



August 23, 2022

Richard Elliot  
Thousand Hills Land and Cattle Company  
812 E. Monument Street  
Colorado Springs, CO 80903

**RE: Preliminary Habitat Assessment for Wetland Habitat and Other Waters of the U.S. for the Falcon Acres Site near Falcon, El Paso County, CO**

Dear Mr. Elliot:

Ecosystem Services, LLC (Ecos or ecos) is pleased to submit the following Preliminary Habitat Assessment (PHA) Technical Memorandum (Memo) for the Falcon Acres site (Site) located near Falcon, El Paso County, Colorado.

## **1.0 METHODOLOGY**

Ecos performed an office level review of available databases, resources and literature to gather background information on the environmental setting of Site and potential ecological constraints to development, including:

- U.S. Geological Survey (USGS);
- Google Earth (GE) current and historic aerial imagery;
- Colorado Oil and Gas Conservation Commission (COGCC) Online GIS data;
- USFWS National Wetland Inventory (NWI);
- Colorado Natural Heritage Program (CNHP) Wetland & Riparian Inventory;
- U.S. Department of Agriculture (USDA) Natural Resource Conservation Services (NRCS) Web Soil Survey;
- Site-specific background data provided by the Client, including topographic base mapping, site development plans, and other data pertinent to the assessment.

Following the collection and review of background information the Site boundaries were overlain on the resource mapping to create Figures for this Memo and/or the data were summarized as Appendices to this Memo.

Following the office level review, ecos conducted an onsite field assessment of the Site to determine the presence or absence, extent and characteristics of any waters of the U.S including wetlands (WOTUS) that may be present that could be regulated under the Clean Water Act (CWA).

## **2.0 SUMMARY OF ASSESSMENT FINDINGS**

Ecos determination of the presence/absence of potentially significant WOTUS documented during the office level assessment are summarized below:

## 2.1 Office Level Review

General Site Location: The Site, consisting of 49.6 acres (+/-), is located in the northeast corner of Section 4, Township 14 South, Range 64 West southwest of the intersection of Davis Road and Curtis Road. The center of the site is at latitude 38.865935° North and longitude of -104.557150° West.

USGS Mapping: The USGS mapping (Figure 1) illustrates that the Site lies in a flat to gently sloping valley that tilts toward the northeast. Elevations range from 6560' along the western Site boundary to 6525' near the northeast corner of the Site. An isolated pond is present in the center of the Site oriented in a north-south direction. One (1) topographic depression is mapped but not as an aquatic feature. USGS mapping does not show any other mapped water features. Refer to Figure 1, USGS Site Location Map.

Google Earth aerial imagery review: Ecos reviewed the Site using the time-lapse function in Google Earth (GE) to get a look back in time to 1999. The timeline review indicates the presence of a stock pond in the north central portion of the site. As of 10/9/2019, it appears that the stock pond and the Site in general is no longer used for agricultural or residential purposes and the central stock pond has dried up. No other obvious wetlands or water bodies (natural or manmade) are evident on aerial imagery. Refer to Figure 2, Google Earth Aerial Photo.

COGCC Online Geographic Information System (GIS) data: – The database provided links to FEMA Floodplain Mapping. The COGCC database indicates that there are no mapped FEMA floodplains within the Site. Refer to Figure 3, COGCC FEMA Floodplain Map.

USFWS National Wetland Inventory (NWI): NWI indicates the presence of 2 isolated ponds in the central and northeastern corner of the Site and classifies them as Palustrine Emergent Persistent and Intermittently Flooded herbaceous wetlands (PEM1J). Refer to Figure 4, National Wetland Inventory Map.

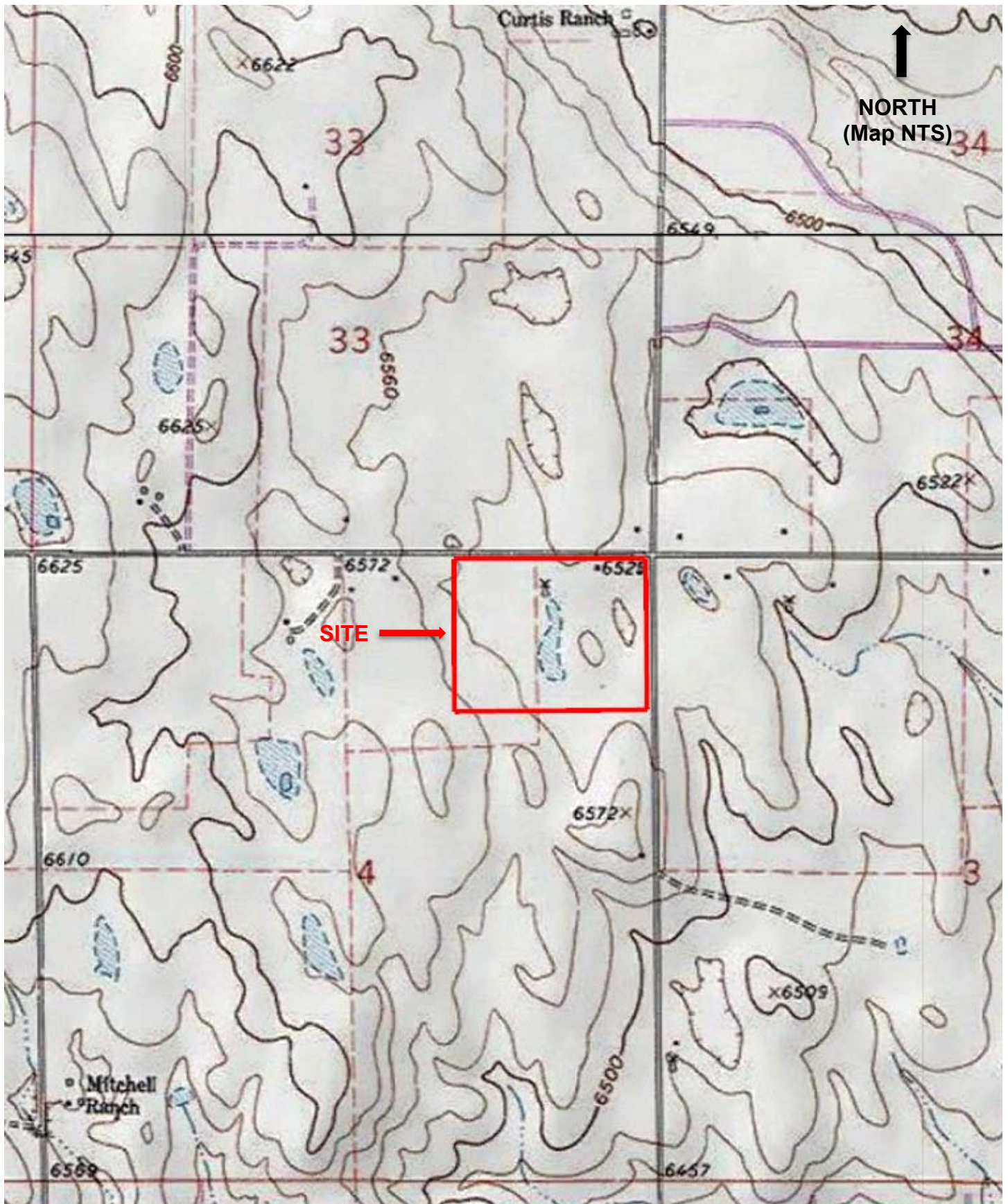
USDA NRCS Soil Survey: A custom soil report was generated for the Site via the NRCS Web Soil Survey (USDA NRCS, 2022) that maps and generates a comprehensive list of soil types that underly the Site. Refer to Appendix A, USDA NRCS Soil Survey that illustrates the following soil types present on site:

- Truckton sandy loam (Map unit 97), 3 to 9 percent slopes

The Colorado Hydric Soils database (USDA, NRCS, 2015) indicates that the Truckton sandy loam soil type is not listed as a hydric soil. Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS, 1994) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation (i.e., wetland vegetation).

**Figure 1**

**USGS Site Location Map**



USGS 7.5 min. Quad: Falcon, CO  
Section 4, Township 14 South, Range 64 West  
Latitude: 38.865935° North, Longitude: -104.557150° West

## Figure 2

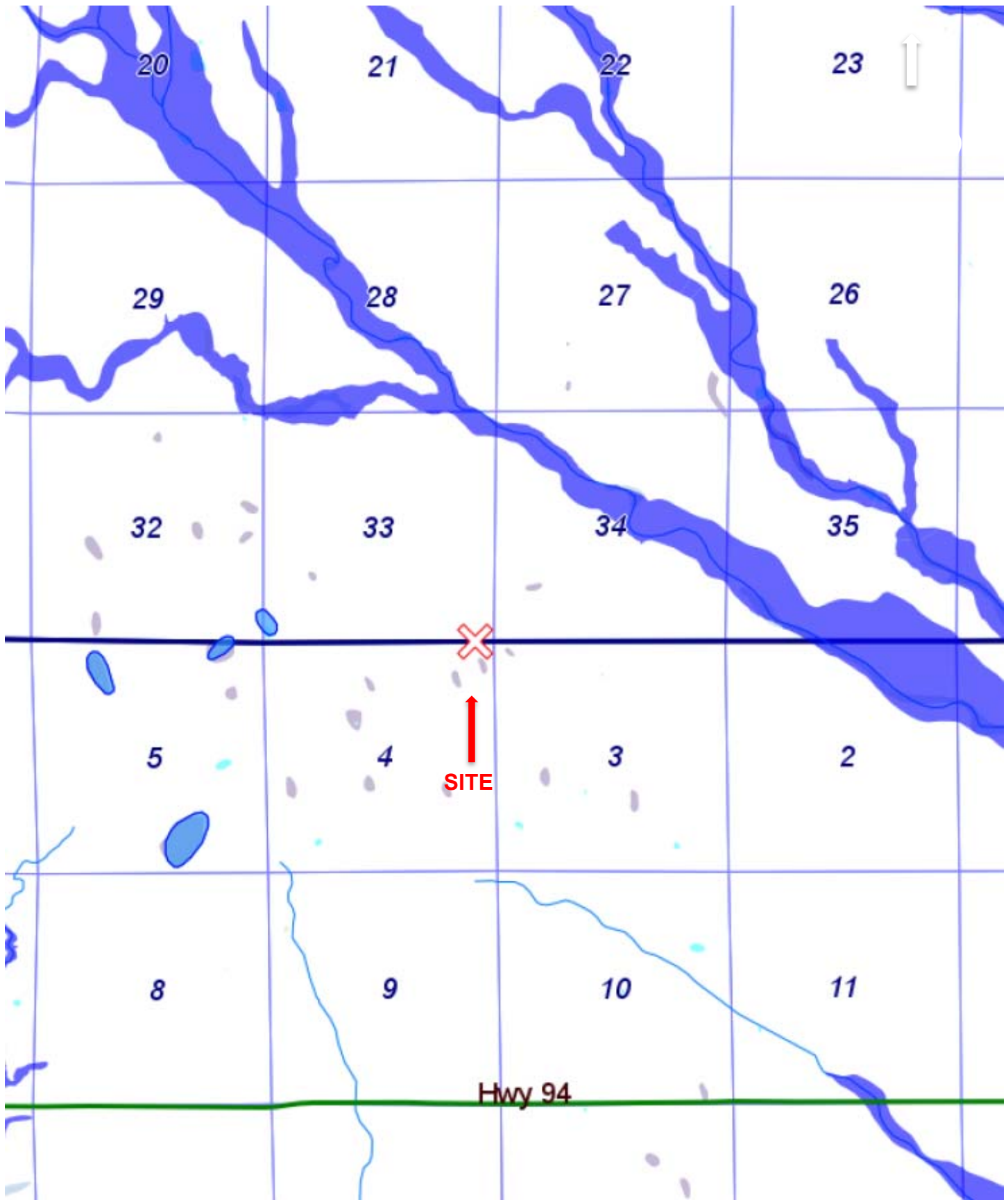
Google Earth Aerial Photo



Aerial Photo Source: Google Earth, 10/6/2019

**Figure 3**

**COGCC FEMA Floodplain Map**

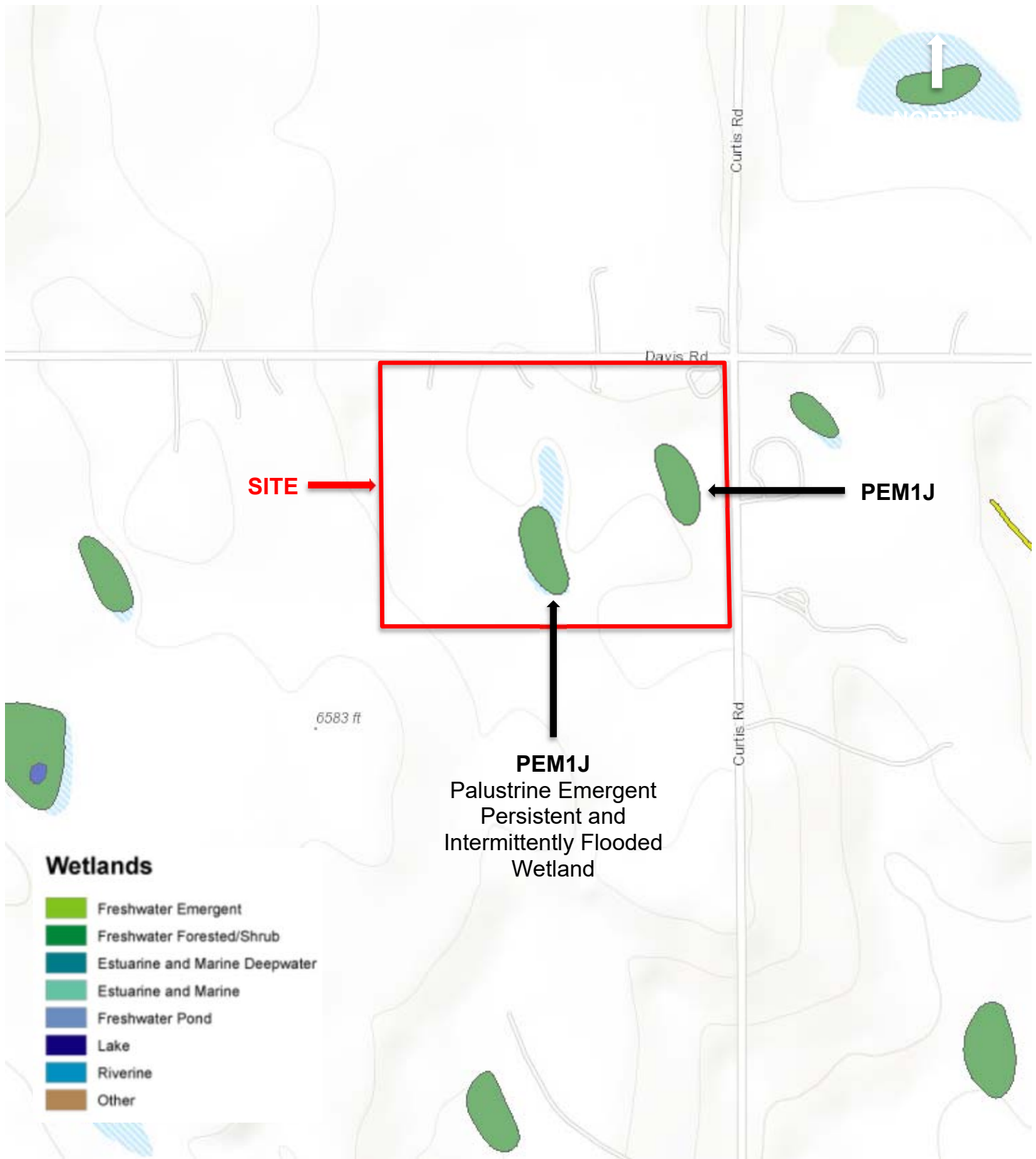


Source: COGCC Online Geographic Information System (GIS)



**Figure 4**

**National Wetland Inventory Map**



Source: CNHP Wetland Mapper / U.S. Fish and Wildlife Service National Wetland Inventory (NWI)

## 2.2 Field Assessment Results

Waters of the United States, including Wetlands: Ecos performed an onsite field investigation of potential WOTUS on 9/13/2022 to determine if they are jurisdictional under the Clean Water Act (CWA). No WOTUS were found on the Site, including in any of the locations or depressional areas identified on USGS or NWI mapping. Specifically, no portion of the Site met the 3 criteria required for an area to be deemed jurisdictional wetland habitat as defined in the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory, 1987). These 3 criteria include the presence of: 1) hydrophytic vegetation; 2) hydric soil; and 3) a source of sustaining hydrology. No wetland vegetation was found (only upland grasses and weeds) and there are no sources of persistent sustaining hydrology. Because the first 2 criteria were not met, soil test pits were not investigated to determine the presence or absence of hydric soils.

The overall composition of upland vegetation observed throughout the Site, include blue grama (50%), Russian thistle (25%), lambs quarters (25%). Green needle grass, fringed sage, bluegrass, Canada wildrye, common ragweed and common sunflower are present throughout the site intermixed with the dominant species above.

Refer to Appendix B, Photo Location Map and Photos taken on 9/13/2022 of typical site conditions and the conditions of the potential WOTUS features identified on USGS and NWI mapping that do not exist.

## 3.0 REGULATORY IMPLICATIONS AND RECOMMENDATIONS

### 3.1 Clean Water Act - Waters of the U.S. and Wetlands

There are no potentially jurisdictional WOTUS present on site. If the features illustrated on USGS or NWI mapping were in fact present and met the 3 wetland criteria, they would be considered isolated and non-jurisdictional under the CWA because they have no direct or indirect surface flow connection to other jurisdictional waters.

Because there are not jurisdictional WOTUS on the Site, the landowner is under no legal obligation to notify the U.S. Army Corps of Engineers to obtain a Jurisdictional Determination (JD) or a CWA Permit for any construction activities because the USACE does not regulate uplands.

#### 3.1.1 Clarification of Jurisdictional vs. Non-Jurisdictional Waters of the U.S.

The USACE and U.S. Environmental Protection Agency (USEPA) prepared a memorandum, *Revised Guidance on CWA Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States* (December 2, 2008), to provide guidance to USACE districts and USEPA regions implementing the Supreme Court's decision in these cases regarding jurisdiction over WOTUS under the CWA. Key points of the guidance, summarized below are utilized by ecos to inform our preliminary jurisdictional assessment:

The agencies will assert jurisdiction over the following waters:

- Traditional Navigable Waters (TNWs) and wetlands adjacent to TNWs;
- Non-navigable tributaries of TNWs that are relatively permanent waters (RPWs) where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months); and wetlands that directly abut such tributaries.

The agencies will decide and lately have been asserting jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a TNW:

- \* Non-navigable tributaries that are not relatively permanent, have discontinuous bed and banks and wetlands adjacent to such tributaries.

\*Footnote 24 of the memorandum defines a “tributary” as follows: “a tributary includes natural, man-altered, or man-made water bodies that carry flow directly or indirectly into a traditional navigable water.”

The agencies generally will not assert jurisdiction over the following features:

- Isolated wetlands;
- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow [typically less than 3 months per year]); and
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

Additionally, although not included in the USACE/USEPA guidance memo referenced above, ecos extensive experience with the USACE verifies that the agencies generally will not assert jurisdiction over uplands transporting overland sheet flow generated from precipitation (i.e., rain events and snowmelt).

#### 4.0 REFERENCES

Colorado Natural Heritage Program (CNHP) Wetlands & Riparian Inventory accessed at: COGCC (Colorado Oil and Gas Conservation Commission). 2022. COGCC GIS Online. Available at: <http://dnrwebmapgdev.state.co.us/mg2012app/>.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.

NTCHS (National Technical Committee for Hydric Soils). 1994. *Changes in Hydric Soils of the United States* (including the NTCHS definition of Hydric Soil). Federal Register Volume 59, Number 133. Wednesday, July 13, 1994.

USACE (U.S. Army Corps of Engineers). 2010. Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Great Plains Region (Version 2). March 2010.

USDA, Natural Resources Conservation Service (NRCS). 2010. Field Indicators of Hydric Soils in the United States, A Guide for Identifying and Delineating Hydric Soils, Version 7.0. L.M. Vasilas, G.W. Hurt and C.V. Noble (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.

USDA, NRCS. 2015. National Hydric Soils List 2015 Colorado. Available at: <https://www.codot.gov/programs/environmental/wetlands/tools.html> and click on 2015 National Hydric Soils List, Colorado.

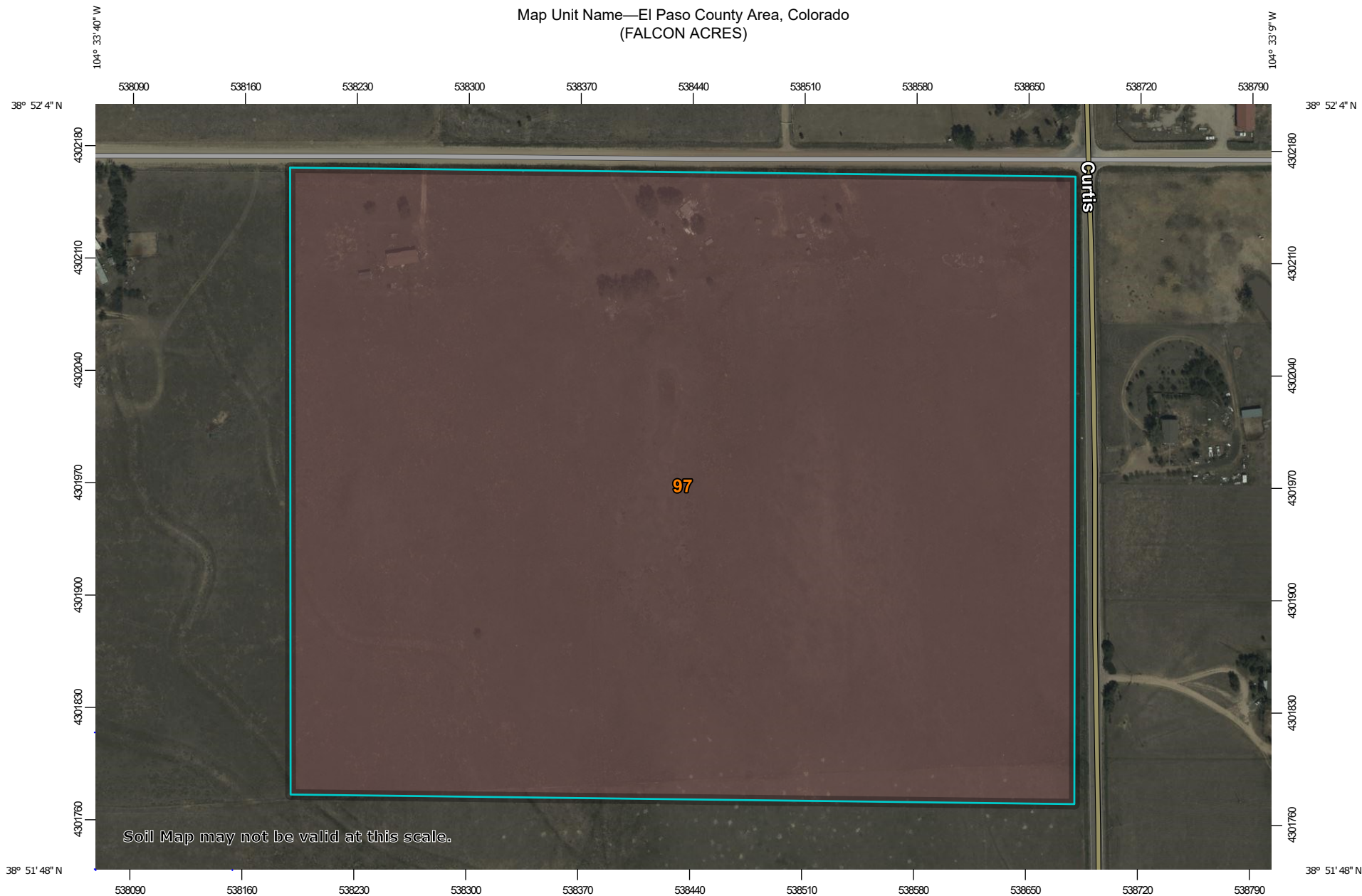
USDA, NRCS. 2022. Web Soil Survey. Available at: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>.

USFWS 2022. National Wetland Inventory, Wetlands Mapper. Available at: <http://www.fws.gov/wetlands/Data/Mapper.html>.

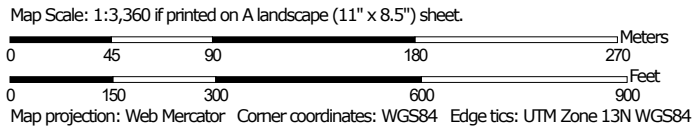
**Appendix A**

**USDA NRCS Soil Survey**

Map Unit Name—El Paso County Area, Colorado  
(FALCON ACRES)




Soil Map may not be valid at this scale.





## MAP LEGEND

### Area of Interest (AOI)



 Area of Interest (AOI)

### Soils



#### Soil Rating Polygons

 Truckton sandy loam, 3 to 9 percent slopes  
 Not rated or not available


#### Soil Rating Lines

 Truckton sandy loam, 3 to 9 percent slopes  
 Not rated or not available






#### Soil Rating Points

 Truckton sandy loam, 3 to 9 percent slopes  
 Not rated or not available


### Water Features

 Streams and Canals

### Transportation

 Rails  
 Interstate Highways  
 US Routes  
 Major Roads  
 Local Roads

### Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

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

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

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

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: El Paso County Area, Colorado  
Survey Area Data: Version 19, Aug 31, 2021

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

Date(s) aerial images were photographed: Sep 11, 2018—Oct 20, 2018

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

## Map Unit Name

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
97	Truckton sandy loam, 3 to 9 percent slopes	Truckton sandy loam, 3 to 9 percent slopes	47.6	100.0%
<b>Totals for Area of Interest</b>			<b>47.6</b>	<b>100.0%</b>

## Rating Options

*Aggregation Method:* No Aggregation Necessary

*Tie-break Rule:* Lower



## Appendix B

### Photo Location Map and Representative Photos





Photo Point FA 1: View east from northwest corner of the Site of typical, weedy upland grassland.



Photo Point FA 1: View south from northwest corner of the Site of typical, weedy upland grassland.



Photo Point FA 2: View south from center portion of the Site overlooking the “potential wetland” identified on the NWI. This depression is full of upland weeds. No wetland vegetation.



Photo Point FA 3: View west from south central property line of typical, weedy upland grassland.



Photo Point FA 3: View northwest from south central property line of typical, weedy upland grassland.



Photo Point FA 3: View north from south central property line of typical, weedy upland grassland.



Photo Point FA 4: View south from northeast corner of the Site of typical, weedy upland grassland. Curtis Road is on the left.



Photo Point FA 4: View west from northeast corner of the Site of typical, weedy upland grassland. Davis Road is on the right.



Photo Point FA 5: View west from southeast corner of the Site of typical, weedy upland grassland.



Photo Point FA 5: View north from southeast corner of the Site of typical, weedy upland grassland. Curtis Road is on the right.



Photo Point FA UPL-1: View south from the lowest point on the Site filled with upland vegetation.



Photo Point FA UPL-1: View west from the lowest point on the Site filled with upland vegetation.



Photo Point FA UPL-1: View north from the lowest point on the Site filled with upland vegetation.



Photo Point FA UPL-1: View east from the lowest point on the Site filled with upland vegetation.





Photo Point FA UPL-2: View south of the “potential wetland” shown on NWI mapping filled with upland vegetation.