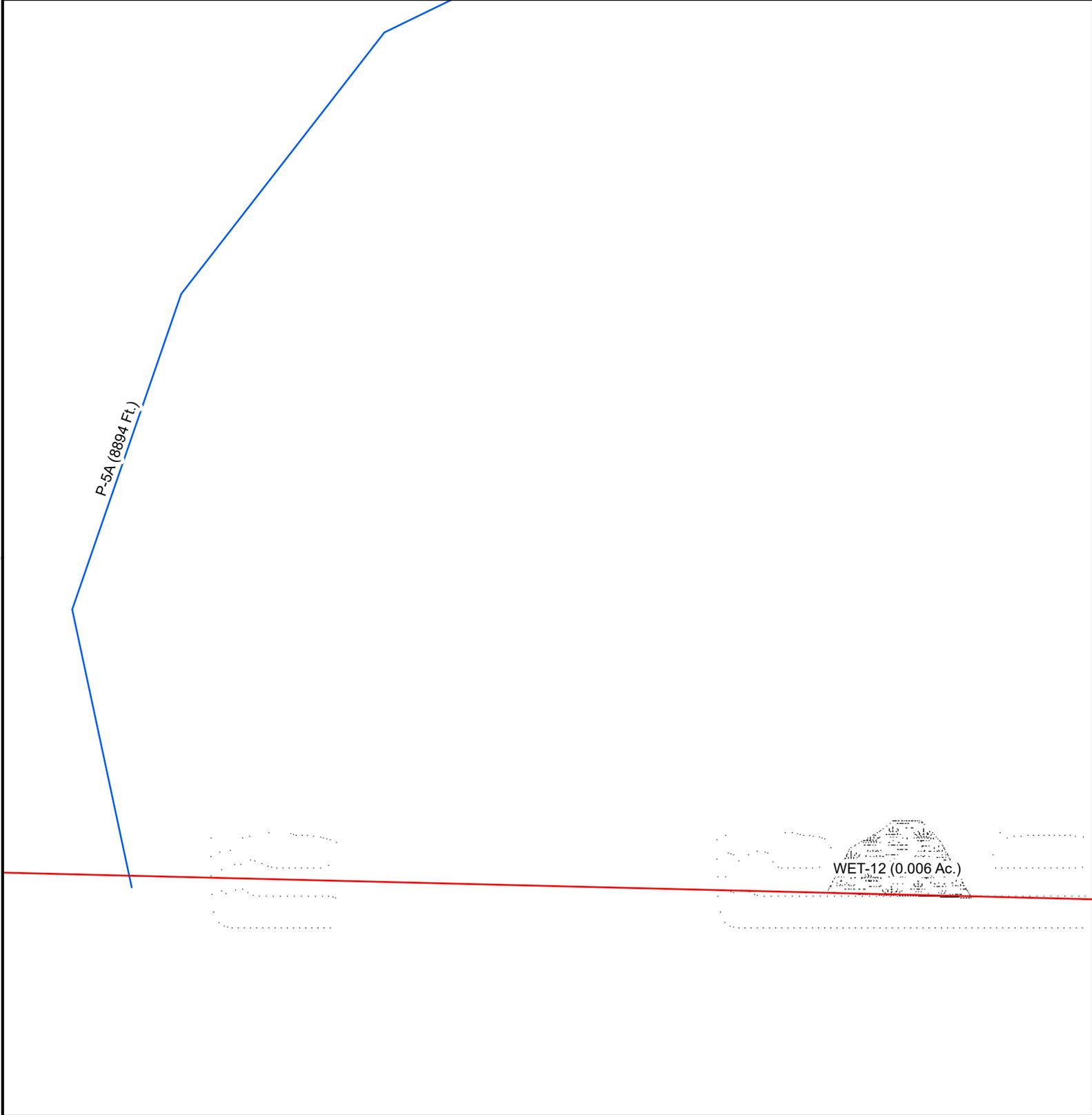


**Crafton Tull**

**Legend**

- Project Site
- Perennial Tributaries
- Ephemeral Tributaries
- Ponds
- Wetlands

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



**Gum Springs Supersite**  
 Economic Development  
 Corporation of Clark County  
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**Legend**

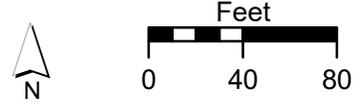
- Project Site
- Perennial Tributaries
- Ephemeral Tributaries
- Ponds
- Wetlands

**Figure 9**

Service Layer Credits:



**Gum Springs Supersite**  
 Economic Development  
 Corporation of Clark County  
 1,223-acre Project Site



**Crafton Tull**

**Legend**

- Project Site
- Perennial Tributaries
- Ephemeral Tributaries
- Ponds
- Wetlands

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

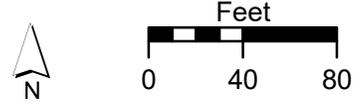
**Figure 10**



# Gum Springs Supersite

Economic Development  
 Corporation of Clark County  
 1,223-acre Project Site

**Figure 11**



**Legend**

- Project Site
- Perennial Tributaries
- Ephemeral Tributaries
- Ponds
- Wetlands

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



**Gum Springs Supersite**  
 Economic Development  
 Corporation of Clark County  
 1,223-acre Project Site

**Figure 12**

Feet  
 0      70      140

N



**Crafton Tull**

**Legend**

- Project Site
- Perennial Tributaries
- Ephemeral Tributaries
- Ponds
- Wetlands

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# Gum Springs Supersite

Economic Development  
 Corporation of Clark County  
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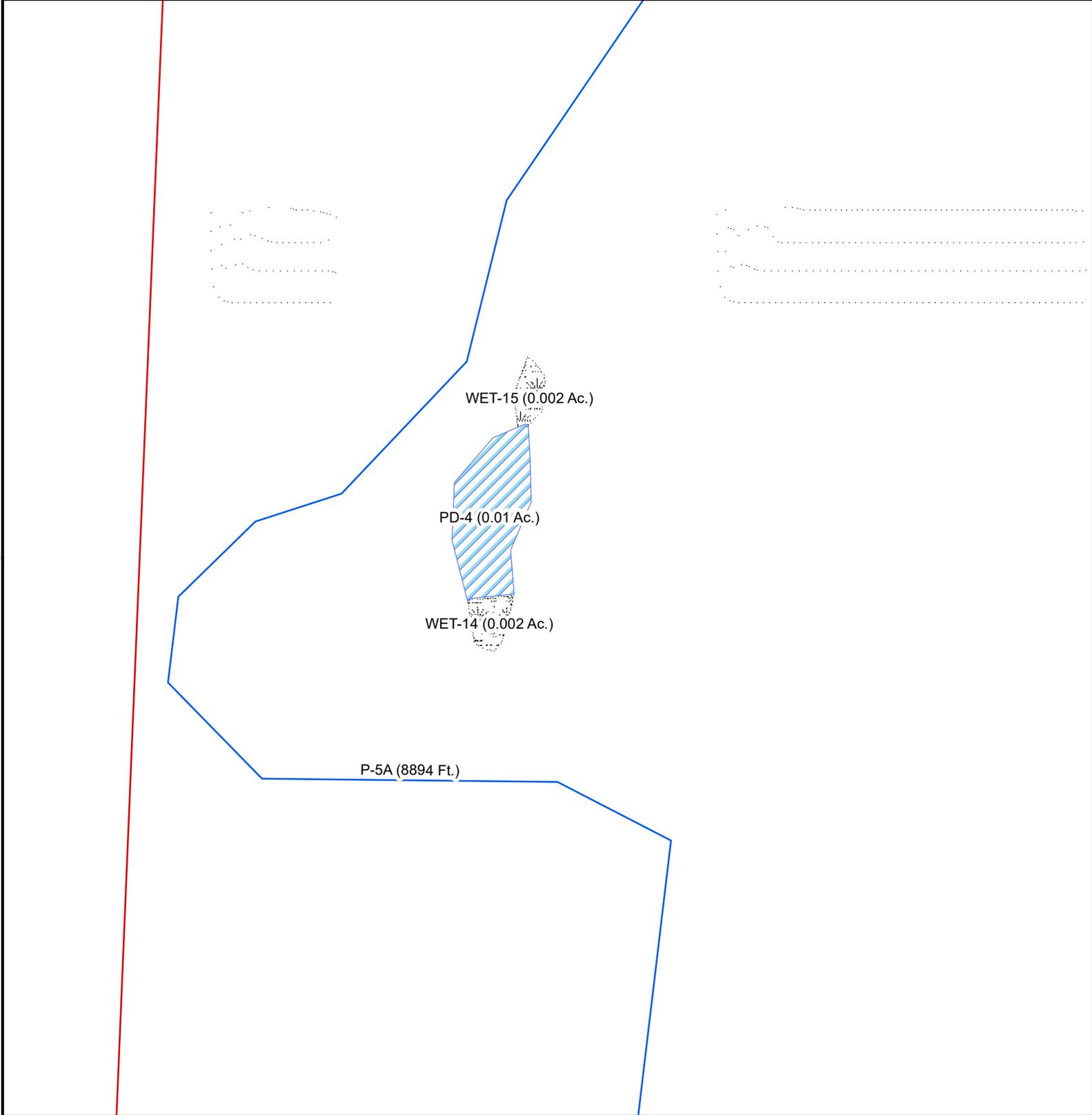
**Figure 13**



**Crafton Tull**

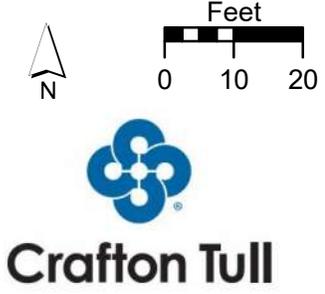
Legend	
	Project Site
	Perennial Tributaries
	Ephemeral Tributaries
	Ponds
	Wetlands

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



**Gum Springs Supersite**  
 Economic Development  
 Corporation of Clark County  
 1,223-acre Project Site

**Figure 14**



**Legend**

- Project Site
- Perennial Tributaries
- Ephemeral Tributaries
- Ponds
- Wetlands

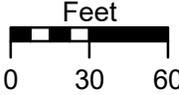
Service Layer Credits:



# Gum Springs Supersite

Economic Development  
 Corporation of Clark County  
 1,223-acre Project Site

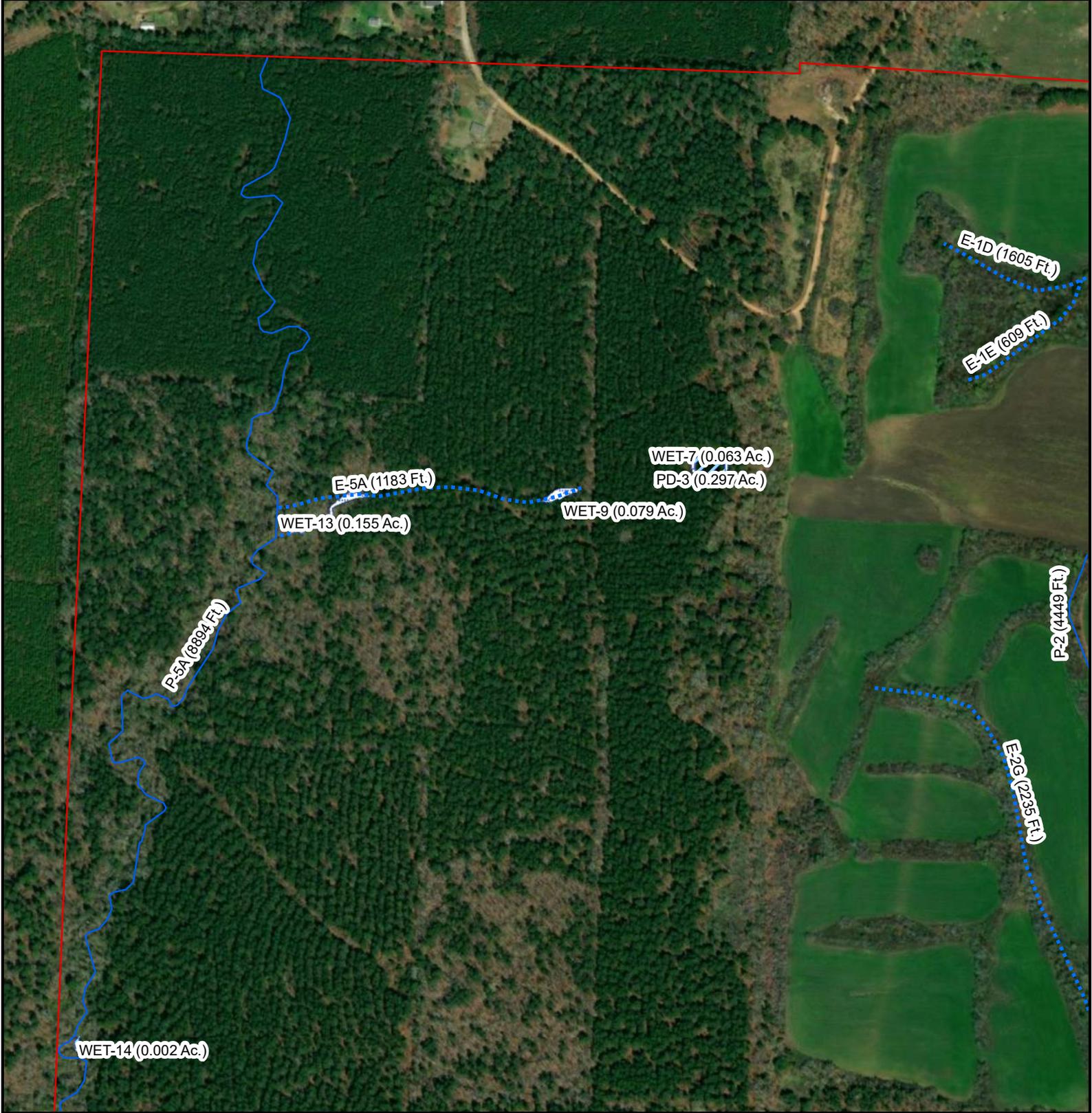
**Figure 15**

  
  
  
**Crafton Tull**

**Legend**

-  Project Site
-  Perennial Tributaries
-  Ephemeral Tributaries
-  Ponds
-  Wetlands

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



# Gum Springs Supersite

Economic Development  
 Corporation of Clark County  
 1,223-acre Project Site

**Figure 16**

Feet  
 0 250 500

N



**Crafton Tull**

**Legend**

- Project Site
- Perennial Tributaries
- Ephemeral Tributaries
- Ponds
- Wetlands

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



**Gum Springs Supersite**  
 Economic Development  
 Corporation of Clark County  
 1,223-acre Project Site

**Figure 17**

Feet  
 0      40      80

N



**Crafton Tull**

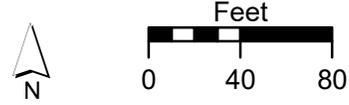
**Legend**

- Project Site
- Perennial Tributaries
- Ephemeral Tributaries
- Ponds
- Wetlands

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



**Gum Springs Supersite**  
 Economic Development  
 Corporation of Clark County  
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**Crafton Tull**

**Legend**

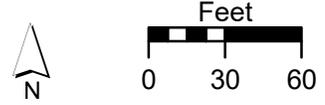
-  Project Site
-  Perennial Tributaries
-  Ephemeral Tributaries
-  Ponds
-  Wetlands

**Figure 18**

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



**Gum Springs Supersite**  
 Economic Development  
 Corporation of Clark County  
 1,223-acre Project Site

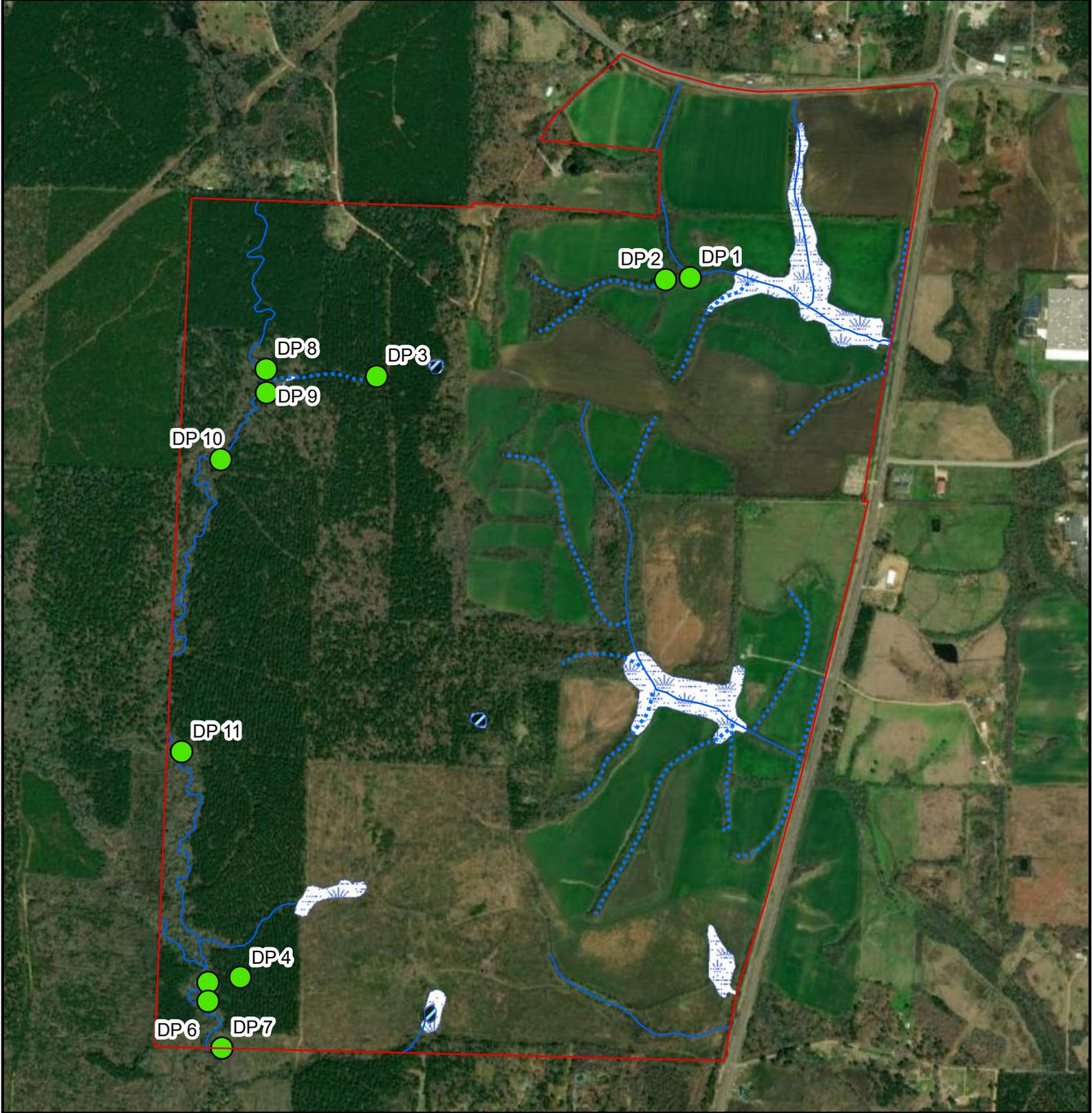


**Crafton Tull**

**Legend**

-  Project Site
-  Perennial Tributaries
-  Ephemeral Tributaries
-  Ponds
-  Wetlands

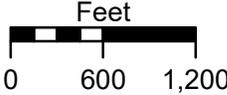
Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



# Gum Springs Supersite

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 Corporation of Clark County  
 1,223-acre Project Site

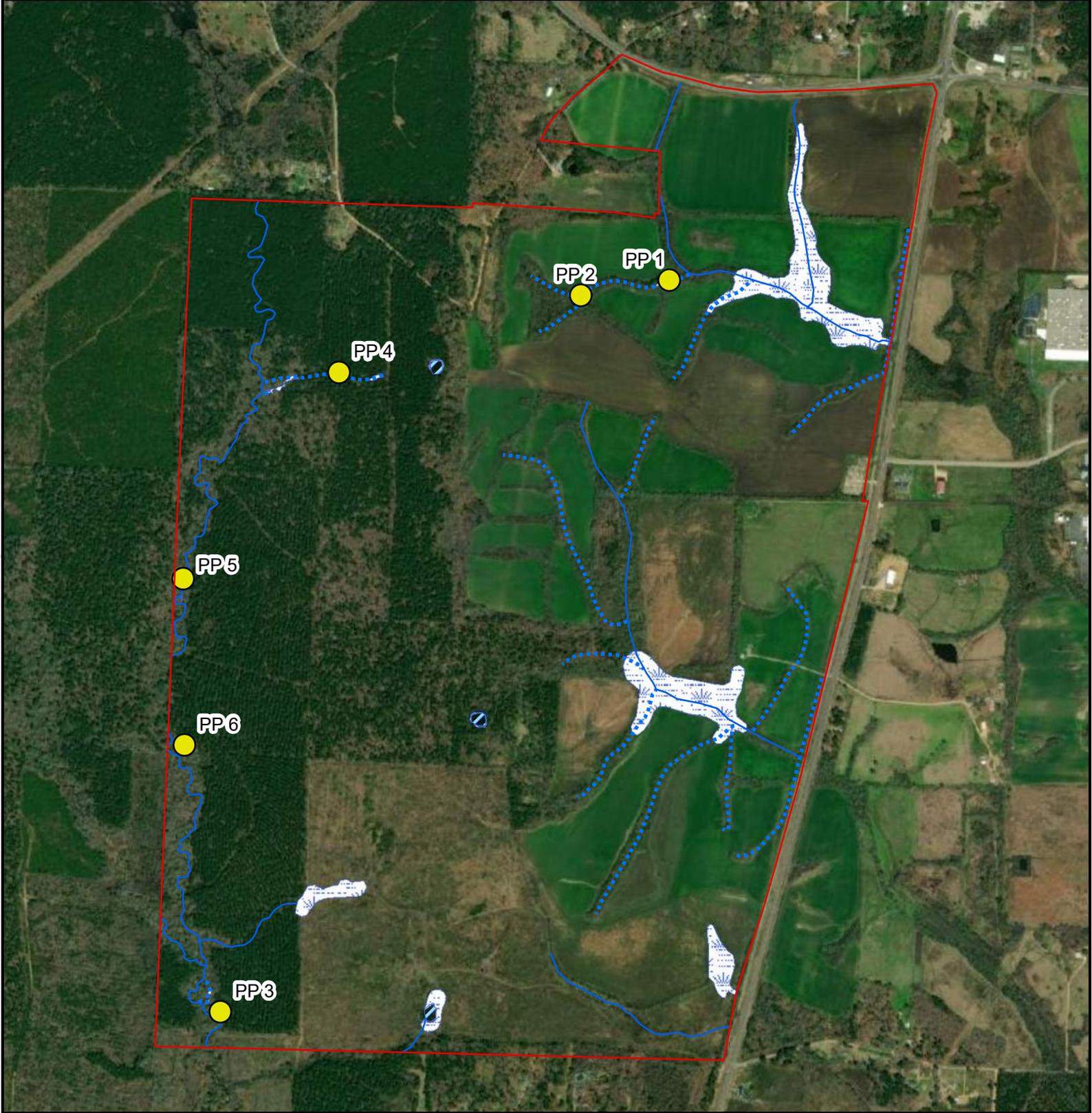
**Figure 20**


  
  
**Crafton Tull**

**Legend**

-  Project Site
-  Data Points
-  Perennial Tributaries
-  Ephemeral Tributaries
-  Ponds
-  Wetlands

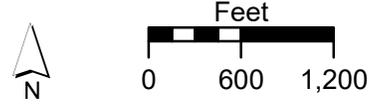
Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



# Gum Springs Supersite

Economic Development  
 Corporation of Clark County  
 1,223-acre Project Site

**Figure 21**



**Crafton Tull**

**Legend**

- Project Site
- Picture Points
- Perennial Tributaries
- Ephemeral Tributaries
- Ponds
- Wetlands

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



## Figure 22 Waters Table

**Wetlands:**

<b>WET-1</b>	<b>10.877 acres</b>
<b>WET-2</b>	<b>2.567 acres</b>
<b>WET-3</b>	<b>1.067 acres</b>
<b>WET-4</b>	<b>2.248 acres</b>
<b>WET-5</b>	<b>0.084 acres</b>
<b>WET-6</b>	<b>0.080 acres</b>
<b>WET-7</b>	<b>0.063 acres</b>
<b>WET-8</b>	<b>15.385 acres</b>
<b>WET-9</b>	<b>0.079 acres</b>
<b>WET-10</b>	<b>0.01 acres</b>
<b>WET-11</b>	<b>0.034 acres</b>
<b>WET-12</b>	<b>0.006 acres</b>
<b>WET-13</b>	<b>0.155 acres</b>
<b>WET-14</b>	<b>0.002 acres</b>
<b>WET-15</b>	<b>0.002 acres</b>



**Figure 22 Continued**

**Ponds:**

<b>PD-1</b>	<b>0.327 acres</b>
<b>PD-2</b>	<b>0.329 acres</b>
<b>PD-3</b>	<b>0.297 acres</b>
<b>PD-4</b>	<b>0.010 acres</b>

**Perennial Tributaries:**

<b>P-1A</b>	<b>2,910 Ft.</b>
<b>P-1B</b>	<b>2,009 Ft.</b>
<b>P-1C</b>	<b>687 Ft.</b>
<b>P-2</b>	<b>4,449 Ft.</b>
<b>P-3</b>	<b>2,012 Ft.</b>
<b>P-4</b>	<b>402 Ft.</b>
<b>P-5A</b>	<b>8,894 Ft.</b>
<b>P-5B</b>	<b>733 Ft.</b>
<b>P-5C</b>	<b>1,117 Ft.</b>



**Figure 22 Continued**

**Ephemeral Tributaries:**

<b>E-1A</b>	<b>1,076 Ft.</b>
<b>E-1B</b>	<b>1,392 Ft.</b>
<b>E-1C</b>	<b>1,250 Ft.</b>
<b>E-1D</b>	<b>1,605 Ft.</b>
<b>E-1E</b>	<b>609 Ft.</b>
<b>E-2A</b>	<b>788 Ft.</b>
<b>E-2B</b>	<b>1,215 Ft.</b>
<b>E-2C</b>	<b>1,099 Ft.</b>
<b>E-2D</b>	<b>2,270 Ft.</b>
<b>E-2E</b>	<b>1,304 Ft.</b>
<b>E-2F</b>	<b>834 Ft.</b>
<b>E-2G</b>	<b>2,235 Ft.</b>
<b>E-2H</b>	<b>861 Ft.</b>
<b>E-2I</b>	<b>1,561 Ft.</b>
<b>E-5A</b>	<b>1,183 Ft.</b>
<b>E-5B</b>	<b>359 Ft.</b>
<b>E-5C</b>	<b>142 Ft.</b>
<b>E-5D</b>	<b>60 Ft.</b>



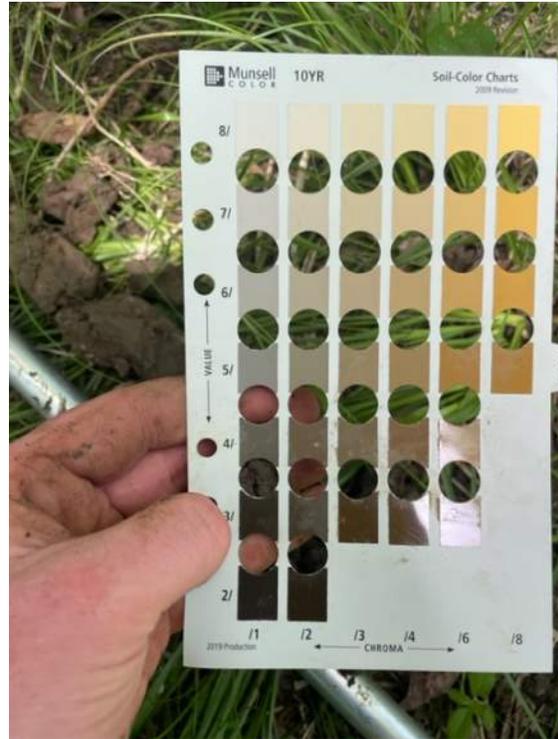
# Site Photographs



Data Point #1. Upland. Located at: 34.0546, -93.1058.



**Economic Development Corporation of Clark County  
Wetland Delineation Report**



Data Point #1 Soils.



Data Point #2. Wetland. Located at: 34.0545, -93.1066.



Data Point # 2 Soils.



Data Point #3. Wetland. Located at: 34.0519, -93.1155.



**Economic Development Corporation of Clark County  
Wetland Delineation Report**



Data Point #3 Soils.



Data Point #4. Upland. Located at: 34.0364, -93.1195.



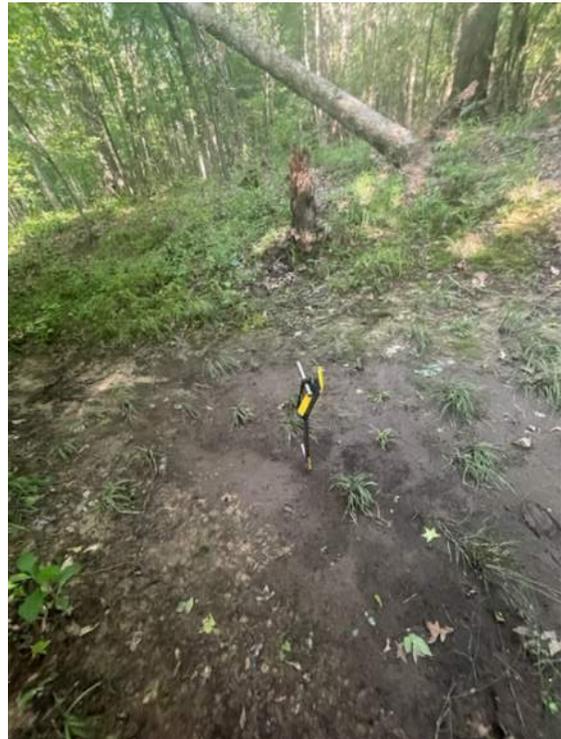
Data Point #4. Soils.



Data Point #5. Upland. Located at: 34.0362, -93.1206.



Data Point #5 Soils.



Data Point #6. Wetland. Located at: 34.0357, -93.1206.



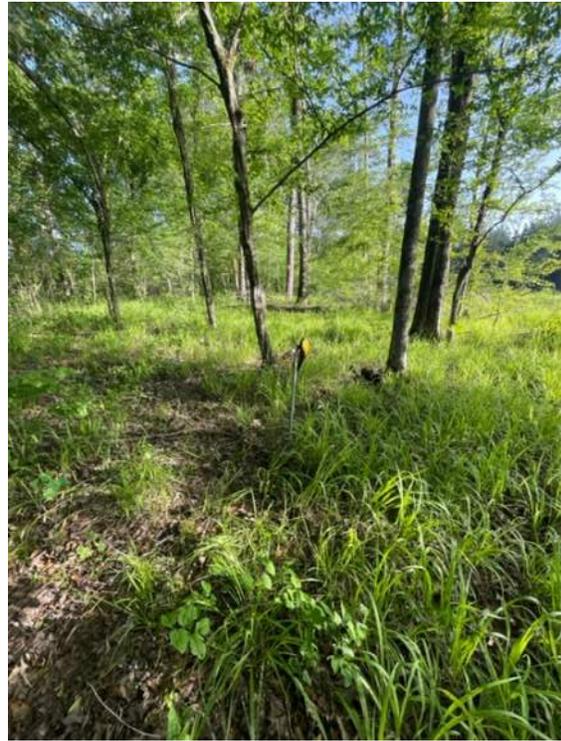
Data Point #6. Soils.



Data Point #7. Wetland. Located at: 34.0345, -93.1201.



Data Point #7. Soils.



Data Point 8. Upland. Located at: 34.0521, -93.1190.



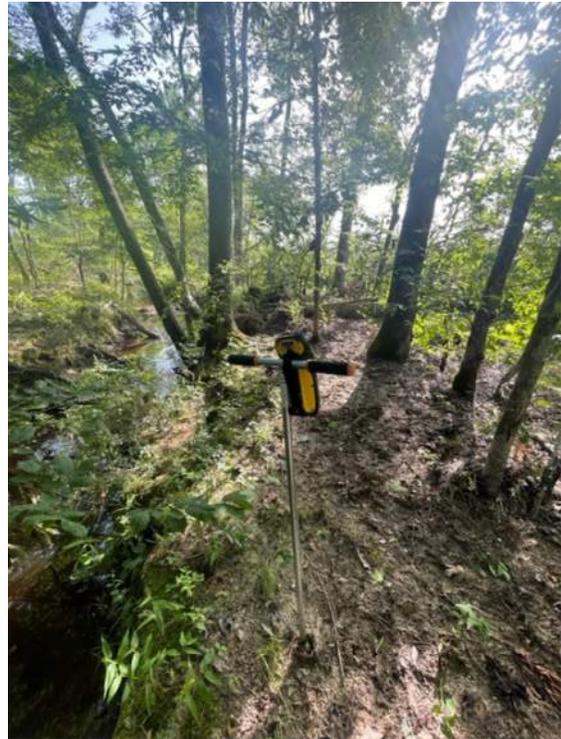
Data Point #8. Soils.



Data Point 9. Wetland. Located at: -93.118999 34.051544



Data Point #9.



Data Point #10. Upland. Located at: 34.0497, -93.1204.



Data Point #10. Soils.



Data Point #11. Located at: 34.0422, -93.1214.



Data Point #11. Soils.



Picture Point #1. Located at: 34.0546, -93.1064.



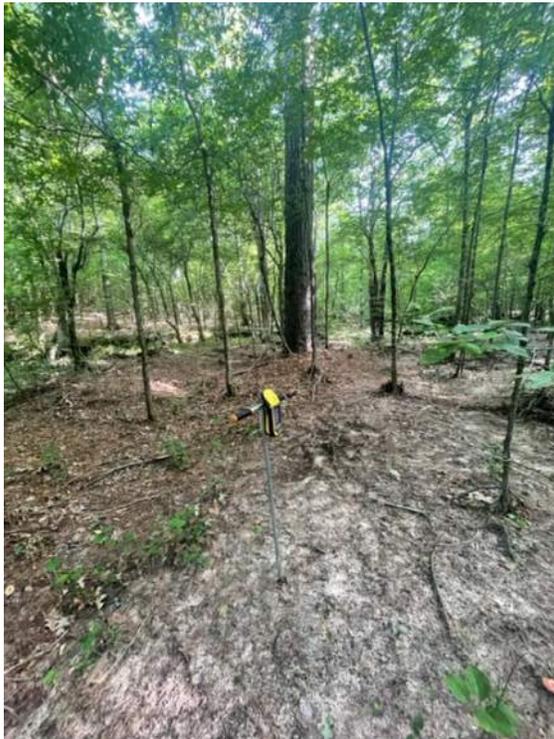
Picture Point #2. Located at: 34.0541, -93.1092.



Picture Point #3. Located at: 34.0354, -93.1202.



Picture Point #4. Located at: 34.0521, -93.1166.



Picture Point #5. Located at: 34.0467, -93.1215.



Picture Point #6. Located at: 34.0423, -93.1214.

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

Project/Site: Clark County Supersite City/County: Gum Springs / Clark County Sampling Date: 13 Jun, 2022  
 Applicant/Owner: Economic Development Corporation of Clark County State: AR Sampling Point: 1  
 Investigator(s): Austin Dartez Section, Township, Range: Section 11, Township 8 South, Range 20 West  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 0-3%  
 Subregion (LRR or MLRA): MLRA 135B Lat: 34.054621 Long: -93.105779 Datum: NAD 83 AR S  
 Soil Map Unit Name: Clark County NWI classification: Tributary

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="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Marginal upland adjacent to tributary.	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" 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"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

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

Sampling Point: 1

	Absolute % Cover	Dominant Species?	Indicator Status		
<b>Tree Stratum</b> (Plot size: <u>15' x 15'</u> )					
1. <u>Celtis laevigata</u>	<u>70</u>	<u>Y</u>	<u>FACW</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>7</u> (A)  Total Number of Dominant Species Across All Strata: <u>7</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)	
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
50% of total cover: <u>35</u>	<u>70</u> = Total Cover	<u>20</u> of total cover:	<u>14</u>		<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species _____ x 3 = <u>0</u> FACU species _____ x 4 = <u>0</u> UPL species _____ x 5 = <u>0</u> Column Totals: _____ (A) <u>0</u> (B)  Prevalence Index = B/A = <u>0</u>
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15' x 15'</u> )					
1. <u>Lonicera maackii</u>	<u>40</u>	<u>Y</u>	<u>NI</u>		
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
50% of total cover: <u>20</u>	<u>40</u> = Total Cover	<u>20</u> of total cover:	<u>8</u>		
<b>Herb Stratum</b> (Plot size: <u>8' x 8'</u> )					
1. <u>Elymus virginicus</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	<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"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
2. <u>Microstegium vimineum</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>		
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
50% of total cover: <u>25</u>	<u>50</u> = Total Cover	<u>20</u> of total cover:	<u>10</u>		
<b>Woody Vine Stratum</b> (Plot size: <u>8' x 8'</u> )					
1. <u>Smilax rotundifolia</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	<b>Definitions of Four Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vine</b> – All woody vines greater than 3.28 ft in height.	
2. <u>Vitis rotundifolia</u>	<u>12</u>	<u>Y</u>	<u>FAC</u>		
3. <u>Smilax bona-nox</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>		
4. <u>Toxicodendron radicans</u>	<u>8</u>	<u>N</u>	<u>FAC</u>		
5. _____					
50% of total cover: <u>22.5</u>	<u>45</u> = Total Cover	<u>20</u> of total cover:	<u>9</u>		
Remarks: (Include photo numbers here or on a separate sheet.)				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____	

**SOIL**

Sampling Point: 1

**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 3/1	100					Loam	No redox noted
2-12	10YR 3/2	100					Loam	No redox noted
12-16	10YR 4/1	100					Loam	No redox noted

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
- 2 cm Muck (A10) **(LRR N)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)

- Dark Surface (S7)
- Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- Thin Dark Surface (S9) **(MLRA 147, 148)**
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- Umbric Surface (F13) **(MLRA 136, 122)**
- Piedmont Floodplain Soils (F19) **(MLRA 148)**
- Red Parent Material (F21) **(MLRA 127, 147)**

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

- 2 cm Muck (A10) **(MLRA 147)**
- Coast Prairie Redox (A16) **(MLRA 147, 148)**
- Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- 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:  
 Indicative of a depleted matrix (F3), but appears to not meet redox concentration criteria.

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

Project/Site: Clark County Supersite City/County: Gum Springs / Clark County Sampling Date: 13 Jun, 2022  
 Applicant/Owner: Economic Development Corporation of Clark County State: AR Sampling Point: 2  
 Investigator(s): Austin Dartez Section, Township, Range: Section 11, Township 8 South, Range 20 West  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 0-3%  
 Subregion (LRR or MLRA): MLRA 135B Lat: 34.054598 Long: -93.106600 Datum: NAD 83 AR S  
 Soil Map Unit Name: Clark County NWI classification: Tributary

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="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	--

Remarks:  
 Small wetland within tributary floodplain. Area disturbed from logging operations.

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> True Aquatic Plants (B14) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" 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"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
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<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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

Sampling Point: 2

	Absolute % Cover	Dominant Species?	Indicator Status		
<b>Tree Stratum</b> (Plot size: <u>15' x 15'</u> )					
1. <u>Celtis laevigata</u>	<u>70.00</u>	<u>Y</u>	<u>FACW</u>	<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%</u> (A/B)	
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
_____ = Total Cover 50% of total cover: <u>35</u> 20% of total cover: <u>14</u>					<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species _____ x 3 = <u>0</u> FACU species _____ x 4 = <u>0</u> UPL species _____ x 5 = <u>0</u> Column Totals: <u>0</u> (A) <u>0</u> (B)  Prevalence Index = B/A = <u>0</u>
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15' x 15'</u> )					
1. <u>Lonicera maackii</u>	<u>40</u>	<u>Y</u>	<u>NI</u>		
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
_____ = Total Cover 50% of total cover: <u>20</u> 20% of total cover: <u>8</u>					
<b>Herb Stratum</b> (Plot size: <u>8' x 8'</u> )					
1. <u>Microstegium vimineum</u>	<u>60</u>	<u>Y</u>	<u>FAC</u>	<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"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
2. <u>Carex pedunculata</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>		
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
_____ = Total Cover 50% of total cover: <u>45</u> 20% of total cover: <u>18</u>					
<b>Woody Vine Stratum</b> (Plot size: <u>8' x 8'</u> )					
1. <u>Smilax rotundifolia</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>	<b>Definitions of Four Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vine</b> – All woody vines greater than 3.28 ft in height.	
2. <u>Vitis rotundifolia</u>	<u>8</u>	<u>Y</u>	<u>FAC</u>		
3. <u>Smilax bona-nox</u>	<u>5</u>	<u>Y</u>	<u>FAC</u>		
4. <u>Parthenocissus quinquefolia</u>	<u>3</u>	<u>N</u>	<u>FACU</u>		
5. _____					
_____ = Total Cover 50% of total cover: <u>13</u> 20% of total cover: <u>5.2</u>					
Remarks: (Include photo numbers here or on a separate sheet.)					



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

Project/Site: Clark County Supersite City/County: Gum Springs / Clark County Sampling Date: 13 Jun, 2022  
 Applicant/Owner: Economic Development Corporation of Clark County State: AR Sampling Point: 3  
 Investigator(s): Austin Dartez Section, Township, Range: Section 11, Township 8 South, Range 20 West  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 0-3%  
 Subregion (LRR or MLRA): MLRA 135B Lat: 34.051993 Long: -93.115535 Datum: NAD 83 AR S  
 Soil Map Unit Name: Clark County NWI classification: Tributary

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="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Small wetland within tributary floodplain. Area disturbed from logging operations.	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> True Aquatic Plants (B14) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input checked="" type="checkbox"/> Aquatic Fauna (B13)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" 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"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

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

Sampling Point: 3

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>15' x 15'</u> )				
1. <u>Carya glabra</u>	<u>70.00</u>	<u>Y</u>	<u>FACU</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60%</u> (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
<u>70</u> = Total Cover				
50% of total cover: <u>35</u>		20% of total cover: <u>14</u>		
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15' x 15'</u> )				
1. <u>Diospyros virginiana</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species _____ x 3 = <u>0</u> FACU species _____ x 4 = <u>0</u> UPL species _____ x 5 = <u>0</u> Column Totals: <u>0</u> (A) <u>0</u> (B)  Prevalence Index = B/A = <u>0</u>
2. <u>Fraxinus americana</u>	<u>5</u>	<u>Y</u>	<u>FACU</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
<u>20</u> = Total Cover				
50% of total cover: <u>10</u>		20% of total cover: <u>4</u>		
<b>Herb Stratum</b> (Plot size: <u>8' x 8'</u> )				
1. <u>Cyclosporum leptophyllum</u>	<u>40</u>	<u>Y</u>	<u>FAC</u>	<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"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Panicum scoparium</u>	<u>30</u>	<u>Y</u>	<u>NI</u>	
3. <u>Carex pedunculata</u>	<u>25</u>	<u>Y</u>	<u>FACW</u>	
4. <u>Cyperus echinatus</u>	<u>10</u>	<u>N</u>	<u>FAC</u>	
5. <u>Salix nigra</u>	<u>8</u>	<u>N</u>	<u>OBL</u>	
6. <u>Passiflora incarnata</u>	<u>1</u>	<u>N</u>	<u>NI</u>	
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
<u>114</u> = Total Cover				
50% of total cover: <u>57</u>		20% of total cover: <u>22.8</u>		
<b>Woody Vine Stratum</b> (Plot size: <u>8' x 8'</u> )				
1. _____				<b>Definitions of Four Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
2. _____				
3. _____				
4. _____				
5. _____				
<u>0</u> = Total Cover				
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				

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

**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>		
0-4	10YR 4/1	90	Red-Orange	10	C	M	Loam	Saturated

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils <sup>3</sup> :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> 2 cm Muck (A10) (MLRA 147)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Polyvalue Below Surface (S8) (MLRA 147, 148)	<input type="checkbox"/> Coast Prairie Redox (A16)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (S9) (MLRA 147, 148)	<input type="checkbox"/> (MLRA 147, 148)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19)	
<input type="checkbox"/> Stratified Layers (A5)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> (MLRA 136, 147)	
<input type="checkbox"/> 2 cm Muck (A10) (LRR N)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR N, MLRA 136)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Umbric Surface (F13) (MLRA 136, 122)		
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 148)		
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21) (MLRA 127, 147)		

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

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No _____
---	--

Remarks:  
 Soil inundated and difficult to obtain sample.

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

Project/Site: Clark County Supersite City/County: Gum Springs / Clark County Sampling Date: 13 Jun, 2022  
 Applicant/Owner: Economic Development Corporation of Clark County State: AR Sampling Point: 4  
 Investigator(s): Austin Dartez Section, Township, Range: Section 11, Township 8 South, Range 20 West  
 Landform (hillslope, terrace, etc.): Riverine Interface Local relief (concave, convex, none): Concave Slope (%): 0-3%  
 Subregion (LRR or MLRA): MLRA 135B Lat: 34.036413 Long: -93.119564 Datum: NAD 83 AR S  
 Soil Map Unit Name: Clark County NWI classification: Upland

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="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Adjacent to Caney Creek.	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13)	<u>Secondary Indicators (minimum of two required)</u> <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"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

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

Sampling Point: 4

	Absolute % Cover	Dominant Species?	Indicator Status		
<b>Tree Stratum</b> (Plot size: <u>15' x 15'</u> )					
1. <u>Ulmus americana</u>	<u>60.00</u>	<u>Y</u>	<u>FAC</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</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>83.33%</u> (A/B)	
2. <u>Liquidambar styraciflua</u>	<u>20.00</u>	<u>Y</u>	<u>FAC</u>		
3. <u>Quercus nigra</u>	<u>10.00</u>	<u>N</u>	<u>FAC</u>		
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
$\frac{90}{100} = \text{Total Cover}$ 50% of total cover: <u>45</u> 20% of total cover: <u>18</u>				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species _____ x 3 = <u>0</u> FACU species _____ x 4 = <u>0</u> UPL species _____ x 5 = <u>0</u> Column Totals: <u>0</u> (A) <u>0</u> (B)  Prevalence Index = B/A = <u>0</u>	
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15' x 15'</u> )					
1. <u>Ulmus alata</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>		
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
$\frac{15}{100} = \text{Total Cover}$ 50% of total cover: <u>7.5</u> 20% of total cover: <u>3</u>				<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"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <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>Herb Stratum</b> (Plot size: <u>8' x 8'</u> )					
1. <u>Oryzopsis sp.</u>	<u>30</u>	<u>Y</u>	<u>NI</u>		
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
$\frac{30}{100} = \text{Total Cover}$ 50% of total cover: <u>15</u> 20% of total cover: <u>6</u>				<b>Definitions of Four Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vine</b> – All woody vines greater than 3.28 ft in height.	
<b>Woody Vine Stratum</b> (Plot size: <u>8' x 8'</u> )					
1. <u>Smilax bona-nox</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>		
2. <u>Toxicodendron radicans</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>		
3. <u>Lonicera japonica</u>	<u>5</u>	<u>Y</u>	<u>FACU</u>		
4. _____					
5. _____					
$\frac{30}{100} = \text{Total Cover}$ 50% of total cover: <u>15</u> 20% of total cover: <u>6</u>					<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____
Remarks: (Include photo numbers here or on a separate sheet.)					

**SOIL**

Sampling Point: 4

**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>		
0-1	10YR 3/1	100					Loam	
1-12	10YR 4/3	100					Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
- 2 cm Muck (A10) (**LRR N**)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)

- Dark Surface (S7)
- Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- Thin Dark Surface (S9) (**MLRA 147, 148**)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- Umbric Surface (F13) (**MLRA 136, 122**)
- Piedmont Floodplain Soils (F19) (**MLRA 148**)
- Red Parent Material (F21) (**MLRA 127, 147**)

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

- 2 cm Muck (A10) (**MLRA 147**)
- Coast Prairie Redox (A16) (**MLRA 147, 148**)
- Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- 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 – Eastern Mountains and Piedmont Region

Project/Site: Clark County Supersite City/County: Gum Springs / Clark County Sampling Date: 13 Jun, 2022  
 Applicant/Owner: Economic Development Corporation of Clark County State: AR Sampling Point: 5  
 Investigator(s): Austin Dartez Section, Township, Range: Section 11, Township 8 South, Range 20 West  
 Landform (hillslope, terrace, etc.): Riverine Interface Local relief (concave, convex, none): Concave Slope (%): 0-3%  
 Subregion (LRR or MLRA): MLRA 135B Lat: 34.036245 Long: -93.120621 Datum: NAD 83 AR S  
 Soil Map Unit Name: Clark County NWI classification: Upland

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="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Adjacent to Caney Creek.	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13)	<u>Secondary Indicators (minimum of two required)</u> <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"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

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

Sampling Point: 5

	Absolute % Cover	Dominant Species?	Indicator Status		
<b>Tree Stratum</b> (Plot size: <u>15' x 15'</u> )					
1. <u>Ulmus americana</u>	<u>60</u>	<u>Y</u>	<u>FAC</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>7</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>57.14%</u> (A/B)	
2. <u>Liquidambar styraciflua</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>		
3. <u>Quercus nigra</u>	<u>10</u>	<u>N</u>	<u>FAC</u>		
4. _____					
5. _____					
6. _____					
7. _____					
$\frac{90}{90} = \text{Total Cover}$ 50% of total cover: <u>45</u> 20% of total cover: <u>18</u>				<b>Prevalence Index worksheet:</b>  Total % Cover of: _____    Multiply by: OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species _____ x 3 = <u>0</u> FACU species _____ x 4 = <u>0</u> UPL species _____ x 5 = <u>0</u> Column Totals: _____ (A) <u>0</u> (B)  Prevalence Index = B/A = <u>0</u>	
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15' x 15'</u> )					
1. <u>Ulmus americana</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>		
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
$\frac{20}{20} = \text{Total Cover}$ 50% of total cover: <u>10</u> 20% of total cover: <u>4</u>				<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 $\leq 3.0^1$ <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <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>Herb Stratum</b> (Plot size: <u>8' x 8'</u> )					
1. <u>Thalictrum thalictroides</u>	<u>40</u>	<u>Y</u>	<u>FACU</u>		
2. <u>Milium effusum</u>	<u>20</u>	<u>Y</u>	<u>NI</u>		
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
$\frac{60}{60} = \text{Total Cover}$ 50% of total cover: <u>30</u> 20% of total cover: <u>12</u>				<b>Definitions of Four Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vine</b> – All woody vines greater than 3.28 ft in height.  <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
<b>Woody Vine Stratum</b> (Plot size: <u>8' x 8'</u> )					
1. <u>Toxicodendron radicans</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>		
2. <u>Parthenocissus quinquefolia</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>		
3. <u>Lonicera japonica</u>	<u>5</u>	<u>Y</u>	<u>FACU</u>		
4. _____					
5. _____					
$\frac{30}{30} = \text{Total Cover}$ 50% of total cover: <u>15</u> 20% of total cover: <u>6</u>					
Remarks: (Include photo numbers here or on a separate sheet.)					

**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 3/3	100					Loam	

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

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> 2 cm Muck (A10) (MLRA 147)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> (MLRA 147, 148)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Piedmont Floodplain Soils (F19)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> (MLRA 136, 147)
<input type="checkbox"/> 2 cm Muck (A10) (LRR N)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Polyvalue Below Surface (S8) (MLRA 147, 148)	
<input type="checkbox"/> Thin Dark Surface (S9) (MLRA 147, 148)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR N, MLRA 136)	
<input type="checkbox"/> Umbric Surface (F13) (MLRA 136, 122)	
<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 148)	
<input type="checkbox"/> Red Parent Material (F21) (MLRA 127, 147)	

<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 – Eastern Mountains and Piedmont Region

Project/Site: Clark County Supersite City/County: Gum Springs / Clark County Sampling Date: 14 Jun, 2022  
 Applicant/Owner: Economic Development Corporation of Clark County State: AR Sampling Point: 6  
 Investigator(s): Austin Dartez Section, Township, Range: Section 11, Township 8 South, Range 20 West  
 Landform (hillslope, terrace, etc.): Riverine Interface Local relief (concave, convex, none): Concave Slope (%): 0-3%  
 Subregion (LRR or MLRA): MLRA 135B Lat: 34.035780 Long: -93.120621 Datum: NAD 83 AR S  
 Soil Map Unit Name: Clark County NWI classification: Upland

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="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Adjacent to Caney Creek.	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input checked="" type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" 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"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

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

Sampling Point: 6

	Absolute % Cover	Dominant Species?	Indicator Status		
<b>Tree Stratum</b> (Plot size: <u>15' x 15'</u> )					
1. <u>Ulmus americana</u>	<u>60</u>	<u>Y</u>	<u>FAC</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)	
2. <u>Liquidambar styraciflua</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>		
3. <u>Quercus nigra</u>	<u>10</u>	<u>N</u>	<u>FAC</u>		
4. _____					
5. _____					
6. _____					
7. _____					
$\frac{90}{90} = \text{Total Cover}$ 50% of total cover: <u>45</u> 20% of total cover: <u>18</u>				<b>Prevalence Index worksheet:</b> $\frac{\text{Total \% Cover of:}}{\text{Multiply by:}}$ OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species _____ x 3 = <u>0</u> FACU species _____ x 4 = <u>0</u> UPL species _____ x 5 = <u>0</u> Column Totals: _____ (A) <u>0</u> (B)  Prevalence Index = B/A = <u>0</u>	
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15' x 15'</u> )					
1. <u>Carpinus caroliniana</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>		
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
$\frac{20}{20} = \text{Total Cover}$ 50% of total cover: <u>10</u> 20% of total cover: <u>4</u>				<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 $\leq 3.0^1$ <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
<b>Herb Stratum</b> (Plot size: <u>8' x 8'</u> )					
1. <u>Carex albursina</u>	<u>15</u>	<u>Y</u>	<u>NI</u>		
2. <u>Chasmanthium latifolium</u>	<u>8</u>	<u>Y</u>	<u>FAC</u>		
3. <u>Callicarpa americana</u>	<u>4</u>	<u>N</u>	<u>FACU</u>		
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
$\frac{27}{27} = \text{Total Cover}$ 50% of total cover: <u>13.5</u> 20% of total cover: <u>5.4</u>				<b>Definitions of Four Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vine</b> – All woody vines greater than 3.28 ft in height.	
<b>Woody Vine Stratum</b> (Plot size: <u>8' x 8'</u> )					
1. <u>Toxicodendron radicans</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>		
2. _____					
3. _____					
4. _____					
5. _____					
$\frac{15}{15} = \text{Total Cover}$ 50% of total cover: <u>7.5</u> 20% of total cover: <u>3</u>					<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____
Remarks: (Include photo numbers here or on a separate sheet.)					



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

Project/Site: Clark County Supersite City/County: Gum Springs / Clark County Sampling Date: 14 Jun, 2022  
 Applicant/Owner: Economic Development Corporation of Clark County State: AR Sampling Point: 7  
 Investigator(s): Austin Dartz Section, Township, Range: Section 11, Township 8 South, Range 20 West  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 0-3%  
 Subregion (LRR or MLRA): MLRA 135B Lat: 34.034534 Long: -93.120165 Datum: NAD 83 AR S  
 Soil Map Unit Name: Clark County NWI classification: Tributary

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="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Area disturbed from logging operations.	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> True Aquatic Plants (B14) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input checked="" type="checkbox"/> Aquatic Fauna (B13)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" 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"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

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

Sampling Point: 7

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>15' x 15'</u> )				<b>Dominance Test worksheet:</b>
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
4. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species _____ x 3 = <u>0</u> FACU species _____ x 4 = <u>0</u> UPL species _____ x 5 = <u>0</u> Column Totals: _____ (A) <u>0</u> (B)  Prevalence Index = B/A = <u>0</u>
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15' x 15'</u> )				
1. <u>Diospyros virginiana</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>	<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"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <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. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: <u>5</u> 20% of total cover: <u>2</u>				
<b>Herb Stratum</b> (Plot size: <u>8' x 8'</u> )				<b>Definitions of Four Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
1. <u>Carex pedunculata</u>	<u>40</u>	<u>Y</u>	<u>OBL</u>	
2. <u>Cyperus echinatus</u>	<u>30</u>	<u>Y</u>	<u>FAC</u>	
3. <u>Cyclosporum leptophyllum</u>	<u>25</u>	<u>Y</u>	<u>FAC</u>	
4. <u>Panicum clandestinum</u>	<u>10</u>	<u>Y</u>	<u>NI</u>	
5. <u>Juncus effusus</u>	<u>10</u>	<u>Y</u>	<u>OBL</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: <u>57.5</u> 20% of total cover: <u>23</u>				
<b>Woody Vine Stratum</b> (Plot size: <u>8' x 8'</u> )				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

**SOIL**

Sampling Point: 7

**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 4/1	90	Red-Orange	10	C	M	Loam	Saturated

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

<b>Hydric Soil Indicators:</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> 2 cm Muck (A10) (MLRA 147)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Polyvalue Below Surface (S8) (MLRA 147, 148)	<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 147, 148)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (S9) (MLRA 147, 148)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 136, 147)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Stratified Layers (A5)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10) (LRR N)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR N, MLRA 136)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Umbric Surface (F13) (MLRA 136, 122)	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 148)	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21) (MLRA 127, 147)	

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

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	Hydric Soil Present?    Yes <input checked="" type="checkbox"/> No _____
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Remarks:  
Soil inundated and difficult to obtain sample.

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

Project/Site: Clark County Supersite City/County: Gum Springs / Clark County Sampling Date: 14 Jun, 2022  
 Applicant/Owner: Economic Development Corporation of Clark County State: AR Sampling Point: 8  
 Investigator(s): Austin Dartez Section, Township, Range: Section 11, Township 8 South, Range 20 West  
 Landform (hillslope, terrace, etc.): Riverine Interface Local relief (concave, convex, none): Concave Slope (%): 0-3%  
 Subregion (LRR or MLRA): MLRA 135B Lat: 34.0521 Long: -93.1190 Datum: NAD 83 AR S  
 Soil Map Unit Name: Clark County NWI classification: Upland

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="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Adjacent to Caney Creek.	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13)	<u>Secondary Indicators (minimum of two required)</u> <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"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

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

Sampling Point: 8

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>15' x 15'</u> )				
1. <u>Ulmus americana</u>	<u>80.00</u>	<u>Y</u>	<u>FAC</u>	<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>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40%</u> (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
80 = Total Cover				
50% of total cover: <u>40</u>		20% of total cover: <u>16</u>		
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15' x 15'</u> )				
1. <u>Ulmus americana</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species <u>2</u> x 3 = <u>6</u> FACU species <u>3</u> x 4 = <u>12</u> UPL species _____ x 5 = <u>0</u> Column Totals: <u>5</u> (A) <u>18</u> (B)  Prevalence Index = B/A = <u>3.6</u>
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
20 = Total Cover				
50% of total cover: <u>10</u>		20% of total cover: <u>4</u>		
<b>Herb Stratum</b> (Plot size: <u>8' x 8'</u> )				
1. <u>Thalictrum thalictroides</u>	<u>40</u>	<u>Y</u>	<u>FACU</u>	<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"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Milium effusum</u>	<u>20</u>	<u>Y</u>	<u>NI</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
60 = Total Cover				
50% of total cover: <u>30</u>		20% of total cover: <u>12</u>		
<b>Woody Vine Stratum</b> (Plot size: <u>8' x 8'</u> )				
1. <u>Toxicodendron radicans</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	<b>Definitions of Four Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
2. <u>Parthenocissus quinquefolia</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>	
3. <u>Lonicera japonica</u>	<u>5</u>	<u>Y</u>	<u>FACU</u>	
4. _____				
5. _____				
30 = Total Cover				
50% of total cover: <u>15</u>		20% of total cover: <u>6</u>		
Remarks: (Include photo numbers here or on a separate sheet.)				<b>Hydrophytic Vegetation Present?</b> Yes _____ No <input checked="" type="checkbox"/>



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

Project/Site: Clark County Supersite City/County: Gum Springs / Clark County Sampling Date: 14 Jun, 2022  
 Applicant/Owner: Economic Development Corporation of Clark County State: AR Sampling Point: 9  
 Investigator(s): Austin Dartez Section, Township, Range: Section 11, Township 8 South, Range 20 West  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 0-3%  
 Subregion (LRR or MLRA): MLRA 135B Lat: 34.051544 Long: -93.118999 Datum: NAD 83 AR S  
 Soil Map Unit Name: Clark County NWI classification: Tributary

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="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Area disturbed from logging operations.	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> True Aquatic Plants (B14) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input checked="" type="checkbox"/> Aquatic Fauna (B13)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" 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"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

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

Sampling Point: 9

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>15' x 15'</u> )				
1. <u>Ulmus americana</u>	<u>30.00</u>	<u>Y</u>	<u>FAC</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
50% of total cover: <u>15</u>	<u>30</u> = Total Cover	<u>20</u> of total cover: <u>6</u>		
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15' x 15'</u> )				
1. <u>Diospyros virginiana</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species _____ x 3 = <u>0</u> FACU species _____ x 4 = <u>0</u> UPL species _____ x 5 = <u>0</u> Column Totals: <u>0</u> (A) <u>0</u> (B)  Prevalence Index = B/A = <u>0</u>
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
50% of total cover: <u>5</u>	<u>10</u> = Total Cover	<u>20</u> of total cover: <u>2</u>		
<b>Herb Stratum</b> (Plot size: <u>8' x 8'</u> )				
1. <u>Carex pedunculata</u>	<u>40</u>	<u>Y</u>	<u>OBL</u>	<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"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Cyperus echinatus</u>	<u>30</u>	<u>Y</u>	<u>FAC</u>	
3. <u>Juncus effusus</u>	<u>20</u>	<u>Y</u>	<u>OBL</u>	
4. <u>Cyclosporum leptophyllum</u>	<u>10</u>	<u>N</u>	<u>FAC</u>	
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
50% of total cover: <u>50</u>	<u>100</u> = Total Cover	<u>20</u> of total cover: <u>20</u>		
<b>Woody Vine Stratum</b> (Plot size: <u>8' x 8'</u> )				
1. _____				<b>Definitions of Four Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
2. _____				
3. _____				
4. _____				
5. _____				
50% of total cover: <u>0</u>	<u>0</u> = Total Cover	<u>0</u> of total cover: <u>0</u>		
<b>Hydrophytic Vegetation Present?</b>				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: (Include photo numbers here or on a separate sheet.)				

**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 4/1	90	Red-Orange	10	C	M	Loam	Saturated

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils <sup>3</sup> :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> 2 cm Muck (A10) (MLRA 147)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Polyvalue Below Surface (S8) (MLRA 147, 148)	<input type="checkbox"/> Coast Prairie Redox (A16)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (S9) (MLRA 147, 148)	<input type="checkbox"/> (MLRA 147, 148)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19)	
<input type="checkbox"/> Stratified Layers (A5)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> (MLRA 136, 147)	
<input type="checkbox"/> 2 cm Muck (A10) (LRR N)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR N, MLRA 136)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Umbric Surface (F13) (MLRA 136, 122)		
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 148)		
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21) (MLRA 127, 147)		

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

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No _____
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Remarks:

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

Project/Site: Clark County Supersite City/County: Gum Springs / Clark County Sampling Date: 14 Jun, 2022  
 Applicant/Owner: Economic Development Corporation of Clark County State: AR Sampling Point: 10  
 Investigator(s): Austin Dartez Section, Township, Range: Section 11, Township 8 South, Range 20 West  
 Landform (hillslope, terrace, etc.): Riverine Interface Local relief (concave, convex, none): Concave Slope (%): 0-3%  
 Subregion (LRR or MLRA): MLRA 135B Lat: 34.049751 Long: -93.120464 Datum: NAD 83 AR S  
 Soil Map Unit Name: Clark County NWI classification: Upland

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="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Adjacent to Caney Creek.	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13)	<u>Secondary Indicators (minimum of two required)</u> <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"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

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

Sampling Point: 10

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>15' x 15'</u> )				
1. <u>Ulmus americana</u>	<u>60</u>	<u>Y</u>	<u>FAC</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
50% of total cover: <u>30</u>	<u>60</u> = Total Cover	20% of total cover: <u>12</u>		
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15' x 15'</u> )				
1. <u>Ulmus americana</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species _____ x 3 = <u>0</u> FACU species _____ x 4 = <u>0</u> UPL species _____ x 5 = <u>0</u> Column Totals: _____ (A) <u>0</u> (B)  Prevalence Index = B/A = <u>0</u>
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
50% of total cover: <u>7.5</u>	<u>15</u> = Total Cover	20% of total cover: <u>3</u>		
<b>Herb Stratum</b> (Plot size: <u>8' x 8'</u> )				
1. <u>Chasmanthium latifolium</u>	<u>35</u>	<u>Y</u>	<u>FAC</u>	<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"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
50% of total cover: <u>17.5</u>	<u>35</u> = Total Cover	20% of total cover: <u>7</u>		
<b>Woody Vine Stratum</b> (Plot size: <u>8' x 8'</u> )				
1. <u>Toxicodendron radicans</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	<b>Definitions of Four Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
2. <u>Parthenocissus quinquefolia</u>	<u>5</u>	<u>N</u>	<u>FAC</u>	
3. _____				
4. _____				
5. _____				
50% of total cover: <u>10</u>	<u>20</u> = Total Cover	20% of total cover: <u>4</u>		
				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: (Include photo numbers here or on a separate sheet.)				

**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 4/2	100					Loam	No redox noted.
6-18	10YR 4/4	100					Loam	No redox noted.

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
- 2 cm Muck (A10) **(LRR N)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)

- Dark Surface (S7)
- Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- Thin Dark Surface (S9) **(MLRA 147, 148)**
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- Umbric Surface (F13) **(MLRA 136, 122)**
- Piedmont Floodplain Soils (F19) **(MLRA 148)**
- Red Parent Material (F21) **(MLRA 127, 147)**

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

- 2 cm Muck (A10) **(MLRA 147)**
- Coast Prairie Redox (A16) **(MLRA 147, 148)**
- Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- 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:  
 Bored to 36" at bank of tributary and found no water-table or saturation. Soil compaction was weak and texture was sandy loam - loam.

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

Project/Site: Clark County Supersite City/County: Gum Springs / Clark County Sampling Date: 14 Jun, 2022  
 Applicant/Owner: Economic Development Corporation of Clark County State: AR Sampling Point: 11  
 Investigator(s): Austin Dartez Section, Township, Range: Section 11, Township 8 South, Range 20 West  
 Landform (hillslope, terrace, etc.): Riverine Interface Local relief (concave, convex, none): Concave Slope (%): 0-3%  
 Subregion (LRR or MLRA): MLRA 135B Lat: 34.042205 Long: -93.121478 Datum: NAD 83 AR S  
 Soil Map Unit Name: Clark County NWI classification: Upland

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="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Adjacent to Caney Creek.	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13)	<u>Secondary Indicators (minimum of two required)</u> <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"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

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

Sampling Point: 11

	Absolute % Cover	Dominant Species?	Indicator Status		
<b>Tree Stratum</b> (Plot size: <u>15' x 15'</u> )				<b>Dominance Test worksheet:</b>	
1. <u>Celtis laevigata</u>	40	Y	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A)	
2. <u>Ulmus americana</u>	30	Y	FAC	Total Number of Dominant Species Across All Strata: <u>7</u> (B)	
3. <u>Liquidambar styraciflua</u>	10	N	FAC	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>85.71%</u> (A/B)	
4. _____				<b>Prevalence Index worksheet:</b>	
5. _____					
6. _____					
7. _____					
80 = Total Cover					
50% of total cover: <u>40</u>		20% of total cover: <u>16</u>			
20% of total cover: <u>16</u>					
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15' x 15'</u> )				OBL species _____ x 1 = <u>0</u>	
1. <u>Liquidambar styraciflua</u>	20	Y	FAC	FACW species _____ x 2 = <u>0</u>	
2. <u>Lonicera maackii</u>	15	Y	NI	FAC species _____ x 3 = <u>0</u>	
3. <u>Carpinus caroliniana</u>	10	N	FAC	FACU species _____ x 4 = <u>0</u>	
4. _____				UPL species _____ x 5 = <u>0</u>	
5. _____				Column Totals: _____ (A) <u>0</u> (B)	
6. _____				Prevalence Index = B/A = <u>0</u>	
7. _____				<b>Hydrophytic Vegetation Indicators:</b>	
8. _____					<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
9. _____					<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
					<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
					<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
<b>Herb Stratum</b> (Plot size: <u>8' x 8'</u> )				<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
1. <u>Chasmanthium latifolium</u>	30	Y	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. <u>Pedicularis canadensis</u>	20	Y	FACU		
3. _____					
4. _____					
5. _____					
6. _____				<b>Definitions of Four Vegetation Strata:</b>	
7. _____					
8. _____					
9. _____					
10. _____					
11. _____				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.	
<b>Woody Vine Stratum</b> (Plot size: <u>8' x 8'</u> )				<b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.	
1. <u>Toxicodendron radicans</u>	20	Y	FAC	<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.	
2. <u>Parthenocissus quinquefolia</u>	5	Y	FAC	<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.	
3. _____				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
4. _____					
5. _____					
25 = Total Cover					
50% of total cover: <u>12.5</u>		20% of total cover: <u>5</u>			
Remarks: (Include photo numbers here or on a separate sheet.)					

**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 4/3	100					Loam	No redox noted.

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

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> 2 cm Muck (A10) (MLRA 147)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 147, 148)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 136, 147)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10) (LRR N)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Polyvalue Below Surface (S8) (MLRA 147, 148)	
<input type="checkbox"/> Thin Dark Surface (S9) (MLRA 147, 148)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR N, MLRA 136)	
<input type="checkbox"/> Umbric Surface (F13) (MLRA 136, 122)	
<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 148)	
<input type="checkbox"/> Red Parent Material (F21) (MLRA 127, 147)	

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

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
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Remarks: