

## **Appendix K**

### **Native Prairie Assessment**

**Westwood**

# **Potential Native Prairie Desktop Assessment**

**Midwater Energy Storage Project**

Shell Rock Township, Freeborn County, Minnesota

**Prepared For:**

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# 1. Introduction

This report presents the results of the desktop assessment conducted to identify areas of Potential Native Prairie (PNP) within the Project Area for the Midwater Energy Storage Project (Project), which covers 104.48 acres (Project Area) of agricultural, grazing, and lightly wooded land located in Township 101 North, Range 20 West, Sections 7, 8 and 17 in Shellrock Township, Freeborn County, Minnesota (**Exhibit 1**). The Primary Development Area is the anticipated Project footprint which is generally limited to the agricultural areas in the southern half of the Project Area (**Exhibit 1**). Westwood Professional Services, Inc. (Westwood) performed this work on behalf of Midwater BESS, LLC in May 2024.

The following presents the desktop assessment for potential native prairies and field observations completed by Westwood for the Project.

## 2. Native Prairie Definition and Assessment Methodologies

The native prairie community types considered in this assessment include dry prairie, mesic prairie, and wet prairie (MNDNR No Date - A). Native prairie, as defined by Minnesota Statutes, Section 84.02, Subdivision 5, means:

*“(1) land that has never been plowed where native prairie vegetation originating from the site currently predominates or, (2) if disturbed, is predominantly covered with native prairie vegetation that originated from the site. Unbroken pastureland used for livestock grazing can be considered native prairie if it has predominantly native vegetation originating from the site and conservation practices have maintained biological diversity.”*

To identify locations of PNP, Westwood conducted an initial desktop screening within the Project Area.

To identify existing records of native prairie, or areas with high potential for native prairie remnants, Westwood used several GIS data layers overlain on aerial imagery to identify areas given special designation or contain certain features which may indicate PNP. The layers and their purpose, include the following:

- **MNDNR Minnesota Biological Survey (MBS) Sites of Biodiversity**  
**Significance:** to identify significant prairie areas
- **MNDNR Native Plant Communities (NPC):** to identify areas classified as native prairie communities
- **MNDNR Regionally Significant Ecological Areas (RSEA):** to identify any suspect prairie areas recognized by the MNDNR as having significant ecological value
- **MBS Railroad Rights-of-Way (ROW) Prairies:** to identify linear features along railroad tracks characterized as remnant prairies
- **MNDNR Potentially Undisturbed Land (Virgin Sod):** to identify untilled, unfarmed areas
- **USDA NRCS Conservation Reserve Program (CRP) lands:** to help determine lands previously enrolled in the CRP (based on publicly available data available prior to

Historical aerial photography back to 1991 showed consistent agricultural use in open, non-wetland portions of the Project Area, but it is unclear if that included row crop tillage historically or if was limited to hay production and/or grazing during these years. Historic imagery from 1951 and 1938 show the clearest evidence of tillage (**Exhibits 4 and 5**, UMN, 2015). Around 2010 disturbance associated with the construction of the substation, utility line and access roads is apparent west of PNP 3 and south of PNP 4.

Summaries of findings from each GIS data layer is as follows:

- **MBS Sites of Biodiversity Significance (SBS):** No prairie SBSs were identified in the Project Area. Two were identified less than 0.1 miles south of the Project.
- **NPC:** No NPCs are present in the Project Area. One is located 0.45 miles south of the Project Area along U.S. Highway 65.
- **RSEA:** No prairie RSEAs are present in the Project Area. One RSEA site is located south of the Project Area along U.S. Highway 65 and generally corresponds to the MBS SBS.
- **Railroad ROW Prairies:** No railroad ROW prairies are present in the Project Area. One is located 0.45 miles south of the Project Area along U.S. Highway 65 and corresponds to the NPC.
- **MNDNR Potentially Undisturbed Land:** No virgin sod is mapped in or adjacent to the Project Area.
- **CRP lands:** CRP land is mapped in the Project Area along the north, west, and south portions of the Project Area, overlaps most of the agricultural portions of the property and encompasses all of PNPs 1, 2, 3 and 4 (USDA-FSA, 2007) (**Exhibits 2 and 3**). Approximately 53.4 acres of CRP land is located within the Project Area. According to the CRP data, the CRP land is made up of four different contracts that expired between September 2009 and September 2020.

Assuming the former CRP lands qualified as eligible cropland at the time (planted to an agricultural commodity for four of six crop years), these areas would likely be removed from consideration as potential native prairie as this provides evidence of historic tillage by qualifying for CRP. The landowner provided some documentation of past CRP contracts, but the record did not provide sufficient information on the contract terms to confirm it's eligibility was as cropland. However, communications with the landowner indicated these areas were formerly in corn and soybean row crop agriculture.

- **NWI:** Several wetlands are located in the Project Area. Listed wetlands according to NWI data are freshwater emergent, freshwater forested/shrub, freshwater pond, and riverine. These wetland types are generally not associated with prairies thus making it unlikely potential prairies would be present.

## 4. Field Survey Results

Observations within some of the PNPs occurred as part of the field wetland delineation conducted by Westwood biologists on April 29, 2024 and are summarized in **Table 1**. Photographs were also taken of PNPs from June 8 to 12, 2024. Where surveyed, field observations generally found PNPs dominated by non-native cool season pasture grasses such as smooth brome (*Bromus inermis*), and Kentucky bluegrass (*Poa pratensis*). However, it is recognized that the presence of native species cannot be ruled out entirely because biologists' observations on April 29, 2024 occurred early in the growing season when many species had not yet emerged. PNP 04 was not visited by Westwood biologists but displayed similar characteristics of the other PNPs in both land use and generally



## 6. References

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MNDNR. 2024. MBS Sites of Biodiversity Significance GIS Layer. Available at:

<https://gisdata.mn.gov/dataset/biota-mcbs-sites-of-biodiversity>

MNDNR. 2024. MNDNR Native Plant Communities GIS Layer. Available at:

<https://gisdata.mn.gov/dataset/biota-dnr-native-plant-comm>

MNDNR. No Date - A. Types of Prairie. Available at:

<https://www.dnr.state.mn.us/prairie/native/types-prairies.html>

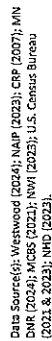
MNDNR. No Date – B. Native Vegetation at the Time of the Public Land Survey 1847-1907 GIS Layer. Available at: <https://gisdata.mn.gov/dataset/biota-marschner-presettle-veg>

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## **Exhibits**

Midwater Energy Storage Project  
Shell Rock Township, Freeborn County, MN







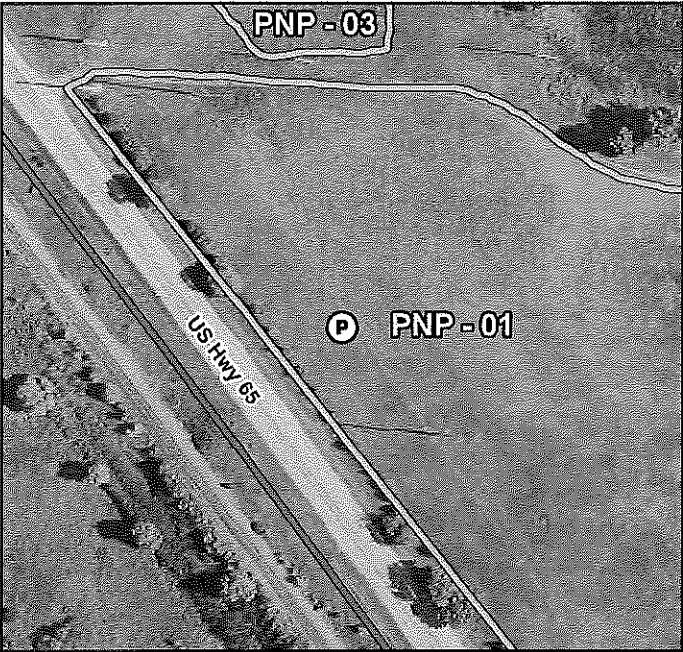
**Appendix A**

**Photo Log**



Midwater BESS  
Potential Native Prairie Assessment Photolog

Photo ID - PL-2



Attributes	
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Legend

P

Photo Location

Potential Native Prairie

Project Area

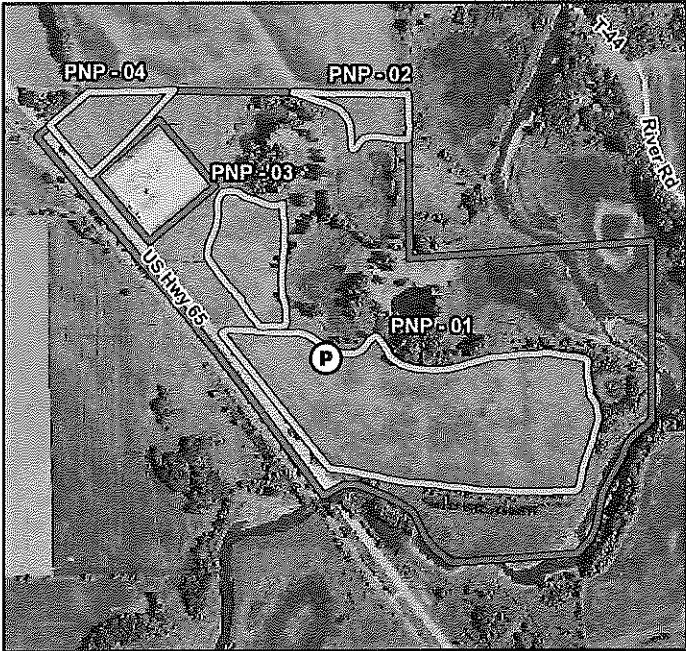
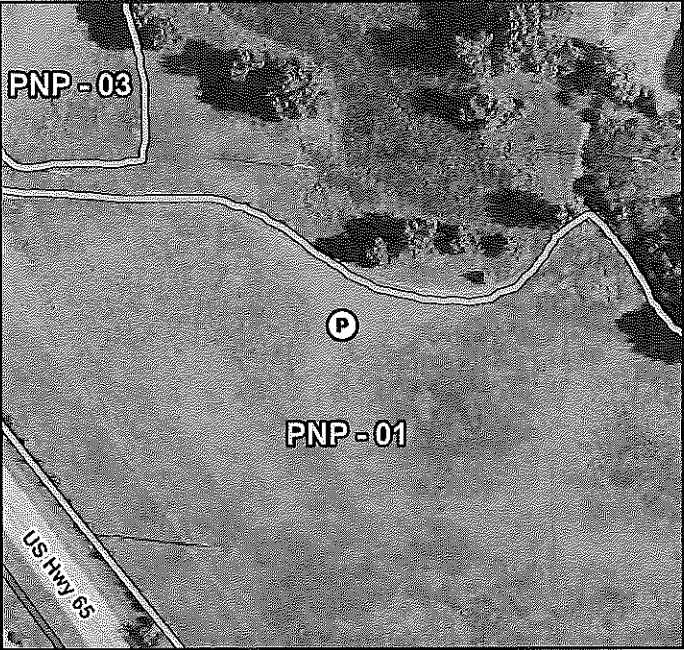


Midwater BESS  
Potential Native Prairie Assessment Photolog

Westwood

Toll Free (888) 937-6160 westwoodps.com

Photo ID - PL-17



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Potential Native Prairie	PNP - 01

**Legend**

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Photo Location

Potential Native Prairie

Project Area

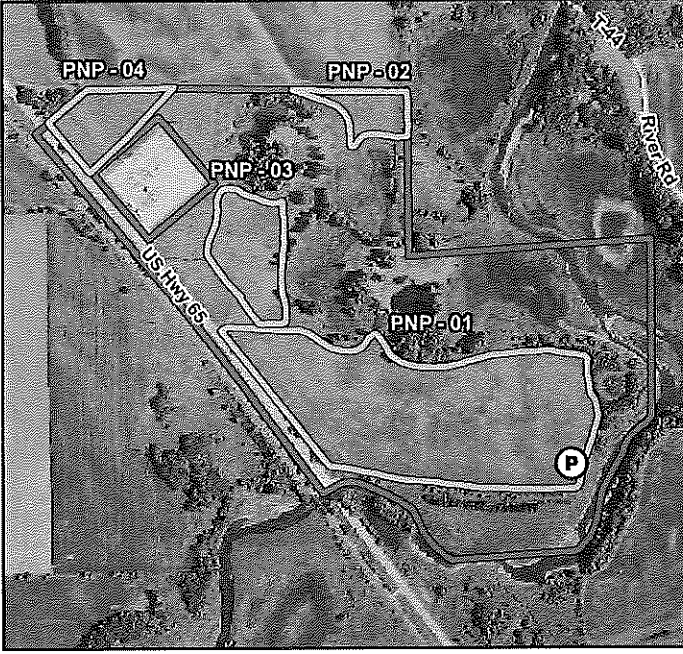
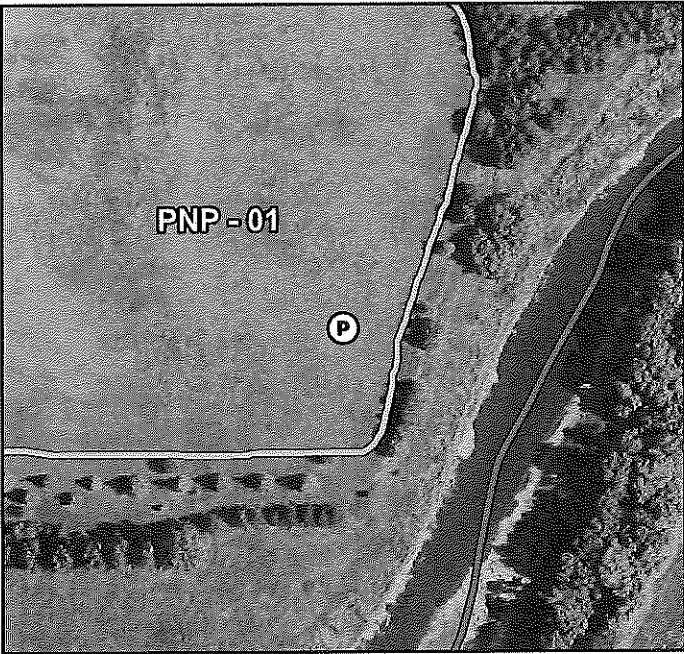


Midwater BESS  
Potential Native Prairie Assessment Photolog

Westwood

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**Legend**

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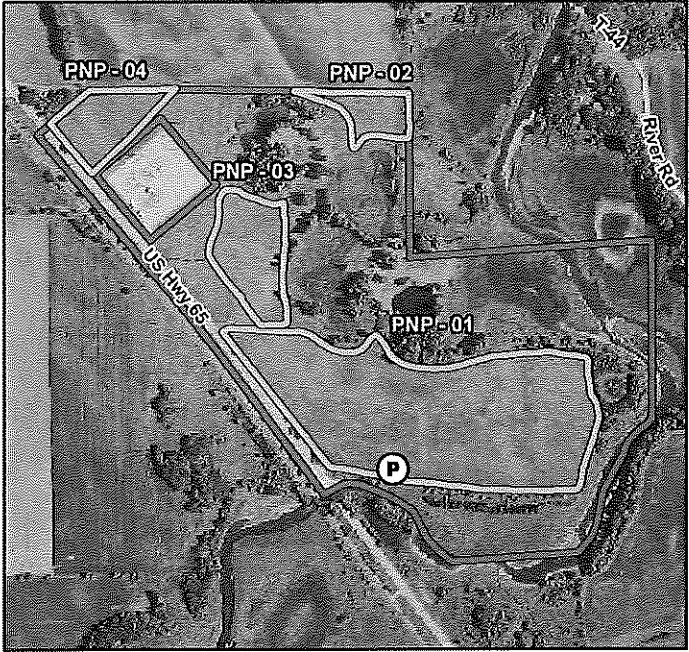
Potential Native Prairie

Project Area

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Legend

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Photo Location

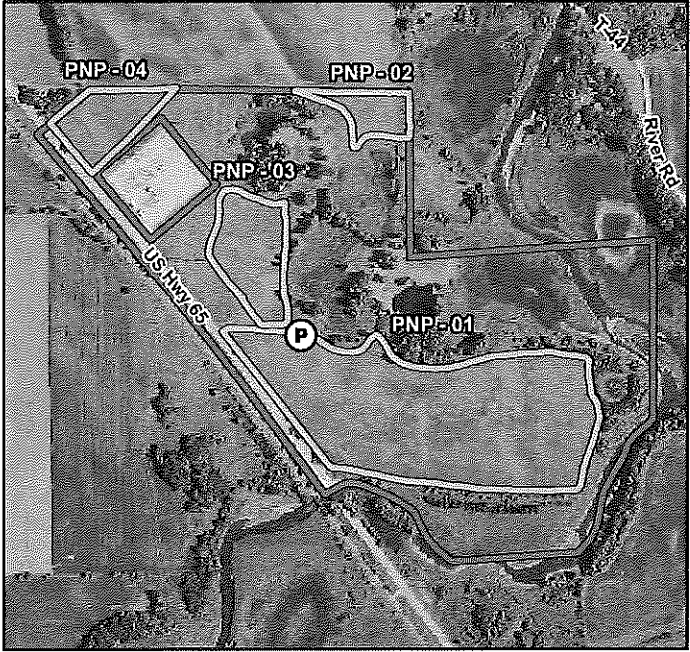
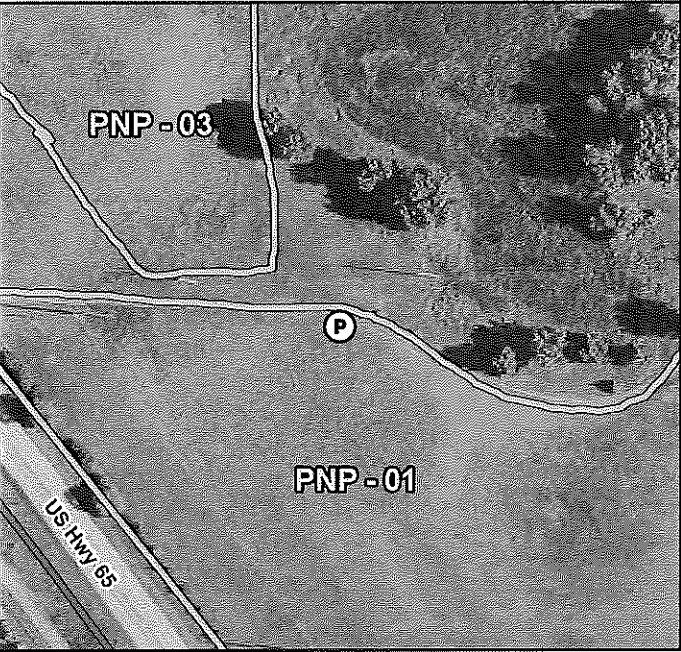
Project Area

Potential Native Prairie



Midwater BESS  
Potential Native Prairie Assessment Photolog

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Legend

P

Photo Location

Potential Native Prairie

Project Area

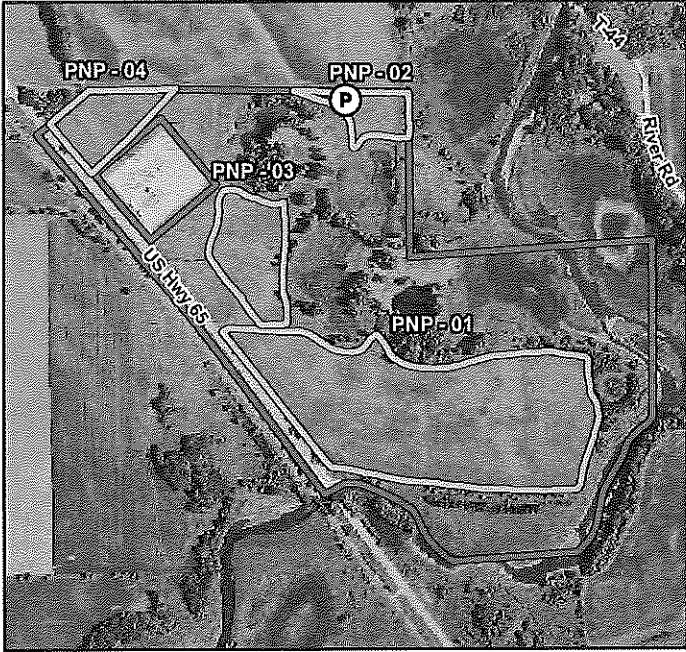
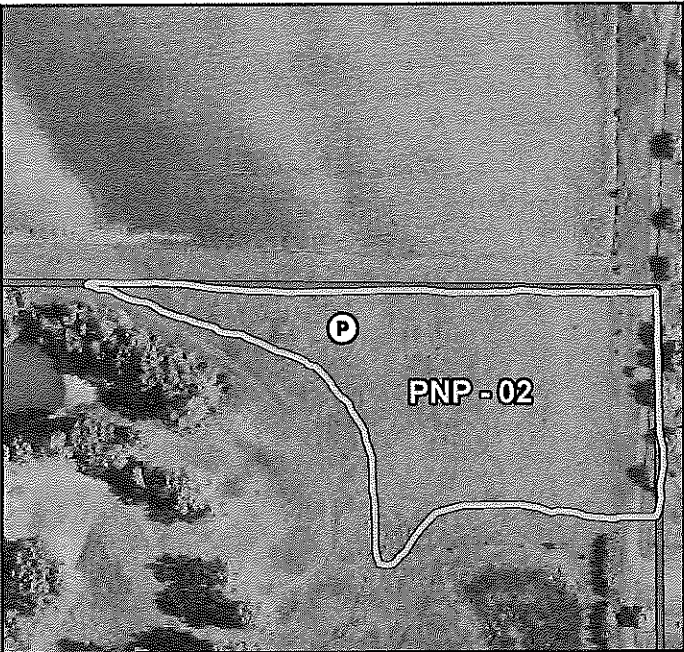


Midwater BESS  
Potential Native Prairie Assessment Photolog

Westwood

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Potential Native Prairie	PNP - 02

Legend

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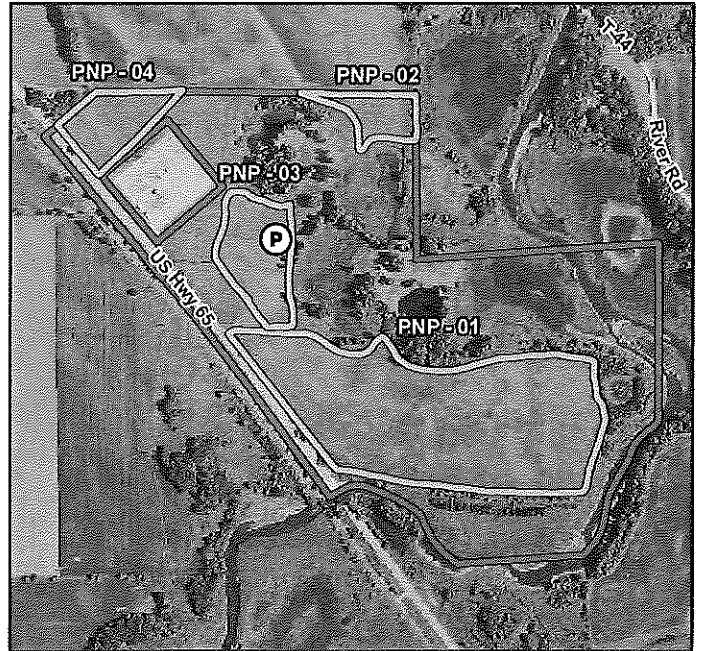
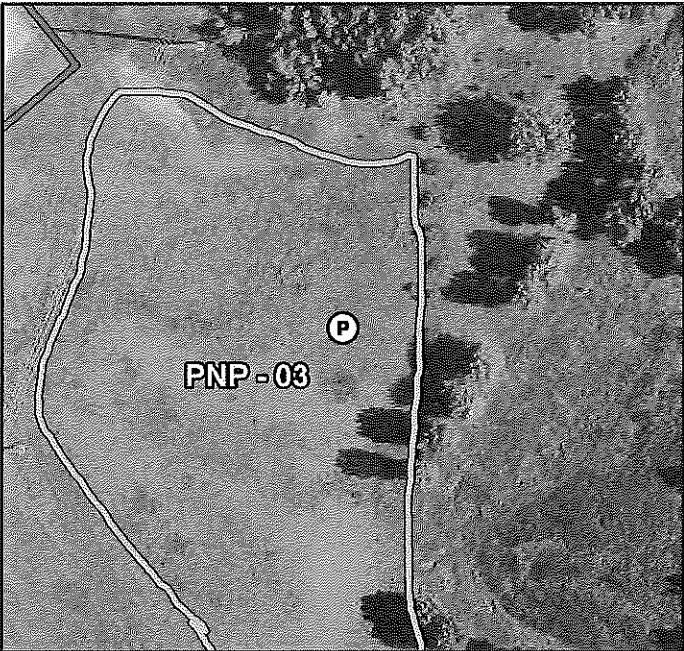
Project Area

Potential Native Prairie



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**Legend**

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Photo Location

Potential Native Prairie

Project Area

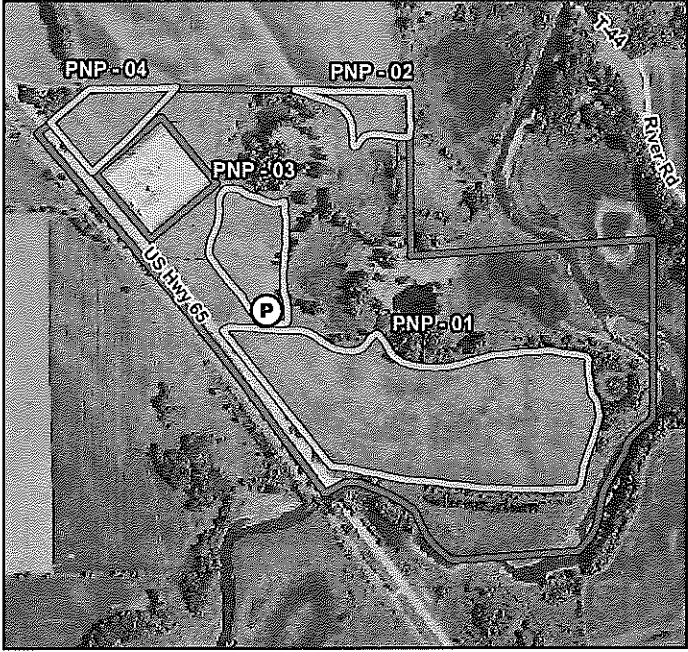
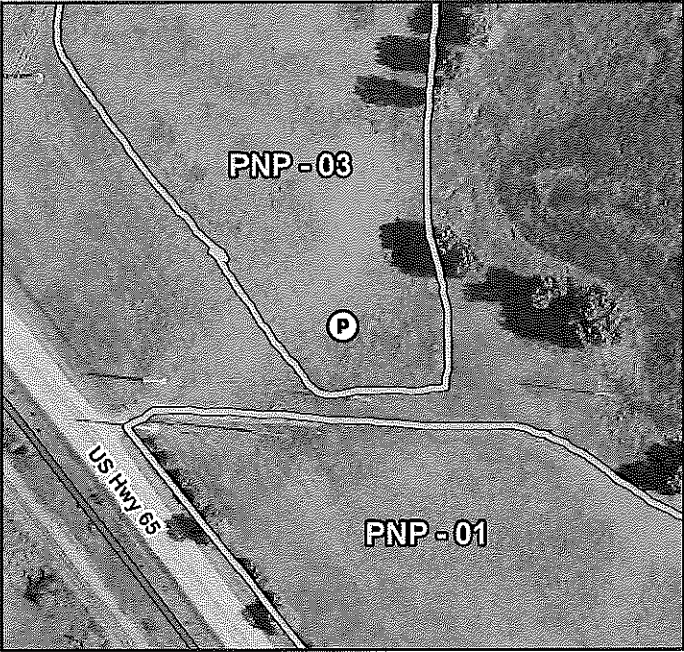


Midwater BESS  
Potential Native Prairie Assessment Photolog




Westwood

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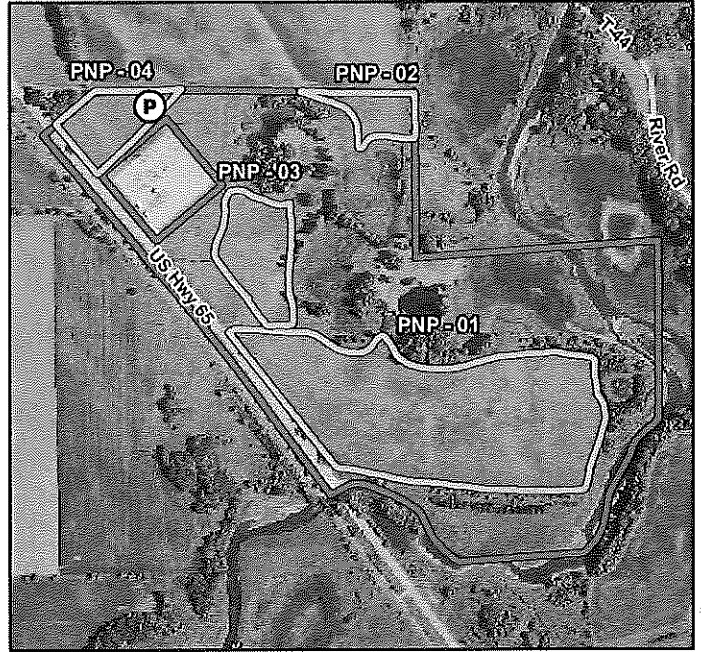
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Legend	
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 Project Area	



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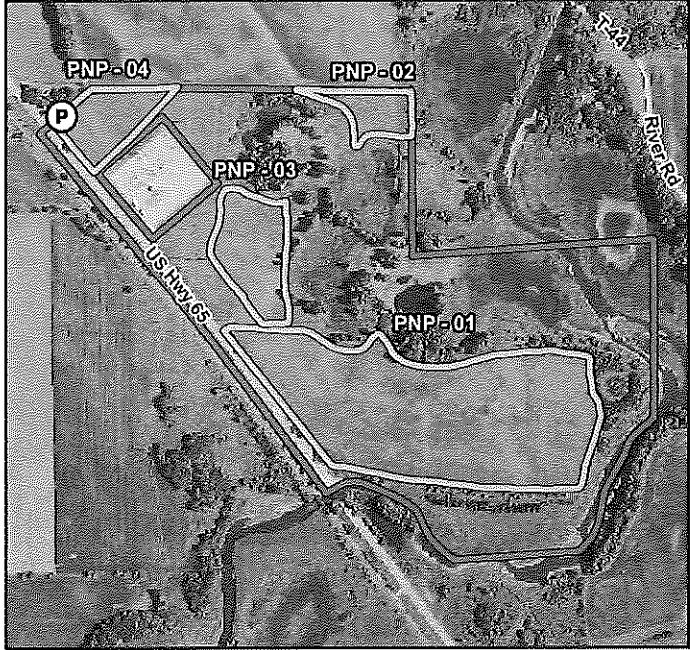
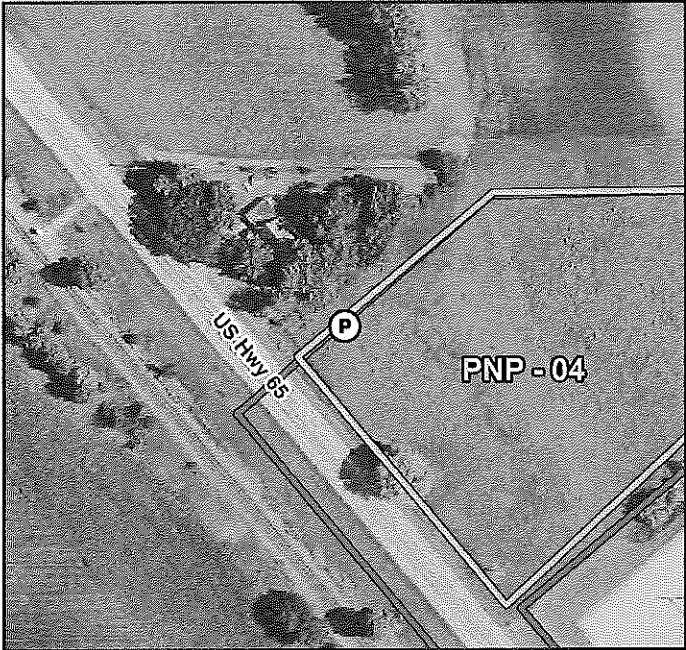
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Potential Native Prairie	PNP - 04

## Legend

- Photo Location
- Potential Native Prairie
- Project Area



# Midwater BESS Potential Native Prairie Assessment Photolog



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Potential Native Prairie	PNP - 04

**Legend**

P

Photo Location

Potential Native Prairie

Project Area