

**Supplemental Watershed Plan Supplement No. 5 and
Environmental Assessment for the Rehabilitation
of Floodwater Retarding Structure No. 21-A
Cottonwood Creek Watershed**

Saunders County, Nebraska

APPENDIX E

**Other Supporting Information
E-1: Geotechnical Investigation**

The Geotechnical Investigation documents were delivered in a format that could not be remediated to be compliant with Section 508 of the Rehabilitation Act of 1973 and is not included within Appendix E. Please contact Melissa Baier at melissa.baier@usda.gov for a copy of the Geotechnical Investigation documents.

**Supplemental Watershed Plan Supplement No. 5 and
Environmental Assessment for the Rehabilitation
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Cottonwood Creek Watershed**

Saunders County, Nebraska

APPENDIX E

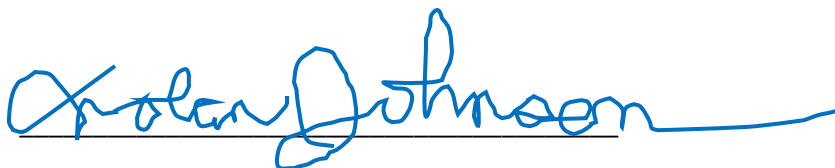
**Other Supporting Information
E-2: Cultural Resources Report**

Cultural Resources Report for the Development of the Supplemental Watershed Plan for the Cottonwood 21A Project; Saunders County, Nebraska

By Nolan Johnson

January 16, 2025

Principal Investigator Nolan Johnson, MA



A report prepared for HDR Inc.,
and the Lower Platte North Natural Resources District
By the State Archeology Office, Lincoln, Nebraska
A program of the Nebraska State Historical Society

Abstract

HDR, Inc., and the Lower Platte North Natural Resources District requested the State Archeology Office (SAO), a division of the Nebraska State Historical Society, conduct a Class III intensive cultural resources investigation, including pedestrian survey, subsurface testing if necessary, and archeological and architectural site documentation in advance of the Cottonwood 21A Rehabilitation Project in Saunders County, Nebraska. Project activities are centered on the rehab of the dam structure to ensure its continued effectiveness. The project is located in Sections 2 and 15, T15N R6E on the USGS 7.5' Malmo Quadrangle. The USDA Natural Resources Conservation Service (NRCS) is the lead federal agency for this project. The project was investigated in June and October of 2024 by staff from the SAO. No archeological properties were identified in the APE. Five ineligible architectural properties were identified in the indirect visual APE, but out of the direct APE.

No Historic Properties were identified within the proposed Cottonwood 21A Project APE. Should any evidence of buried cultural resources be encountered during project construction activities, such activities will be immediately halted and the SHPO or the SAO in Lincoln will be notified immediately to determine an appropriate course of action. The information included in this report is protected by Federal and state law (43CFR § 7.1(a), Nebraska Revised Statute 84-712.05[14] and [15]) and is not for public distribution.

Introduction

This report evaluates potential effects to cultural resources for the proposed improvements to the Cottonwood 21A structure. The structure is located in Saunders County on an ephemeral branch of Cottonwood Creek about ¾ of a mile north of the small village of Malmo, NE. The structure is a small dam that carries County Road P. This small earthen dam was constructed in 1983 and as such does not meet the 50-year threshold to be considered a historic property on the National Register of Historic Places (NRHP). The dam itself will receive no further consideration in this report. The Lower Platte North Natural Resources District (LPNNRD) has proposed to make improvements to the structure. The LPNNRD is receiving assistance for the project from the Natural Resources Conservation Service (NRCS) and this requires the project be reviewed under Section 106 of the National Historic Preservation Act. This report will address both architectural and archeological properties. The direct APE is roughly 196 acres of which 95.5 acres were intensively pedestrian surveyed. Another 40 acres of the APE are covered by the pond at the time of survey.

Background Research Results

There are no previously recorded archeological sites at the project location, nor are there any previous archeological surveys. There are also no previous sites or surveys in the watershed above the dam nor within a mile of the dam or the pond. This is not surprising as the location is fairly small, very rural, and at the top of the drainage on an ephemeral, unnamed tributary of Cottonwood Creek. A search was made of county and local history using the Nebraska State Historical Society (NSHS) reference library by Archeological Technician Makenzie Coufal. There is nothing to suggest the presence of historic resources tied to early American settlement of the in the Area of Potential Effects (APE) (Figure 1).

Former NSHS Preservation Associate Edward Harthorn preformed the background search for architectural properties. There is one previously surveyed property in the APE, SD00-095, the Bethesda Cemetery which will be discuss in a later section.

The General Land Office (GLO) survey map was produced for the APE in 1857 (Nebraska State Surveyor's Office 2016). No human settlement or activity was depicted in the APE. Most rural settlement took place in the late 1870s by emigrants from Sweden. Malmo and several early post offices were named after Swedish towns (Perky 2003:164-165). The railroad from Wahoo was extended into the area in 1887 and settlement expanded. The Malmo Post Office was opened in 1887 and the town was incorporated in 1893. Two County Atlases from 1907 and 1916 show numerous farmsteads within the general area as well as the town of Malmo. The farmsteads may or may not still be extant (see Brown-Scoville Publishing Co. 1907; Anderson Publishing Co. 1918).

Area of Potential Effects

The APE for architectural resources includes all areas in the archeological APE and extends 500 feet beyond that to take into consideration properties that are adjacent to the proposed construction activities (Figures 2 and 3). The APE for archeological resources was designed to encompass all areas where earth moving activities may take place, or within the maximum flood pool of the dam. Given the nature of the project, indirect effects to cultural resources are not anticipated and the indirect APE has been limited to the flood pool of the dam.

The archeological APE was also compared to the Nebraska Buried Sites GIS Layer. The State Archeology Office (SAO) and the University of Kansas (Kansas Geological Survey) collaborated on a GIS-based prediction tool to identify landforms in Nebraska stream valleys with a greater likelihood of containing deeply buried soils with archeological potential (Layzell and Mandel 2018; Layzell et al. 2018). The APE is characterized by upland drainageways and loess uplands. The predictive model found that there are no areas in the APE with moderate or high potential for buried soils and thus no deep testing is required.

Cultural Resource Investigations

The APE was surveyed by NSHS Highway Archeologist Nolan Johnson and Archeological Technicians Makenzie Coufal and Elsie McCabe on 13 June 2024 and 28 October 2024. Eight areas were subject to intensive pedestrian survey. Ground surface visibility was generally fair to good, and averaged 25% (Table 1). The survey area totaled 95.5 acres and took about 12 hours (Figures 4 and 5). Roughly 100 acres of the APE were not surveyed about 40 of these were the dam and pool. Most of the remaining unsurveyed areas in the APE were grass and treed areas in and near the drainageway or extant farmsteads. Twenty meter transects were employed. Most of the fields surrounding the dam have been altered with terrace and field tile systems. No archeological materials were found during the survey. All areas of the APE that offered visibility were surveyed. Farmyards, standing water, and grass and treed areas in the drainageway were not surveyed.

Four farmsteads and one cemetery in the APE were evaluated using the National Park Service “How to Apply the National Register Criteria for Evaluation Bulletin” (NPS 1995). This Bulletin outlines how to evaluate architectural properties for the NHRP and served as a reference during this project. A fifth farmstead is visible on Figure 6, but it is no longer extant. Based on the Saunders County Assessor’s records the farmstead was torn down sometime in 2023 and as such there was nothing to photograph at the time of survey. Figure 6 shows the properties discussed below and the architectural APE. These resources were evaluated in the field by N. Johnson with assistance from NSHS Preservation Associate Austin Magura during report write up (Figure 6). Magura graduated from Colorado State University in 2021 with a BA in History and Political Science. He later completed an MA in History from CSU in 2024. His work focused on cultural resource management, the built environment, and water history in the American West. Austin previously worked for the Public and Environmental History Center.

None of the farmsteads met the minimum survey requirements as outlined in the Nebraska State Historic Preservation Office (NeSHPO) Historic Resources Survey Manual criteria for survey (2010, pp 9-12). A brief description of each farmstead is included below. A viewshed analysis was completed by NSHS Geographic Information System (GIS) Specialist John Swigart (Figure 7). The APE could theoretically be seen from anywhere in yellow on the map. The model is based on elevation and does not account for trees, hazy air, and the built environment, meaning the APE would be visible from a smaller area. While there are other structures in the viewshed, they are all far enough away from the APE that any potential visual impacts could not cause an effect.

Farmstead #1 (1873 COUNTY ROAD 22 MALMO, NE 68040) is an active residence with a 1.5 story farm house built in 1900. The house has an asphalt roof, vinyl siding, modern gutters, and replacement windows (Figure 8). The other buildings are a collection of wood frame sheds, metal pole sheds, and metal grain bins built post 1945. The farmstead is not recommended NRHP eligible under

criteria A, B, or C, because it lacks architectural significance and has diminished integrity regarding design and materials.

Farmstead #2 (2263 COUNTY ROAD P) has a 1.5 story farm house built in 1900 with a one-story addition (Figure 9). The house has an asphalt roof and wood siding. The other buildings are two metal sheds and a grain bin. The house is abandoned and it appears only the modern metal grain bin is in use. The farmstead is not recommended NRHP eligible under criteria A, B, or C, because it lacks architectural significance and has diminished integrity regarding design and materials.

Farmstead #3 (2274 COUNTY ROAD P MALMO, NE 68040) is an active residence with a 1 story brick ranch house built in 1962 (Figure 10). The house has an asphalt roof. The other buildings are two small sheds built in 1920 and 1956, and a large metal Quonset building built in 1960. The farmstead is not recommended NRHP eligible under criteria A, B, or C, because it lacks architectural significance and has diminished integrity regarding design and materials.

Farmstead #4 (1974 COUNTY ROAD 23 MALMO, NE 68040) is an active residence with a 1.5 story farm house built in 1878 with multiple one-story additions (Figure 11). The house has an asphalt roof. The other buildings include a roofless concrete silo, several metal grain bins, a corn crib, a gambrel roof barn with metal roofing, and several small wooden outbuildings. The farmstead is not recommended NRHP eligible under criteria A, B, or C, because it lacks architectural significance and has diminished integrity regarding design and materials.

The Bethesda Cemetery is in the APE, but it will not be affected directly by construction. The oldest internment dates to 1869, predating the town of Malmo by over 20 years. The cemetery continues to be used to this day. It has an iron fence with a decorative gate on most of the west boundary (Figure 12). The rest of the cemetery has chain link fencing. There is a line of young coniferous trees on the north side and a few older trees in the cemetery. There is also a small grain bin just outside the south fence. A gravel drive serves as access through the cemetery. It does not meet any of the Criteria Considerations for cemeteries outlined in the National Park Service National Register Bulletin 41 (NPS 1992) and therefore is recommended ineligible for the NRHP.

Even though it is not eligible for the NRHP any unmarked graves are protected by the “Unmarked Human Burial Sites and Skeletal Remains Protection Act (Nebraska State Statutes 12-1201 through 12-1212) [1989]”. There are marked graves near the fence in the northeast corner of the cemetery. The author was provided construction plans dated 12-30-24 for the entire Cottonwood 21-A project including work adjacent to the cemetery. Additional information was provided via email from project designers. No earth moving will take place within the boundary of the cemetery. The chain-link fence on the northeast and east side may need to be removed and replaced to allow the adjacent work to be done. Work adjacent to the cemetery includes filling in the current Unnamed Tributary to Cottonwood Creek and building a berm just outside the current fence. This will be limited to placing fill dirt to fill in the Unnamed Tributary to Cottonwood Creek and create the berm. In addition, the Unnamed Tributary to Cottonwood Creek will be shifted via excavation farther to the northeast from the cemetery fence (Figures 13 and 14).

The cemetery is built on a small terrace above the Unnamed Tributary to Cottonwood Creek and the channel is just outside the diagonal northeast fence. There is no potential for unmarked graves in those areas where the earthmoving is planned. There may be equipment driven in or near the northeast

boundary of the cemetery, but that is not a concern as long as no excavations occurs inside the existing boundary.

Additionally, project designers have indicated that the final construction documents will have instructions or restrictions to protect the cemetery. Based on all the information above the author believes there is very little to no risk to any marked or unmarked burials in the Bethesda Cemetery.

Project Recommendations

The cultural resources investigation did not discover any historic properties in the APE. There are no archeological properties of any type in the APE, and none of the standing structure properties are recommended eligible to the NRHP. It is recommended that this project will have *No Effect* to historic properties.

It is further recommended that should any evidence of buried cultural resources be encountered during project construction activities, such activities should be immediately halted and the SAO in Lincoln be notified immediately in order to determine an appropriate course of action. If evidence of unmarked human burials is encountered, construction activities must immediately halt and both local law enforcement and the SAO shall be contacted for identification and recovery, per Nebraska Revised Statutes § 12-1205(1). As a reminder, the information included in this letter is protected by state law (Nebraska Revised Statutes § 84-712.05[14] and [15]) and is not for public distribution

References

Anderson, G.W.

1918 Atlas of Saunders County, Nebraska. Anderson Publishing Company. Mason City, Iowa.

Booth, R.C.

1907 Plat Book of Saunders County, Nebraska. The Brown-Scoville Publishing Co., Des Moines, Iowa.

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2018 Nebraska Department of Transportation Project SRP-P1(16) M048
“Systematic Approach to Identifying Deeply Buried Archeological Deposits” Final
Report. On file, Nebraska State Archeology Office, History Nebraska. Lincoln.

National Park Service

1992 Guidelines for Evaluating and Registering Cemeteries and Burial Places [National Register Bulletin 41](#)

1995 How to Apply the National Register Criteria for Evaluation [How to Apply the National Register Criteria for Evaluation](#)

Nebraska State Historical Society

2010 Nebraska Historic Resources Survey & Inventory Manual 2010 Edition. Nebraska State Historical Society. Lincoln

Nebraska State Surveyor's Office

2016 GLO Original and Resurvey Plat Search. Accessed February 9-12-23.

Perky, Elton A.

2003 Perkey's Nebraska Place Names (Revised Edition). Nebraska State Historical Society. Lincoln

Table 1: Survey Area Details

Survey Area	Location	Nearest Water	Legal Description	Ground Cover/ Visibility
1	See attached maps	Tributary of Cottonwood Creek	N ½ N ½ NE ¼ of Sec. 14 T15N R6E	Corn 50%
2	See attached maps	Tributary of Cottonwood Creek	SE ¼ SW ¼ of Sec. 10 T15N R6E	Bean stubble 25-50%
3	See attached maps	Tributary of Cottonwood Creek	NW ¼ SW ¼ of Sec. 10 T15N R6E	Corn 25-50%
4	See attached maps	Tributary of Cottonwood Creek	SE 14/ NE ¼ of Sec. 9 T15N R6E	Beans 25-35%
5	See attached maps	Tributary of Cottonwood Creek	W ½ NE ¼ NE ¼ of Sec. 9 T15N R6E	Beans 25-35%
6	See attached maps	Tributary of Cottonwood Creek	W ½ NE ¼ of Sec. 9 T15N R6E	Beans 25-35%
7	See attached maps	Tributary of Cottonwood Creek	N ½ N ½ NW ¼ SW ¼ & S ½ SW ¼ NW ¼ of Sec. 14 T15N 6E	Corn 25%, Beans 25%
8	See attached maps	Tributary of Cottonwood Creek	SE 1/4 & NE ¼ SW ¼ & SW ¼ SE ¼ NW ¼ of Sec. 10 T15N R6E	Bean stubble 10-25%

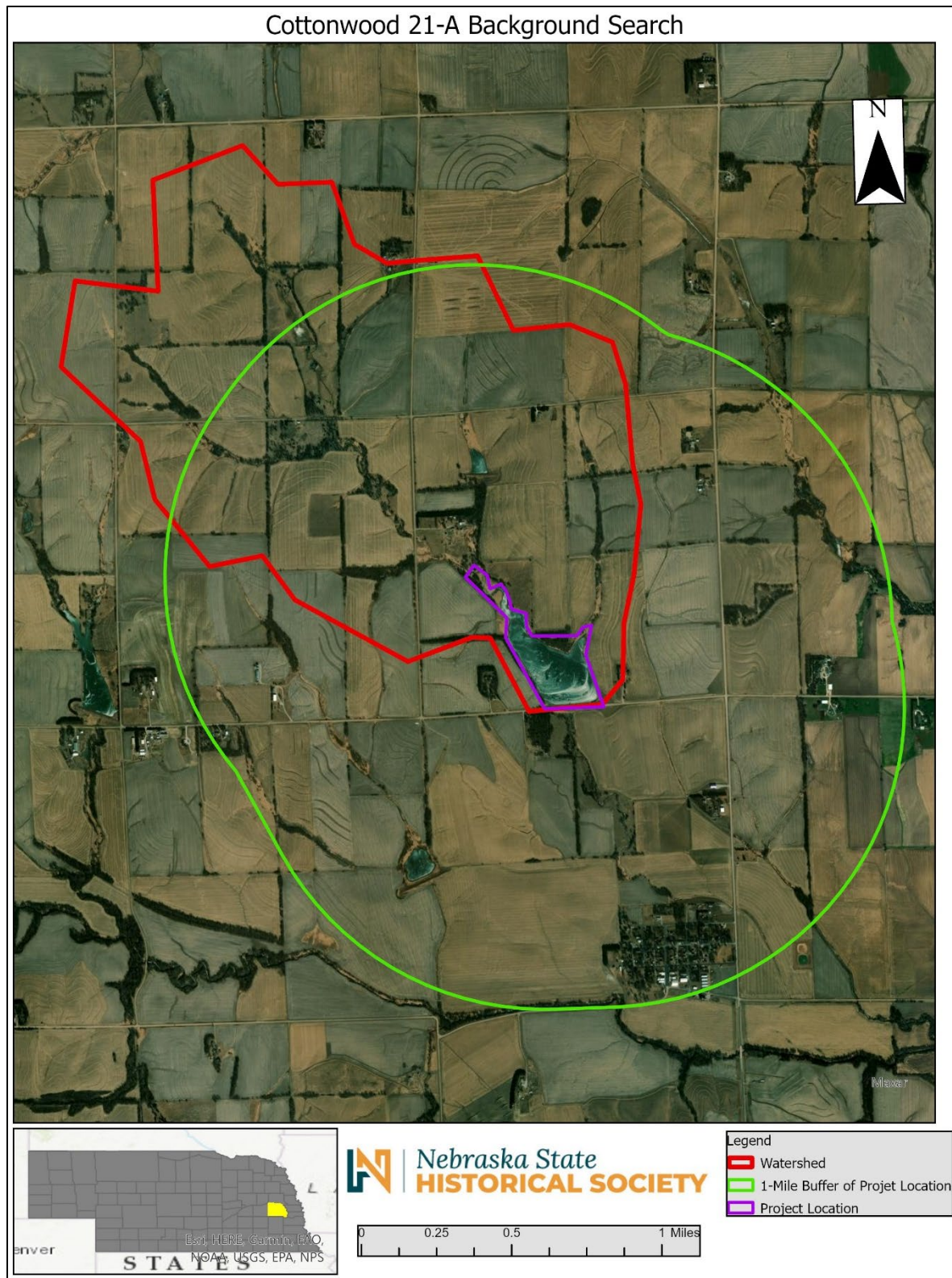


Figure 1: Archeological File Search

Cottonwood 21-A Area of Potential Effects

St. John's Cem.

School No 75

SPILLWAY

1351, 1381, 1385, 1369, 1340, 1329, 1350, 1366, 1372, 1320, 1354, 1310, 1348, 1330, 1367, 1363, 1376, 1300, 1272, 1259, 1260, 1248, 1241, 1330, 1350, 1360, 1400, 1413, 1415, 1430, 1400, 1350, 1360, 1370, 1380, 1390, 1400, 1410, 1420, 1430, 1440, 1450, 1460, 1470, 1480, 1490, 1500, 1510, 1520, 1530, 1540, 1550, 1560, 1570, 1580, 1590, 1600, 1610, 1620, 1630, 1640, 1650, 1660, 1670, 1680, 1690, 1700, 1710, 1720, 1730, 1740, 1750, 1760, 1770, 1780, 1790, 1800, 1810, 1820, 1830, 1840, 1850, 1860, 1870, 1880, 1890, 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970, 1980, 1990, 2000

M A R I P O S A

Malmö

BURLINGTON

Cottonwood

NORTHERN Cree

Sewage Disposal Ponds

Bethesda Cem.

Copyright: © 2011 National Geographic Society, i-cubed

Legend

- Archeological APE
- Architectural APE

0 0.25 0.5 1 Miles

Nebraska State HISTORICAL SOCIETY

Est. HERE, Gumbo, PAO, NOAA, USGS, EPA, NPS

10

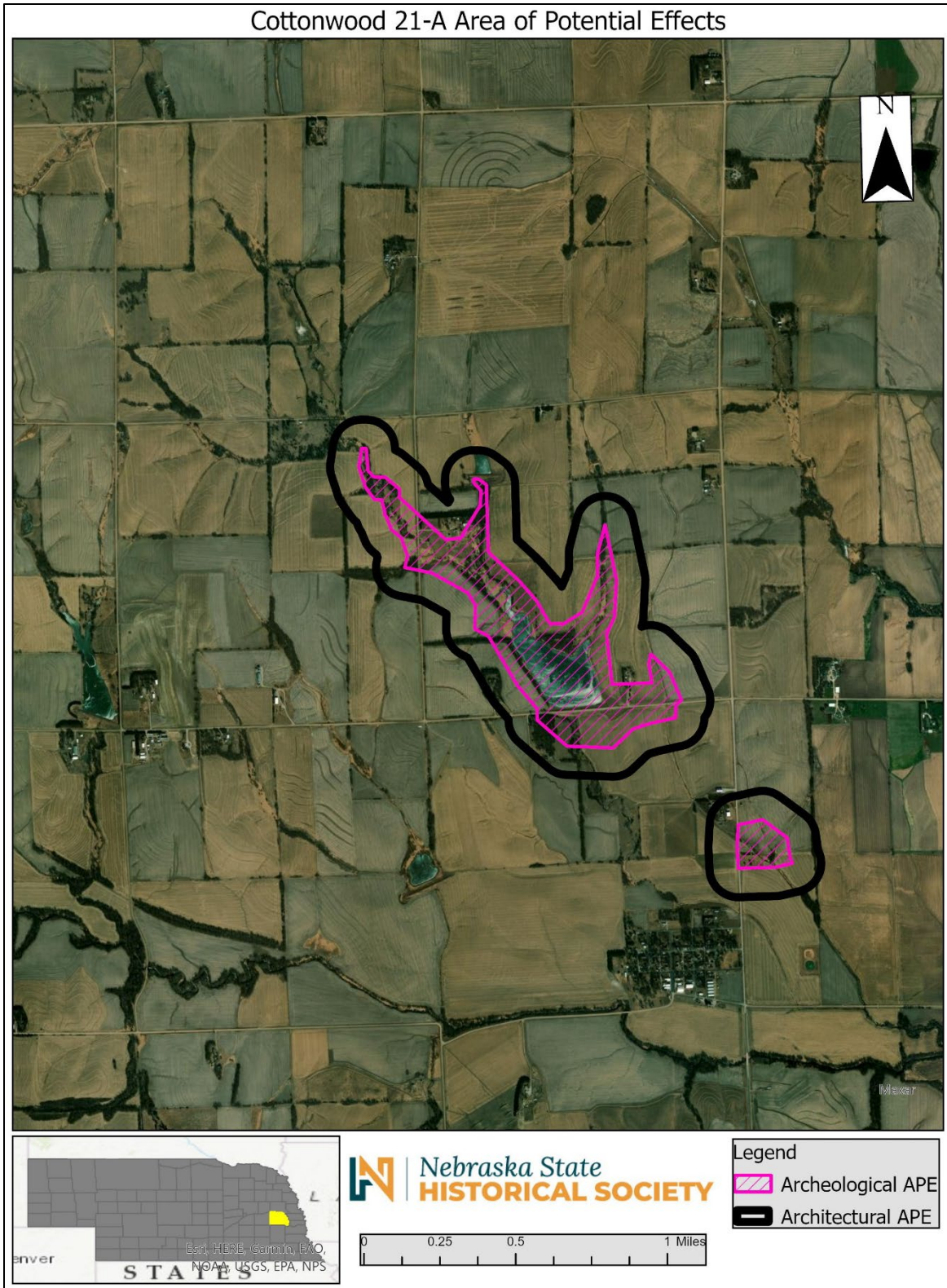


Figure 3: Area of Potential Effects (Aerial Photo)

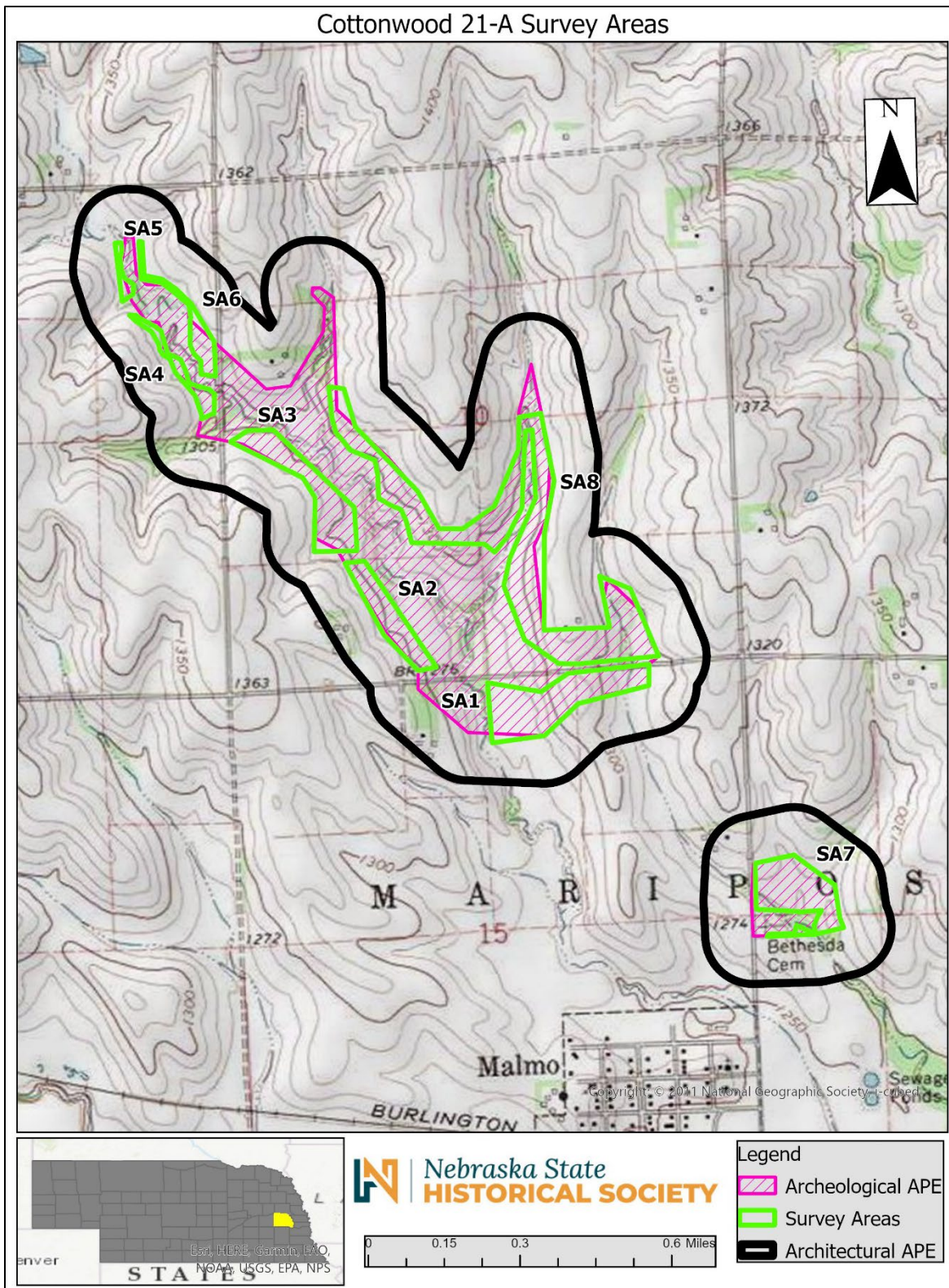


Figure 4: Survey Areas (Topo Map)

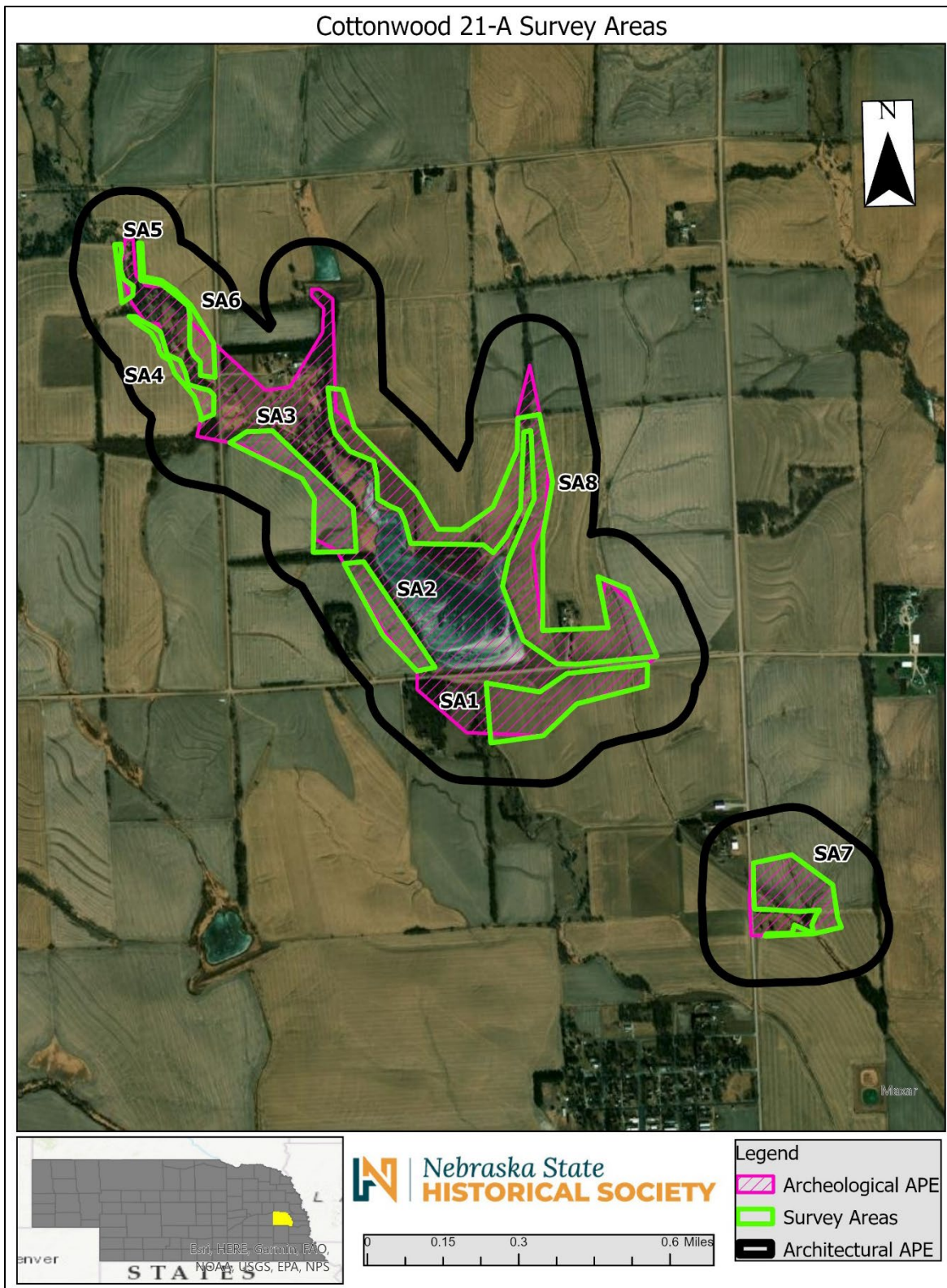


Figure 5: Survey Areas (Aerial Photo)

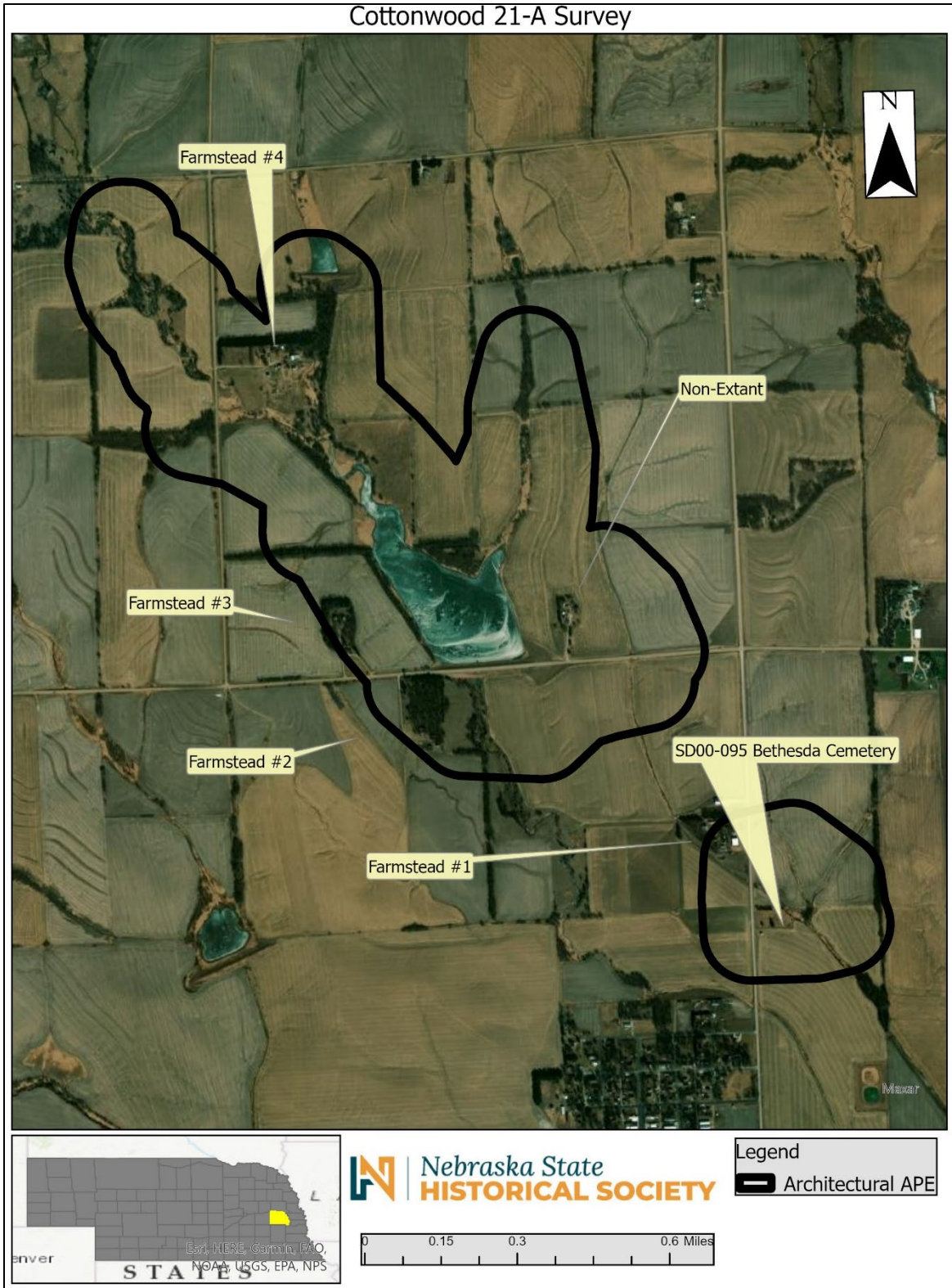


Figure 6: Architectural Properties

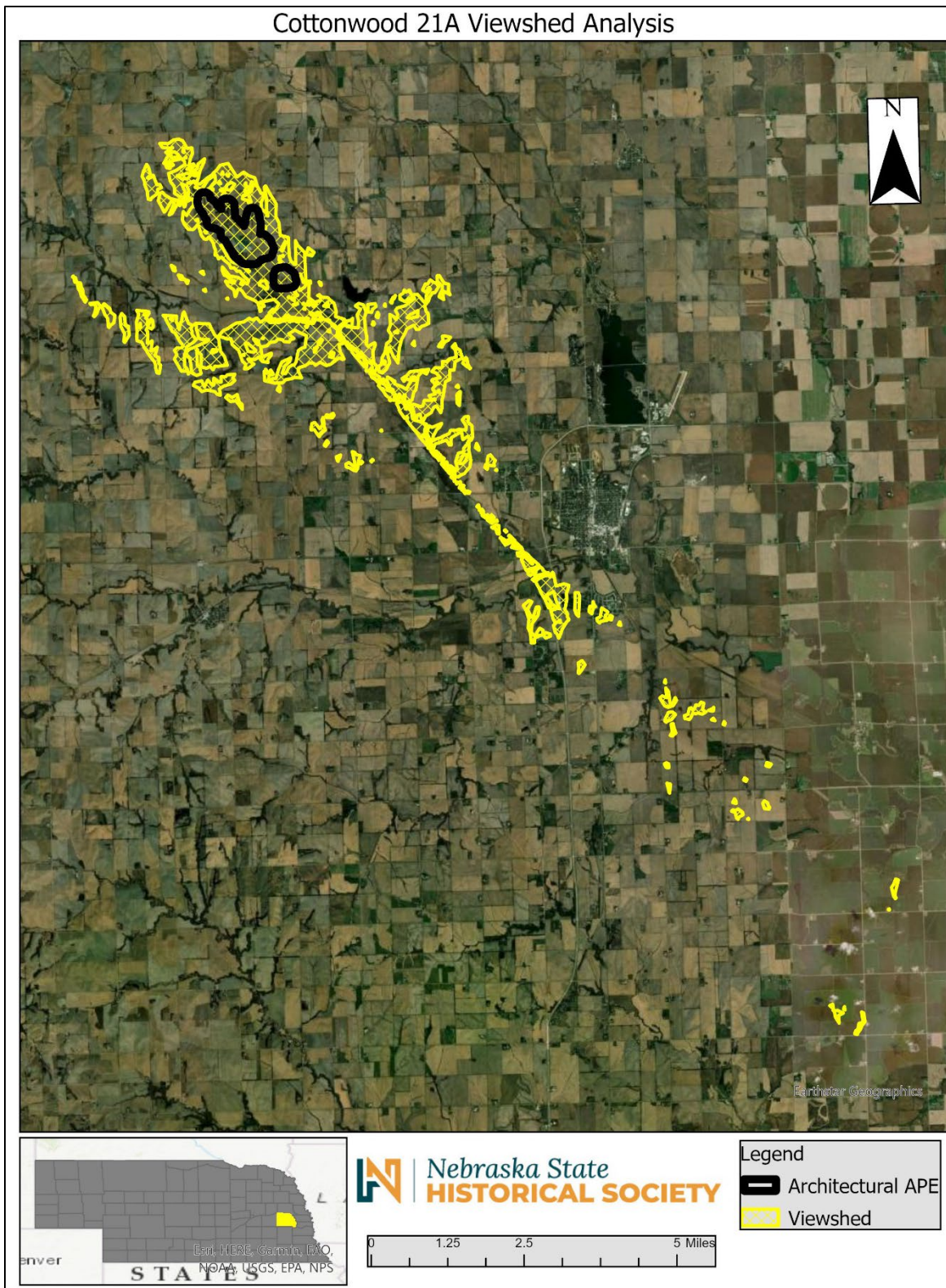


Figure 7 : Viewshed Analysis



Figure 8: Farmstead 1 (Google Maps)



Figure 9: Farmstead 2 (Saunders County Assessor)



Figure 10: Farmstead 3 (Saunders County Assessor)



Figure 11: Farmstead 4 (Google Maps)



Figure 12: Bethesda Cemetery (Google Maps)

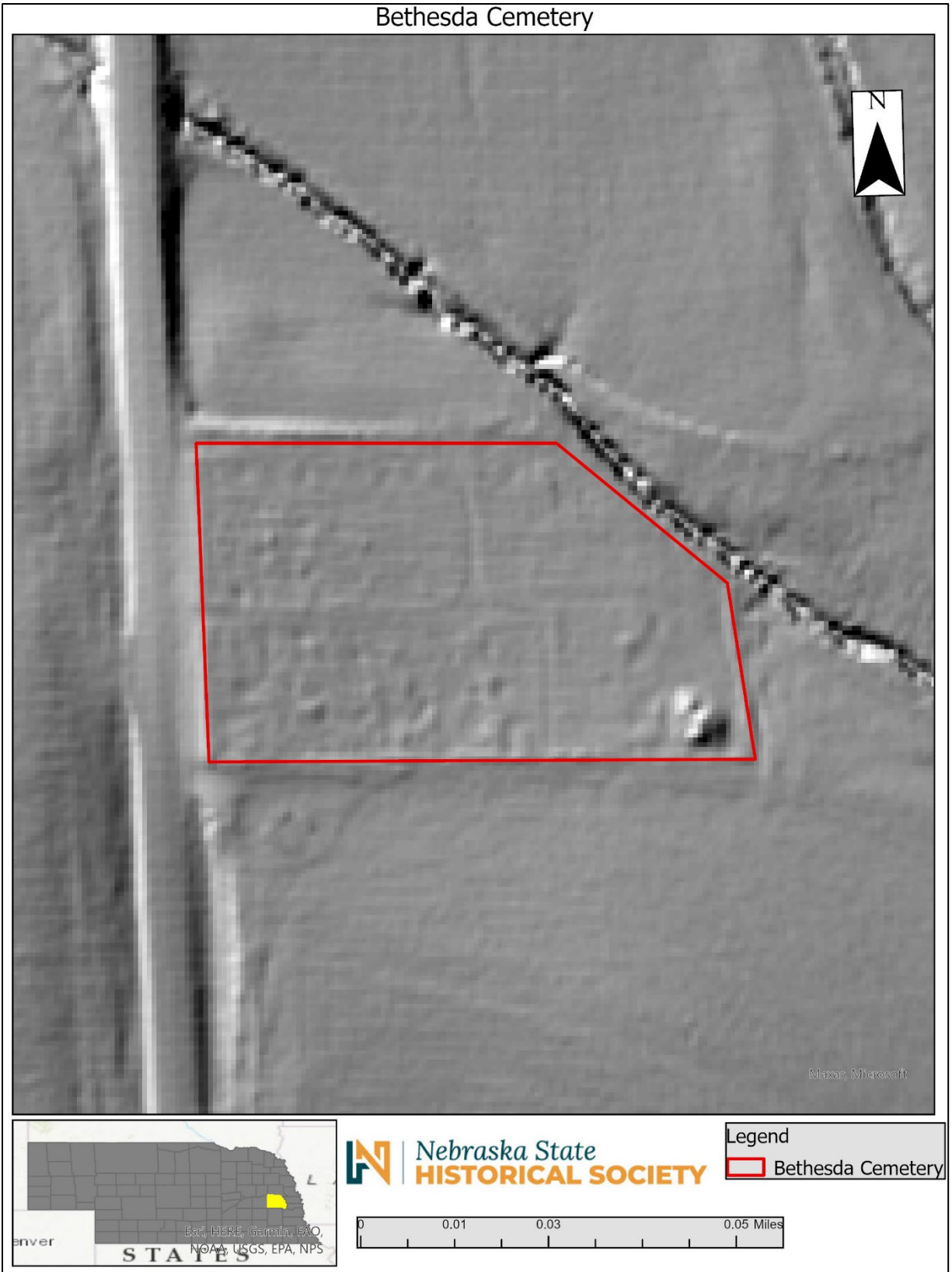


Figure 13: Bethesda Cemetery on LiDAR (Fence Line in Red)



Figure 14: Construction Areas Relative to the Cemetery Fence Line

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Cottonwood Creek Watershed**

Saunders County, Nebraska

APPENDIX E

Other Supporting Information

E-3: Aquatic Resources Memorandum

The Wetland Delineation Forms that supplement the Aquatic Resources Memorandum were delivered in a format that could not be remediated to be compliant with Section 508 of the Rehabilitation Act of 1973 and are not included within Appendix E. Please contact Melissa Baier at melissa.baier@usda.gov for a copy of the Wetland Delineation Forms.

Supplemental Watershed Plan and Environmental Assessment for Rehabilitation of Dam Cottonwood 21-A

Saunders County, Nebraska

APPENDIX E-3: OTHER SUPPORTING DOCUMENTS



APPENDIX E: OTHER SUPPORTING DOCUMENTS

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SECTION E-3-1: SUMMARY TABLE OF ENVIRONMENTAL IMPACTS

Table E3-1			
Alternative	Prime Farmland	Wetlands / WOTUS	Notes
1 – No Action/FWOFI	0	Loss of 20.9 acres open water, 7.3 acres fringe wetland, add 2,000 LF stream	New stream channel in footprint of old pond if dam breached
4 – Rehab – New Aux Spillway	3.6 acres	0.32 acre fringe wetland fill for riprap	New aux spillway, raise road, and spoil
5 – Rehab – Widen Existing Spillway	2.3 acres	0.32 acre fringe wetland fill for riprap	Widened aux spillway, raise road and spoil
6 – Non-Structural Rehab to Sig Hazard Class (Buyout)	0.7 acre	0.32 acre fringe wetland fill for riprap	Buyout 3 homes downstream in breach zone

SECTION E-3-2: WETLAND DELINEATION REPORT

Location

The project study area is located about 1 mile north of Malmo, Nebraska, in Saunders County. The site is located in Section 10, Township 15N and Range 6E and at the approximate GPS coordinates of 41.279042° North latitude and -96.727754° W longitude. Figure 1 shows the Cottonwood 21-A dam location and proximity to the cities of Malmo and Wahoo, Nebraska.

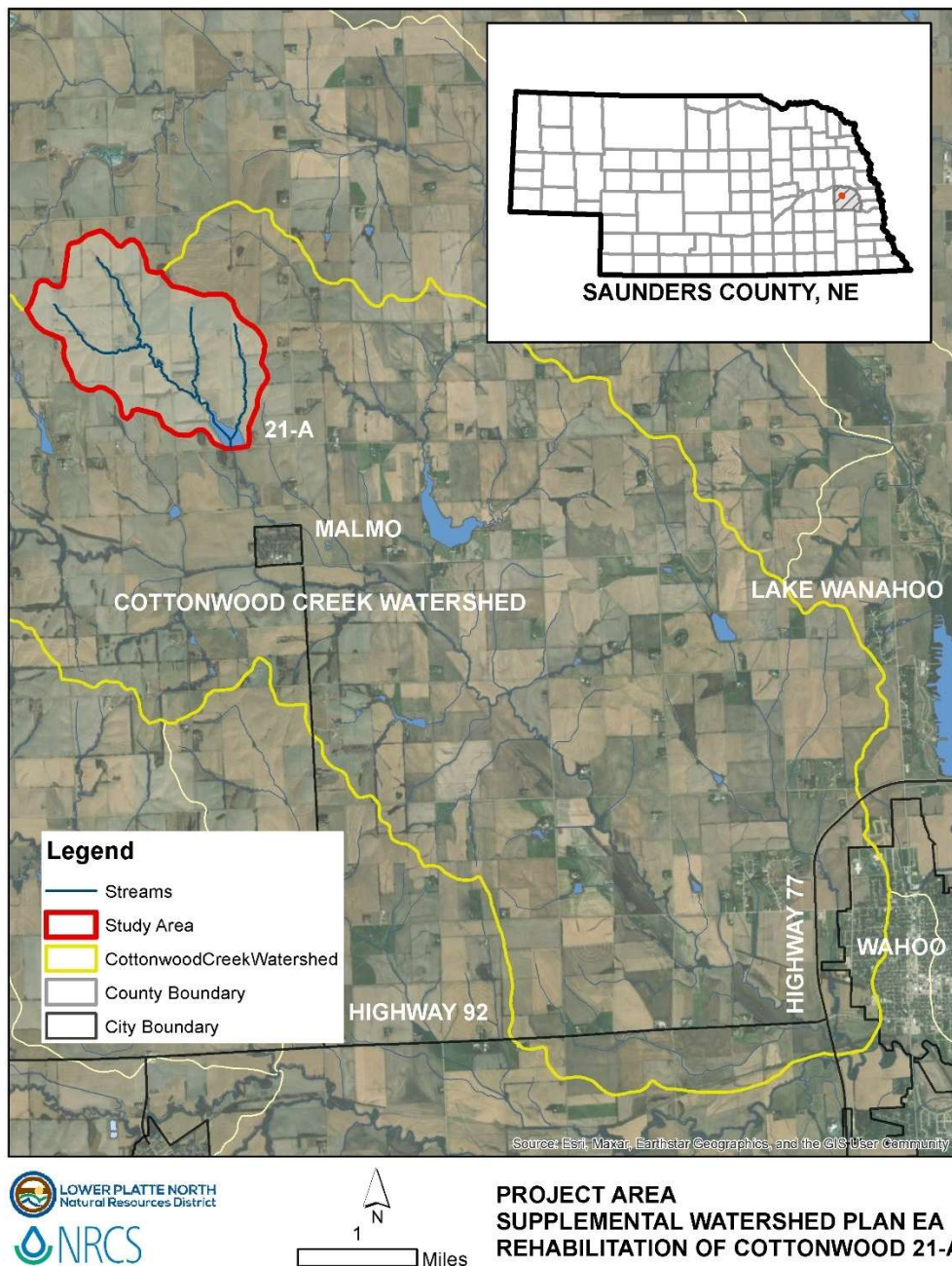


FIGURE E3-1

Background

The Flatwater Group, Inc. (TFG), a subcontractor to HDR, Inc. (HDR) was contracted by the Lower Platte North Natural Resources District (LPNNRD) to perform a wetland delineation for Cottonwood 21-A dam structure as part of the Supplemental Watershed Plan and Environmental Assessment for Rehabilitation of Dam Cottonwood 21-A. Wetland delineation field work was completed on September 6, 2023, in accordance with the 1987 U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (1987 Manual) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region.

Desktop Data Review

TFG staff reviewed existing data in the office prior to field work. TFG reviewed the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI), NRCS Web Soil Survey, Federal Emergency Management Agency (FEMA) Digital Flood Insurance Rate Maps (DFIRM), and historical aerial imagery files for the project site provided by Google Earth. These resources were reviewed to develop understanding of potential Waters of the U.S. (WOTUS) for the project site.

USFWS NWI Map

The NWI data shows two unnamed tributaries merging at Cottonwood 21-A. The northwest tributary is depicted as a PFOA (Freshwater Forested/Shrub Wetland) and the northeast tributary is depicted as R5UBH (Riverine-Unknown Perennial-Unconsolidated Bottom-Permanently Flooded)

The NWI database does not show an open water lacustrine system for Cottonwood 21-A. The likely NWI classification for Cottonwood 21-A would be L1UBHh (Lacustrine-Limnetic-Unconsolidated Bottom-Permanently Flooded-Diked/Impounded). The Cottonwood 21-A dam was constructed in 1983 and likely occurred after the most recent NWI database updates.

NRCS Web Soil Survey

The Cottonwood 21-A subwatershed boundary was used to create an Area of Interest (AOI) through the USDA-NRCS Web Soil Survey soil mapping platform. Table E-2 below lists the soil units and area and Figure E-1 shows the subwatershed and soil survey boundaries.

Table E3-2 – Web Soil Survey Data for Cottonwood 21-A

USDA-NRCS Map Unit	Map Unit Name	Acres in AOI	AOI Percent
7049	Kenridge silty clay loam, occasionally flooded	138.2	5.5
7061	Muscotah silty clay loam, occasionally flooded	7.2	0.3
7205	Aksarben silty clay loam, 0-2% slopes	37.6	1.5
7231	Judson silt loam, 2-6% slopes	138.8	5.5
7645	Yutan silty clay loam, 11-17% slopes, eroded	24.0	1.0
7646	Yutan, eroded-Judson complex, 6-11% slopes	1,243.7	49.7
7647	Yutan eroded-Aksarben silty clay loams, 2-6% slopes	633.4	25.3
7750	Nodaway silt loam, occasionally flooded	167.7	6.7
7868	Nodaway silt loam, channeled, occasionally flooded	77.6	3.1
9971	Arents, earthen dam	5.9	0.2
9999	Water	28.5	1.1
TOTALS		2,502.6	100

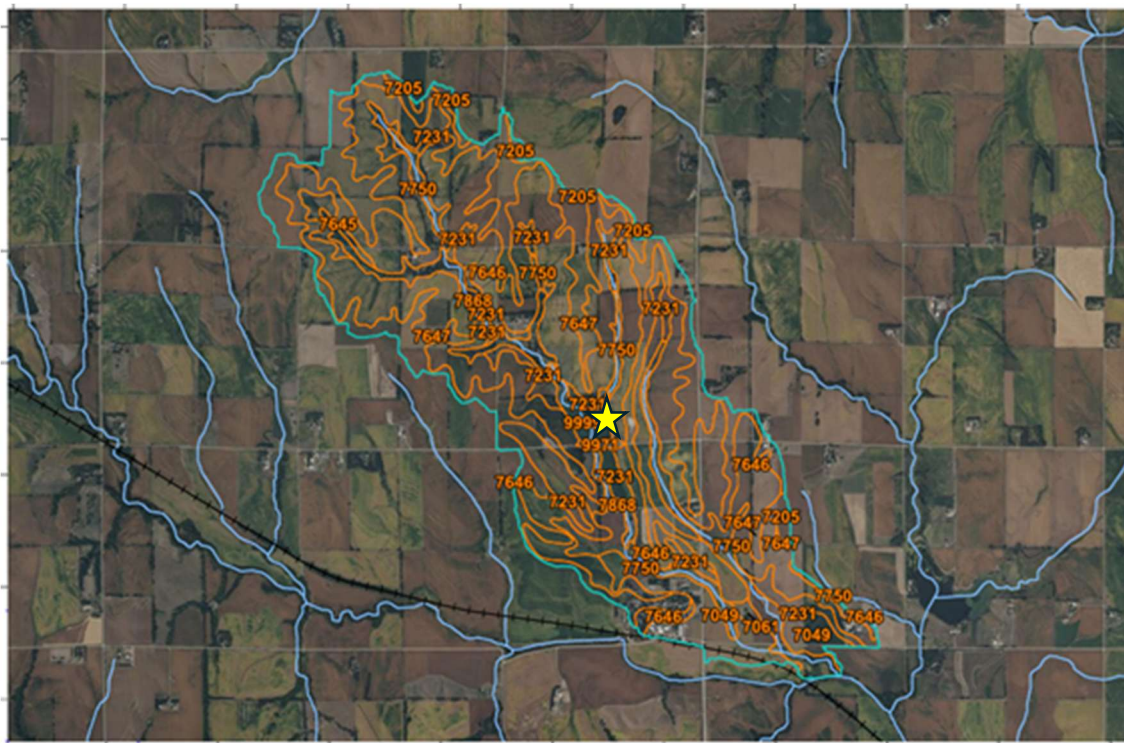


Figure E-2 – Web Soil Survey Map for Planning Area (Source: NRCS Web Soil Survey)
(Yellow star marks Cottonwood 21-A)

FEMA DFIRM

There is no FEMA DFIRM for the Cottonwood 21-A impoundment and upstream but there is a FIRM for the area immediately downstream of Cottonwood 21-A. The study area immediately downstream is effective as of 4/5/2010 and listed as Section 15-15-06E.

Aerial Imagery

A review of historic and recent aerial imagery was performed. Google Earth aerials date back to 1985 which is two years after dam construction. The aerial photo review determined that no major changes to land use has occurred since construction. Drone photos were also collected during the field investigation.

Wetland Delineation Methods

TFG scientists conducted a wetland delineation on September 6, 2023, in accordance with the USACE 1987 Delineation Manual and the Midwest Regional Supplement. TFG staff employed routine wetland delineation methods to record vegetation, soils, and hydrology parameters at plot locations. Plot locations were paired to determine the boundary line between wetland and upland along the shoreline of Cottonwood 21-A.

Field-delineated wetland boundaries were determined utilizing the wetland delineation paired plot data locations as well as topographical survey information in conjunction with critical elevations on the dam riser outlet structure. LEICA GPS survey equipment with sub-centimeter accuracy was used to survey the wetland delineation plot locations as well as the outlet structure elevations. A wetland delineation map and site photographs (ground level and drone images) are included below.

Wetland Delineation Results

Wetland delineation data were collected at 5 locations around the perimeter of the Cottonwood 21-A waterbody. Figure E-3 shows the wetland delineation sample locations and boundary information.

Table E3-3: Wetland Delineation Data

Sample ID	Wetland Group	Wetland Classification	Area
Plots 1A, 2A,3A,4A	Pond Fringe	PEMC	7.3 acres
Pond	Open Water	L1HBHh	20.9 acres
Plot 6A	Pond Fringe	PEMC	0.07 acres
Plot 6B	Plunge Pool	PEMC	0.12 acres
Plots 1B,4B	Upland	N/A	N/A

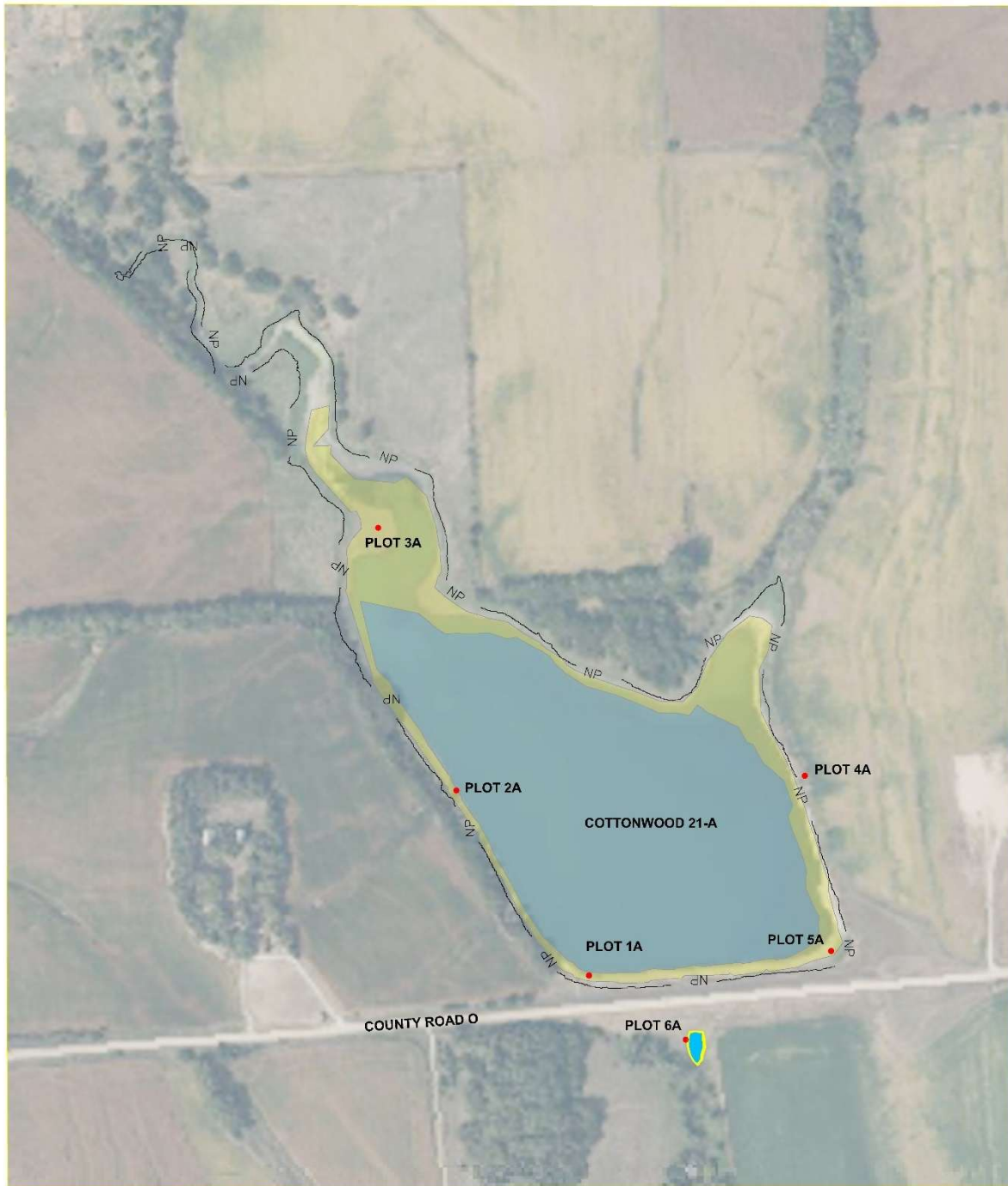
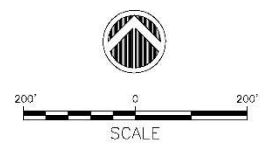


FIGURE E-3: WETLAND DELINEATION MAP

- **SAMPLE PLOT**
 - OPEN WATER (L1UBHh)**
 - WETLAND FRINGE (PEMC)**
- NP
dN **NORMAL POOL BOUNDARY**





Plot 1A – Looking east from southwest corner of pond. Primary vegetation is smartweed.



Plot 1B – Looking west toward southwest corner of pond. Primary vegetation is brome grass and smartweed.



Plot 2A – Looking southeast from west pond shoreline. Primary vegetation is smartweed.



Plot 3A – Looking northwest from north end of pond. Primary vegetation is reed canary grass.



Plot 4B – Looking southeast along east side of dam at boundary between corn field and upland brome grass.



Plot 5A – Looking west from southeast corner of pond. Primary vegetation is reed canary grass and smartweed.



Plot 6a – Looking southeast at plunge pool downstream of outlet structure. Primary vegetation is reed canary grass and cattails along open water fringe.



Plot 6b – Looking north from south side of dam on west side of outlet channel toward outlet structure pipe.

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Cottonwood Creek Watershed**

Saunders County, Nebraska

APPENDIX E

Other Supporting Information

E-4: Farmland Protection Policy Act



Natural Resources Conservation Service

U.S. DEPARTMENT OF AGRICULTURE

Nebraska State Office

NRCS State Office, Room 360

1121 Lincoln Mall

Lincoln, NE 68508

Subject: LNU-Farmland Protection
Cottonwood 21-A Watershed Plan
NEPA/FPPA Evaluation
Saunders County, Nebraska

Date: January 22, 2025

To: The Flatwater Group

Attn: Gordon Coke (gcoke@flatwatergroup.com)

We have reviewed the information provided in your correspondence dated December 3, 2024, concerning the watershed project located in Saunders County, Nebraska. This review is part of the National Environmental Policy Act (NEPA) evaluation for the U.S. Department of Agriculture Natural Resources Conservation Service (USDA-NRCS). We have evaluated the proposed site as required by the Farmland Protection Policy Act (FPPA).

The proposed site of new conversion contains areas of Prime Farmland and Statewide Important Farmland and we have completed the Farmland Conversion Impact Rating form (AD-1006) for the proposed site. The combined rating of the site is 135. The FPPA law states that sites with a rating less than 160 will need no further consideration for protection and no additional evaluation is necessary. We encourage the use of accepted erosion control methods during the construction of this project.

As for the work being done on the existing dam, the restoration, maintenance, renovation, or replacement of existing structures prior to the time of Federal assistance are not subject to FPPA (523.11 C. Activities Not Subject to Provisions of FPPA).

If you have further questions, please contact Elizabeth Gray at 402-437-4068 or by email at Elizabeth.gray@usda.gov (preferred).

Sincerely,

ELIZABETH GRAY

Digitally signed by ELIZABETH

GRAY

Date: 2025.01.22 08:17:40 -06'00'

Elizabeth Gray

USDA-NRCS Nebraska Assistant State Soil Scientist

Attachment: Cottonwood 21-A Watershed Plam_NE155

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request 12/3/24				
Name of Project Cottonwood 21-A Watershed Plan		Federal Agency Involved NRCS				
Proposed Land Use watershed project		County and State Saunders County, Nebraska				
PART II (To be completed by NRCS)		Date Request Received By NRCS 12/3/2024		Person Completing Form: Elizabeth Gray		
Does the site contain Prime, Unique, Statewide or Local Important Farmland? (If no, the FPPA does not apply - do not complete additional parts of this form)		YES ☒	NO ☐	Acres Irrigated 120,313	Average Farm Size 416.0	
Major Crop(s) Corn, Soybeans, Small Grains	Farmable Land In Govt. Jurisdiction Acres: 471,080 % 96.9783540821328		Amount of Farmland As Defined in FPPA Acres: 382251.43062713277 % 78.6064724396095			
Name of Land Evaluation System Used NCCPI	Name of State or Local Site Assessment System NONE		Date Land Evaluation Returned by NRCS 1/22/25			
PART III (To be completed by Federal Agency)		Alternative Site Rating				
		Site A	Site B	Site C	Site D	
A. Total Acres To Be Converted Directly		14				
B. Total Acres To Be Converted Indirectly		0				
C. Total Acres In Site		14				
PART IV (To be completed by NRCS) Land Evaluation Information						
A. Total Acres Prime And Unique Farmland		5				
B. Total Acres Statewide Important or Local Important Farmland		7				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted		0.0032				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value		62				
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)		59				
PART VI (To be completed by Federal Agency) Site Assessment Criteria (Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)		Maximum Points	Site A	Site B	Site C	Site D
1. Area In Non-urban Use	(15)	15				
2. Perimeter In Non-urban Use	(10)	10				
3. Percent Of Site Being Farmed	(20)	11				
4. Protection Provided By State and Local Government	(20)	20				
5. Distance From Urban Built-up Area	(15)	5				
6. Distance To Urban Support Services	(15)	10				
7. Size Of Present Farm Unit Compared To Average	(10)	0				
8. Creation Of Non-farmable Farmland	(10)	0				
9. Availability Of Farm Support Services	(5)	5				
10. On-Farm Investments	(20)	0				
11. Effects Of Conversion On Farm Support Services	(10)	0				
12. Compatibility With Existing Agricultural Use	(10)	0				
TOTAL SITE ASSESSMENT POINTS		160	76	0	0	0
PART VII (To be completed by Federal Agency)						
Relative Value Of Farmland (From Part V)		100	59	0	0	0
Total Site Assessment (From Part VI above or local site assessment)		160	76	0	0	0
TOTAL POINTS (Total of above 2 lines)		260	135	0	0	0
Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES ☐ NO ☒				
Reason For Selection:						
Name of Federal agency representative completing this form:						
Date:						

(See Instructions on reverse side)

Form AD-1006 (03-02)

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

- Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, <http://fppa.nrcs.usda.gov/lesa/>.
- Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s) of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map, or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)
- Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.
- Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.
- Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.
- Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.
- Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.
2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.

Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site A}$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.

**Supplemental Watershed Plan Supplement No. 5 and
Environmental Assessment for the Rehabilitation
of Floodwater Retarding Structure No. 21-A
Cottonwood Creek Watershed**

Saunders County, Nebraska

APPENDIX E

Other Supporting Information

E-5: Dam Assessment Report

The Geotechnical Investigation documents were delivered in a format that could not be remediated to be compliant with Section 508 of the Rehabilitation Act of 1973 and is not included within Appendix E. Please contact Melissa Baier at melissa.baier@usda.gov for a copy of the Geotechnical Investigation documents.

**Supplemental Watershed Plan Supplement No. 5 and
Environmental Assessment for the Rehabilitation
of Floodwater Retarding Structure No. 21-A
Cottonwood Creek Watershed**

Saunders County, Nebraska

APPENDIX E

Other Supporting Information

**E-6: Conservation and Environmental Review
Tool (CERT) Report**



Environmental Review Report

Project Information

Report Generation Date:	9/23/2025 12:45:23 PM
Project Title:	CERT Report - Cottonwood 21-A Chapter 3 Analysis
User Project Number(s):	n/a
System Project ID:	NE-CERT-012760
Project Type:	Other (Only select if the above project types do not apply - ADDITIONAL COORDINATION WILL BE REQUIRED)
Project Activities:	None Selected
Project Size:	54.26 acres
County(s):	Saunders
Watershed(s):	Lower Platte
Watershed(s) HUC 8:	Salt
Watershed(s) HUC 12:	Cottonwood Creek; Duck Creek
Biologically Unique Landscape(s):	None
Township/Range and/or Section(s):	T15R06ES03; T15R06ES04; T15R06ES05; T15R06ES08; T15R06ES09; T15R06ES10
Latitude/Longitude:	41.279775 / -96.740860

Contact Information

Organization:	NRCS
Contact Name:	Melissa Baier
Contact Phone:	402-437-4042
Contact Email:	melissa.baier@usda.gov
Contact Address:	1121 Lincoln Mall Room 360 Lincoln NE 68508
Prepared By:	
Submitted On Behalf Of:	

Project Description

This was the CERT report generated to obtain the species list based off of the sub-watershed boundary encompassing the Cottonwood 21-A Site.

Project Duration

Approximately 3 years for design and construction

Existing Land Use

The project site is currently used as a flood damage reduction dam and agricultural field.

Waterbodies

Dam is within the Platte River watershed and could cause depletions to the river.

The Nebraska Nongame and Endangered Species Conservation Act (NESCA)

The Nebraska Game and Parks Commission (Commission or NGPC) has responsibility for protecting state-listed endangered and threatened species under authority of the Nongame and Endangered Species Conservation Act (NESCA) (Neb. Rev. Stat. § 37-801 to 37-814). Pursuant to §37-807 (3)(c) of NESCA, **all state agencies shall, in consultation with the Commission, ensure projects they authorize (i.e., issue a permit for), fund or carry out do not jeopardize the continued existence of state-listed endangered or threatened species or result in the destruction or modification of habitat of such species which is determined by the Commission to be critical. If a proposed project may affect state-listed species or designated critical habitat, further consultation with the Commission is required.**

Informal consultation pursuant to NESCA can be completed by using the Conservation and Environmental Review Tool (CERT). The CERT analyzes the project type and location, and based on the analysis, provides information about potential impacts to listed species, habitat questions and/or conservation conditions.

- If project proponent agrees to implement conservation conditions, as outlined in the report and applicable to the project type, then this document serves as documentation of consultation with the Commission and the following actions can be taken to move forward with the project:
 - Sign the report in the designated areas, and
 - Upload the signed and dated report into the project within CERT, and
 - Change the edit status to Final from Draft status.
- When these actions are completed, no additional coordination (i.e., contacting the Commission) is required.
- If the report indicates further consultation is required in the Overall Results section on the following page and/or conservation conditions cannot be met, then the following actions must be taken:
 - Project proponent is required to contact and consult with the Commission. Contact information can be found under the Additional Considerations section.

Review the Overall Results section on the following page for further instructions.

Disclaimer

The U.S. Fish and Wildlife Service has responsibility for conservation and management of fish and wildlife resources for the benefit of the American public under the following authorities: 1) Endangered Species Act; 2) Fish and Wildlife Coordination Act; 3) Bald and Golden Eagle Protection Act; and 4) Migratory Bird Treaty Act.

It is recommended that a project start with requesting an Official Species List via the Information for Planning and Consultation ([IPaC](#)) Tool, to begin informal consultation with the U.S. Fish & Wildlife Service.

The information generated in a CERT Environmental Review Report DOES NOT satisfy consultation obligations between the lead federal agency and the U.S. Fish and Wildlife Service pursuant to the Endangered Species Act (ESA).

For the purposes of ESA, the information in this report should be considered as technical assistance, and does not serve as the U.S. Fish and Wildlife Service's concurrence letter, even if the user signs and agrees to implement conservation conditions in order to satisfy consultation requirements of NESCA.

Review the Additional Considerations section for further information.

Overall Results

- Potential impacts on listed species may occur as a result of this project; further review is required. Sign and date the Certification section below and fill out the CERT Further Review Form located at <https://outdoornebraska.gov/conservation/environmental-review/cert-further-review-form/>.

Additional Information

Potential impacts on listed species may occur as a result of this project. Further consultation with the Nebraska Game and Parks Commission is required.

Certification

I certify that ALL the project information in this report (including project location, project size/configuration, project type, project activities, answers to questions) is true, accurate and complete. If the project type, activities, location, size, or configuration of the project change; if a species listing status is reclassified; if a new species is listed; or if any of the answers to any questions asked in this report change, then this document is no longer valid, and re-consultation with the Nebraska Game and Parks Commission is required.

Applicant/project proponent signature

Date

Additional Considerations

Nebraska Game and Parks Commission

Environmental Review Team
2200 North 33 Street
Lincoln, NE 68503
Phone: (402) 471-5423
Email: ngpc.envreview@nebraska.gov

U.S. Fish and Wildlife Service

Nebraska Ecological Services
9325 South Alda Road
Wood River, NE 68883
Phone: (308) 382-6468
Email: nebraskaes@fws.gov

U.S. Army Corps of Engineers

Omaha Regulatory Office
8901 South 154 Street
Omaha, NE 68138
Phone: (402) 896-0896
Email: NE404Reg@usace.army.mil

The following federal laws contribute to the conservation and management of fish and wildlife resources in the United States: Endangered Species Act, Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, Clean Water Act, and the Fish and Wildlife Coordination Act.

Bald and Golden Eagle Protection Act

The federal Bald and Golden Eagle Protection Act (Eagle Act) (16 U.S.C. 668-668c) provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*). Under the Eagle Act, “take” of eagles, their parts, nests or eggs is prohibited. Disturbance resulting in injury to an eagle or a decrease in productivity or nest abandonment by substantially interfering with normal breeding, feeding, or sheltering behavior is a form of “take.”

Nebraska Specific Information

Bald eagles use mature, forested riparian areas near rivers, streams, lakes, and wetlands and occur along all the major river systems in Nebraska. The bald eagle southward migration begins as early as October and the wintering period extends from December-March. The golden eagle is found in arid open country with grassland for foraging in western Nebraska and usually near buttes or canyons which serve as nesting sites. Golden eagles are often a permanent resident in the Pine Ridge area of Nebraska. Additionally, many bald and golden eagles nest in Nebraska from mid-February through mid-July. Disturbances within 0.5-miles of an active nest or within line-of-sight of the nest could cause adult eagles to discontinue nest building or to abandon eggs. Both bald and golden eagles frequent river systems in Nebraska during the winter where open water and forested corridors provide feeding, perching, and roosting habitats, respectively. The frequency and duration of eagle use of these habitats in the winter depends upon ice and weather conditions. Human disturbances and loss of wintering habitat can cause undue stress leading to cessation of feeding and failure to meet winter thermoregulatory requirements. These affects can reduce the carrying capacity of preferred wintering habitat and reproductive success for the species.

To comply with the Eagle Act, it is recommended that the project proponent determine if the proposed project would impact bald or golden eagles or their habitats. This can be done by conducting a habitat assessment, surveying nesting habitat for active and inactive nests, and surveying potential winter roosting habitat to determine if it is being used by eagles. The area to be surveyed is dependent on the type of project; however for most projects we recommend surveying the project area and a ½ mile buffer around the project area. If it is determined that either species could be affected by the proposed project, the Commission recommends that the project proponent notify the Nebraska Game and Parks Commission as well as the Nebraska Field Office, U.S. Fish and Wildlife Service for recommendations to avoid “take” of bald and golden eagles.

Migratory Bird Treaty Act and Nebraska Revised Statute §37-540

We recommend the project proponent comply with the Migratory Bird Treaty Act (16 U.S.C. 703-712: Ch. 128 as amended) (MBTA). The project proponent should also comply with Nebraska Revised Statute §37-540, which prohibits take and destruction of nests or eggs of protected birds (as defined in Nebraska Revised Statute §37-237.01). Construction activities in grassland, wetland, stream, woodland, and river bank habitats that would result in impacts on birds, their nests or eggs protected under these laws should be avoided. Although the provisions of these laws are applicable year-round, most migratory bird nesting activity in Nebraska occurs during the period of April 1 to July 15. However, some migratory birds are known to nest outside of the aforementioned primary nesting season period. For example, raptors can be expected to nest in woodland habitats during February 1 through July 15, whereas sedge wrens, which occur in some wetland habitats, normally nest from July 15 to September 10. If development in this area

is planned to occur during the primary nesting season or at any other time which may result in impacts to birds, their nests or eggs protected under these laws, we request that the project proponent arrange to have a qualified biologist conduct a field survey of the affected habitats to determine the absence or presence of nesting migratory birds. If a field survey identifies the existence of one or more active bird nests that cannot be avoided by the planned construction activities, the Nebraska Game and Parks Commission and the Nebraska Field Office, U.S. Fish and Wildlife Service should be contacted immediately. For more information on avoiding impacts to migratory birds, their nests and eggs, or to report active bird nests that cannot be avoided by planned construction activities, please contact the U.S. Fish and Wildlife Service and/or the Nebraska Game and Parks Commission (contact information within report). Adherence to these guidelines will help avoid unnecessary impacts on migratory birds.

Fish and Wildlife Coordination Act

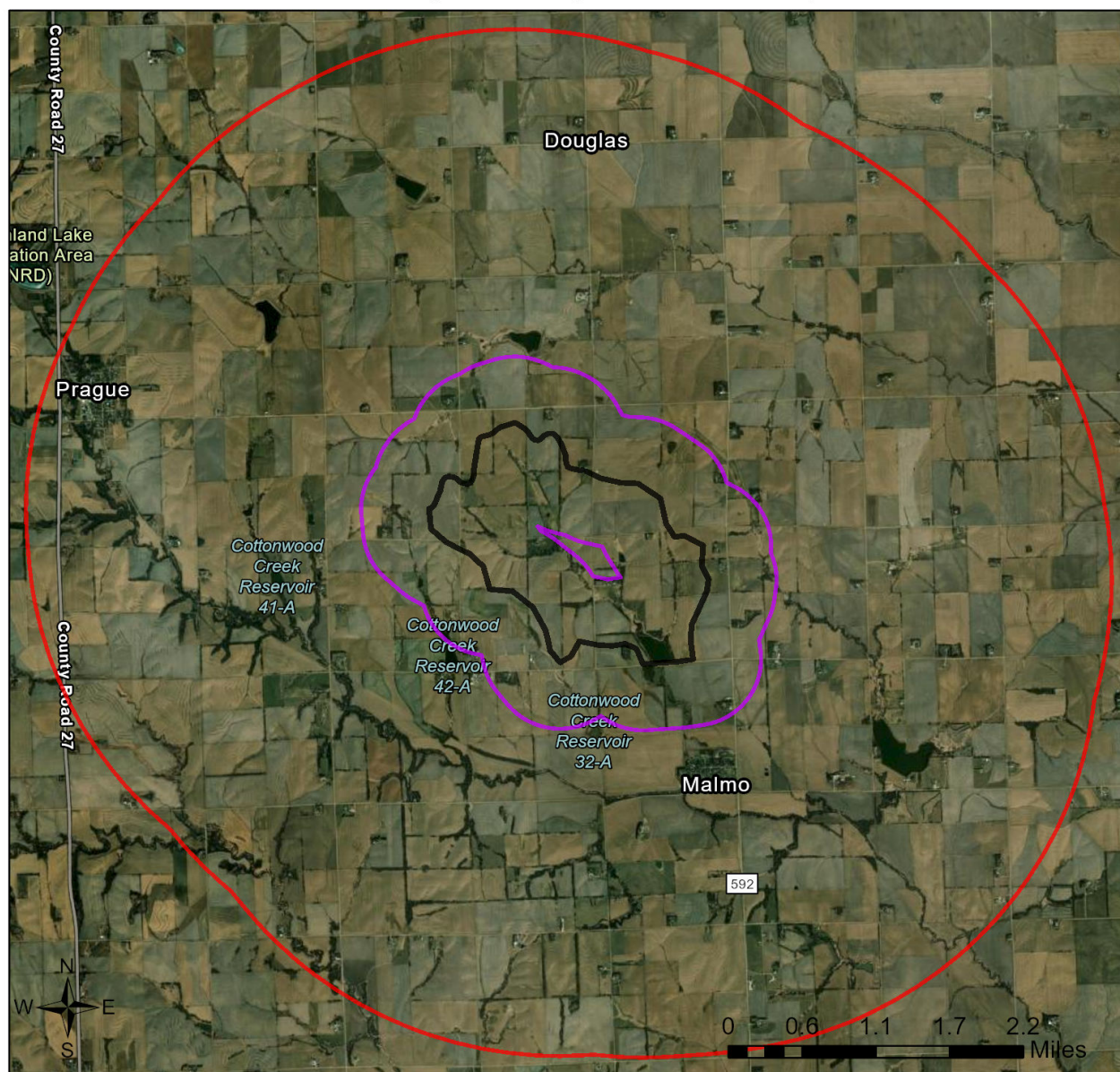
The Fish and Wildlife Coordination Act (FWCA) requires consultation with the U.S. Fish and Wildlife Service (Service) and the State fish and wildlife agency (i.e., Nebraska Game and Parks Commission) for the purpose of preventing loss of and damage to fish and wildlife resources in the planning, implementation, and operation of federal and federally funded, permitted, or licensed water resource development projects. This statute requires that federal agencies take into consideration the effect that the water related project would have on fish and wildlife resources, to take action to prevent loss or damage to these resources, and to provide for the development and improvement of these resources. The comments in this letter are provided as technical assistance only and are not the document required of the Secretary of the Interior pursuant to Section 2(b) of FWCA on any required federal environmental review or permit. This technical assistance is valid only for the described conditions and will have to be revised if significant environmental changes or changes in the proposed project take place. In order to determine whether the effects to fish and wildlife resources from the proposed project are being considered under FWCA, the lead federal agency must notify the Service in writing of how the comments and recommendations in this technical assistance letter are being considered into the proposed project.

Section 404 of the Clean Water Act

In general, the Nebraska Game and Parks Commission and the U.S. Fish and Wildlife Service have concerns for impacts to wetlands, streams and riparian habitats. We recommend that impacts to wetlands, streams, and associated riparian corridors be avoided and minimized, and that any unavoidable impacts to these habitats be mitigated. If any fill materials will be placed into waterways or wetlands, the U.S. Army Corps of Engineers Regulatory Office in Omaha should be contacted to determine if a 404 permit is needed.

CERT Report - Cottonwood 21-A Chapter 3 Analysis

Aerial Image Basemap With Locator Map



3-mile Information
Buffer Boundary

Project Review
Boundary

Project Boundary

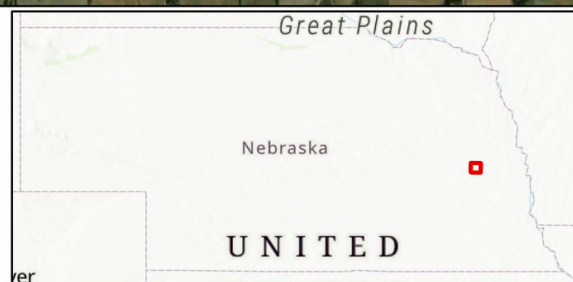
Project Size (acres): 54.26

Lat/Long (DD): 41.2798 / -96.7409

County(s): Saunders

BUL(s):

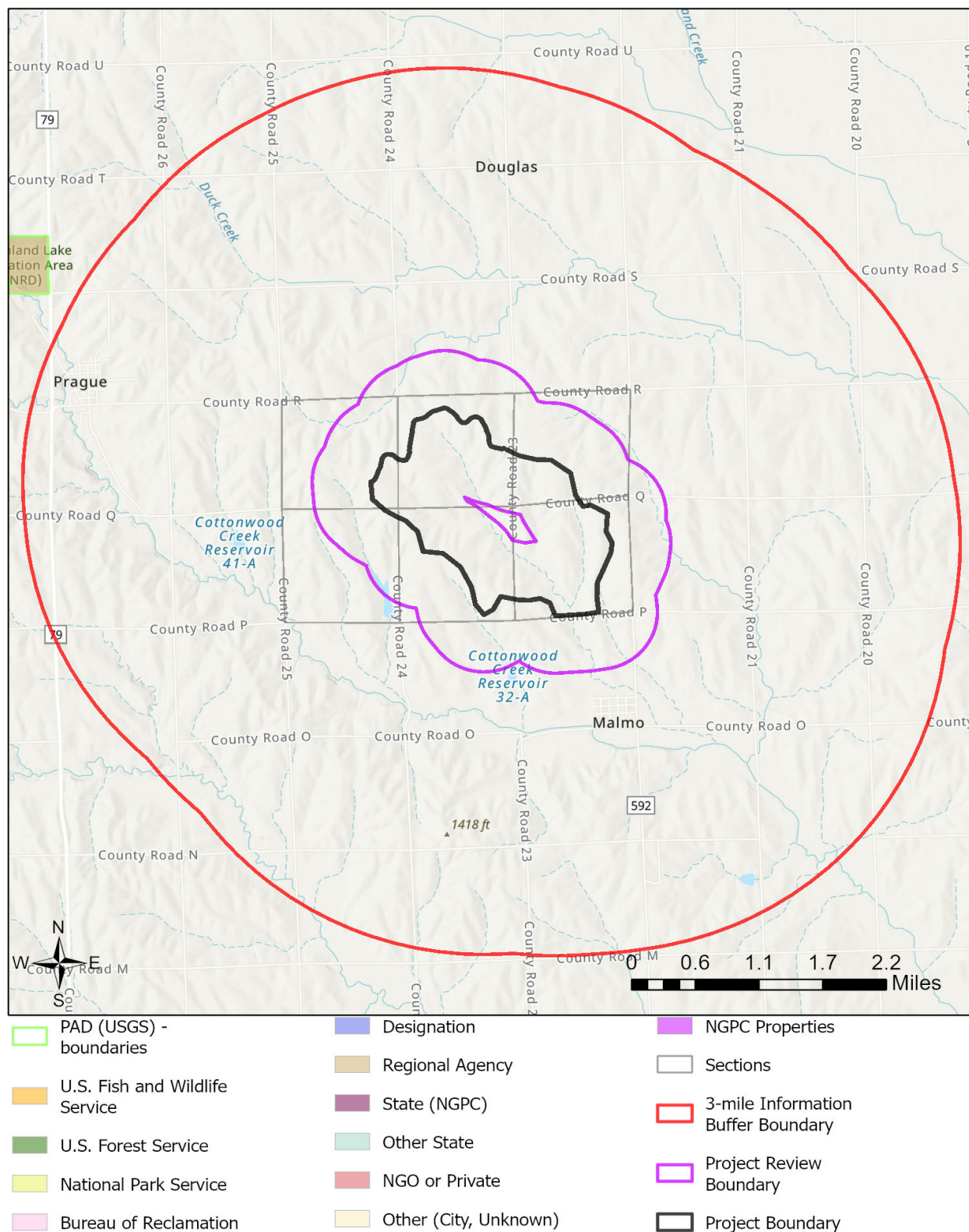
Township/Range/Section(s): T15R06ES03; T15R06ES04; T15R06ES05; T15R06ES08; T15R06ES09 +



Nebraska Game & Parks Commission, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS
Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
Esri, USGS

CERT Report - Cottonwood 21-A Chapter 3 Analysis

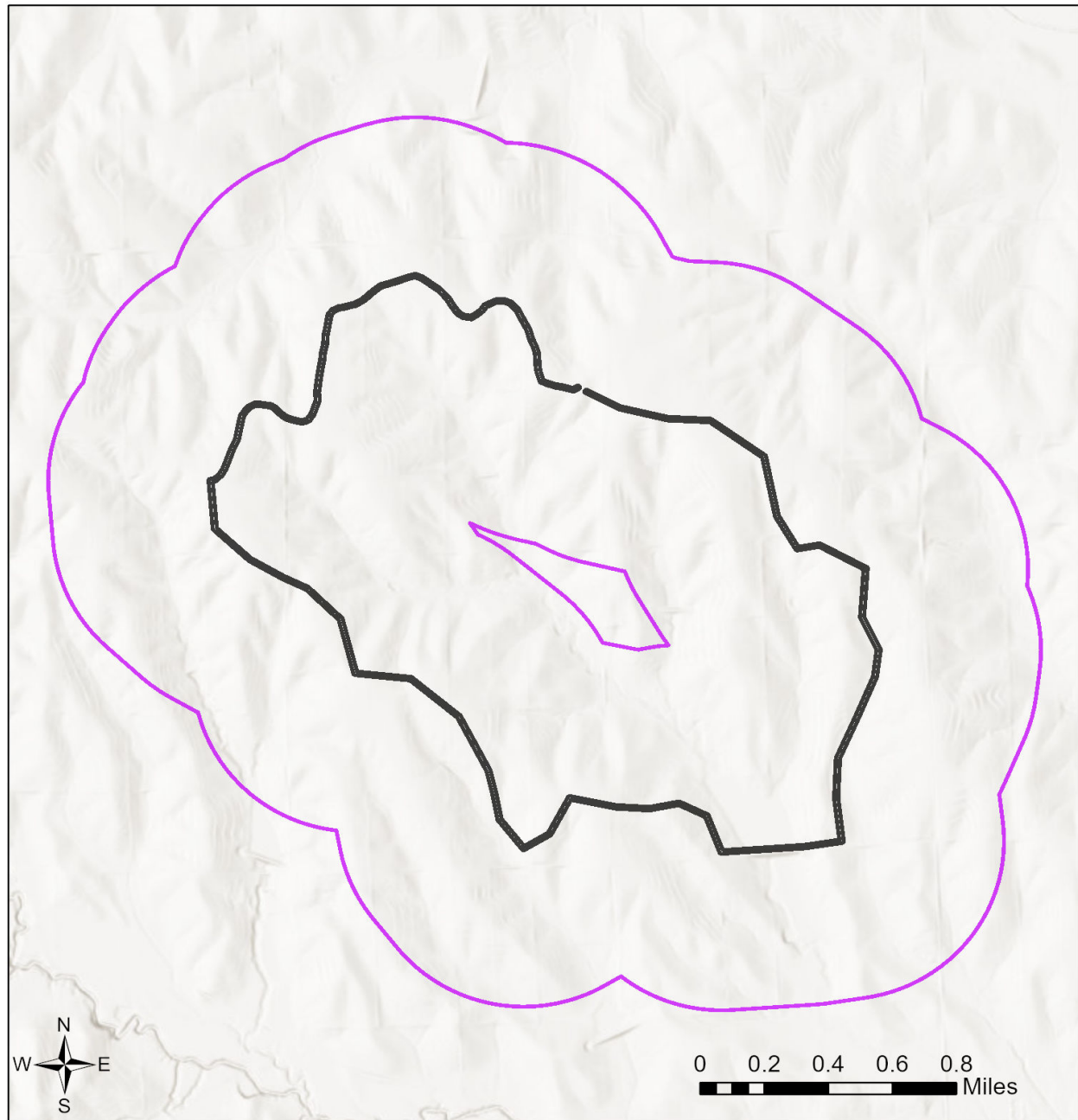
Topographic Basemap With Sections and Protected Areas



Nebraska Game & Parks Commission, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS
Esri, NASA, NGA, USGS

CERT Report - Cottonwood 21-A Chapter 3 Analysis

Web Map As Submitted By User



- Project Review Boundary
- Project Boundary

Esri, NASA, INGA, USGS, FEMA

Table 1
Protected Areas in Immediate Vicinity of Project (project review area)

This table has no results.

Table 2
Documented Occurrences in Immediate Vicinity of Project (project review area):
Natural communities and selected special areas

This table has no results.

Table 3
Regional Documented Occurrences of Species within 1 Mile of Project Review Area:
Tier 1 and 2 at-risk species and additional S1-S3 plants

Scientific Name	Common Name	USFWS	State	SGCN	SRank	GRank	Taxonomic Group
<i>Haliaeetus leucocephalus</i>	Bald Eagle			Tier 2	S3	G5	Vertebrate Animal - Birds

Table 4
Potential Occurrences in Immediate Vicinity of Project (project review area):
Special status species (Tier 1 at-risk species and Bald and Golden Eagle), based on models or range maps

Scientific Name	Common Name	Data Type	USFWS	State	SGCN	SRank	GRank	Taxonomic Group
Ammodramus henslowii	Henslow's Sparrow	Range			Tier 1	S1	G4	
Argynnis idalia	Regal Fritillary	Range			Tier 1	S3	G3?	
Asio flammeus	Short-eared Owl	Range			Tier 1	S2	G5	
Atrytone arogos iowa	Iowa Skipper	Range			Tier 1	S1	G2G3T2T3	
Boloria myrina nebraskensis	Nebraska Fritillary	Range			Tier 1	SNR	G5?T3T4	
Calidris subruficollis	Buff-breasted Sandpiper	Range			Tier 1	S2N	G4	
Catocala nuptialis	Married Underwing	Range			Tier 1	SNR	G3	
Catocala whitneyi	Whitney Underwing	Range			Tier 1	S1	G2G3	
Coccyzus erythrophthalmus	Black-billed Cuckoo	Range			Tier 1	S3	G5	
Danaus plexippus	Monarch	Range			Tier 1	S2	G4	
Ellipsoptera lepida	Ghost Tiger Beetle	Range			Tier 1	S2	G3	
Emydoidea blandingii	Blanding's Turtle	Range			Tier 1	S4	G4	
Erynnis martialis	Mottled Duskywing	Range			Tier 1	S2	G3	
Euphyes conspicua buchholzi	Bucholz Black Dash	Range			Tier 1	S1	G4G5T1	

Table 4
Potential Occurrences in Immediate Vicinity of Project (project review area):
Special status species (Tier 1 at-risk species and Bald and Golden Eagle), based on models or range maps

Scientific Name	Common Name	Data Type	USFWS	State	SGCN	SRank	GRank	Taxonomic Group
Fundulus sciadicus	Plains Topminnow	Range			Tier 1	S3	G4	
Haliaeetus leucocephalus	Bald Eagle	Range			Tier 2	S3	G5	
Hesperia ottoe	Ottoe Skipper	Range			Tier 1	S2	G3	
Lanius ludovicianus	Loggerhead Shrike	Range			Tier 1	S3	G4	
Lasiurus borealis	Eastern Red Bat	Range			Tier 1	S3	G3G4	
Lasiurus cinereus	Hoary Bat	Range			Tier 1	S3	G3G4	
Myotis septentrionalis	Northern Long-eared Myotis	Range	E	E	Tier 1	S1S2	G2G3	
Perimyotis subflavus	Tricolored Bat	Range			Tier 1	S3	G3G4	
Perognathus flavescens perniger	Plains Pocket Mouse	Range			Tier 1	SNR	G5TNR	

**Supplemental Watershed Plan Supplement No. 5 and
Environmental Assessment for the Rehabilitation
of Floodwater Retarding Structure No. 21-A
Cottonwood Creek Watershed**

Saunders County, Nebraska

APPENDIX E

Other Supporting Information

**E-7: Information for Planning and
Consultation Report**



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Nebraska Ecological Services Field Office
9325 B South Alda Rd., Ste B
Wood River, NE 68883-9565
Phone: (308) 382-6468 Fax: (308) 384-8835



In Reply Refer To:

09/23/2025 17:35:10 UTC

Project Code: 2024-0115421

Project Name: IPaC Report - Cottonwood 21-A Chapter 3 Analysis

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the [IPaC website](#) at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended

contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the [Endangered Species Consultation Handbook](#) or at our [Nebraska Ecological Services Field Office - Project Review and Planning webpage](#). **For recommendations to minimize the effects of project actions on federally listed species or designated critical habitat, please view the [Nebraska Ecological Service's Field Office Conservation Measures Technical Assistance Guide](#).**

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Project Consultation Code in the header of this letter (i.e., YEAR-XXXXXXX) with any request for consultation or correspondence about your project that you submit to our office.

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Act, there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts and permitting see <https://www.fws.gov/program/migratory-bird-permit>

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on threats to birds and recommended conservation measures visit <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit:

<https://www.federalregister.gov/documents/2012/10/03/2012-24433/migratory-bird-conservation-executive-order-13186>

Platte River System: The Platte River, its tributaries, and associated wetland habitats are resources of national importance. Due to the cumulative effect of many water depletion projects in the Platte River basin, the Service considers any direct or indirect depletion of flows from the

Platte River system to be significant and will continue to further deteriorate the already stressed habitat conditions. Federal agencies must consult with the Service under section 7 of the ESA for projects in Nebraska that may lead to water depletions or have the potential to impact water quality in the Platte River system, because these actions may affect threatened and endangered species inhabiting the downstream reaches of these river systems. The federally listed species that could be impacted from Platte River water depletions include the federally endangered Whooping Crane (*Grus americana*), and Pallid Sturgeon (*Scaphirhynchus albus*); the threatened Piping Plover (*Charadrius melodus*) and Western Prairie Fringed Orchid (*Platanthera praeclara*). In general, depletions include evaporative losses and/or consumptive use of surface or groundwater within the affected basin, often characterized as diversions minus return flows. Project elements that could be associated with depletions include, but are not limited to: borrow sites, ponds, lakes, and reservoirs (e.g., for detention, recreating, irrigation, storage, stock watering, municipal storage, and power generation); hydrostatic testing of pipelines; wells; dust abatement; diversion structures; and water treatment facilities. For more information on consultation requirements for the Platte River species, please visit <https://fws.gov/partner/platte-river-recovery-implementation-program>.

Nebraska Nongame and Endangered Species Conservation Act: Federally listed species protected under the Endangered Species Act are also state-listed under the Nebraska statute, the Nebraska Nongame and Endangered Species Conservation Act. There may be state-listed species affected by the proposed project that are not federally listed. To determine if the proposed project may affect state-listed species, the Service recommends that the project proponent contact the Nebraska Game and Parks Commission (NGPC) Planning and Program Division located at 2200 North 33rd Street Lincoln, Nebraska 68503-0370. For more information and to request an environmental review from the NGPC, visit their Environmental Review website at <http://outdoornebraska.gov/environmentalreview/> for instructions and contact information.

Attachment(s):

- Official Species List
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Nebraska Ecological Services Field Office

9325 B South Alda Rd., Ste B

Wood River, NE 68883-9565

(308) 382-6468

PROJECT SUMMARY

Project Code: 2024-0115421

Project Name: IPaC Report - Cottonwood 21-A Chapter 3 Analysis

Project Type: Dam - Maintenance/Modification

Project Description: This was the IPaC report generated to obtain the species list based off of the sub-watershed boundary encompassing the Cottonwood 21-A Site. The proposed action identified in the Plan-EA for dam rehabilitation includes partially filling the county road overtopping the dam and excavating a new auxiliary spillway to the east of the pool. The upstream wave berm will be lined with riprap for shoreline protection and a seepage blanket will be installed on the downstream toe to protect from potential under seepage issues. Additionally, a berm and diversion channel would be constructed downstream to protect the Bethesda Cemetery during flood events.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@41.29209265,-96.7229948047979,14z>



Counties: Saunders County, Nebraska

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
Piping Plover <i>Charadrius melodus</i> Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened

FISHES

NAME	STATUS
Pallid Sturgeon <i>Scaphirhynchus albus</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: Water use or contamination may adversely affect the species. Within the Platte River basin, depletions may adversely affect the species. These affects must be considered even outside occupied range. See local FWS office for more information. Species profile: https://ecos.fws.gov/ecp/species/7162 General project design guidelines: https://ipac.ecosphere.fws.gov/project/MSTMG5NHIZCTFCP6BI7WMK6WWY/documents/generated/8697.9357.pdf	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743 General project design guidelines: https://ipac.ecosphere.fws.gov/project/MSTMG5NHIZCTFCP6BI7WMK6WWY/documents/generated/8697.9357.pdf	Proposed Threatened
Suckley's Cuckoo Bumble Bee <i>Bombus suckleyi</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10885 General project design guidelines: https://ipac.ecosphere.fws.gov/project/MSTMG5NHIZCTFCP6BI7WMK6WWY/documents/generated/9357.pdf	Proposed Endangered

FLOWERING PLANTS

NAME	STATUS
Western Prairie Fringed Orchid <i>Platanthera praeclara</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1669 General project design guidelines:	Threatened

NAME

STATUS

<https://ipac.ecosphere.fws.gov/project/MSTMG5NHIZCTFCP6BI7WMK6WWY/documents/generated/8697,9357.pdf>

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act ² and the Migratory Bird Treaty Act (MBTA) ¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

1. The [Bald and Golden Eagle Protection Act](#) of 1940.
2. The [Migratory Birds Treaty Act](#) of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are Bald Eagles and/or Golden Eagles in your [project](#) area.

Measures for Proactively Minimizing Eagle Impacts

For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the [National Bald Eagle Management Guidelines](#). You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

If disturbance or take of eagles cannot be avoided, an [incidental take permit](#) may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the [Do I Need A Permit Tool](#). For assistance making this determination for golden eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local

FWS field office, state surveys, your own surveys). Please review the [Supplemental Information on Migratory Birds and Eagles](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

■ probability of presence ■ breeding season | survey effort — no data

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
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Bald Eagle
Non-BCC
Vulnerable



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) ¹ prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Golden-plover <i>Pluvialis dominica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10561	Breeds elsewhere
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31

NAME	BREEDING SEASON
Bobolink <i>Dolichonyx oryzivorus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9454	Breeds May 20 to Jul 31
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Grasshopper Sparrow <i>Ammodramus savannarum perpallidus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8329	Breeds Jun 1 to Aug 20
Hudsonian Godwit <i>Limosa haemastica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9482	Breeds elsewhere
Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Pectoral Sandpiper <i>Calidris melanotos</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9561	Breeds elsewhere
Prairie Loggerhead Shrike <i>Lanius ludovicianus excubitorides</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8833	Breeds Feb 1 to Jul 31
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Ruddy Turnstone <i>Arenaria interpres morinella</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/10633	Breeds elsewhere
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere

NAME	BREEDING SEASON
Semipalmated Sandpiper <i>Calidris pusilla</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9603	Breeds elsewhere
Short-billed Dowitcher <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Upland Sandpiper <i>Bartramia longicauda</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9294	Breeds May 1 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

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Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

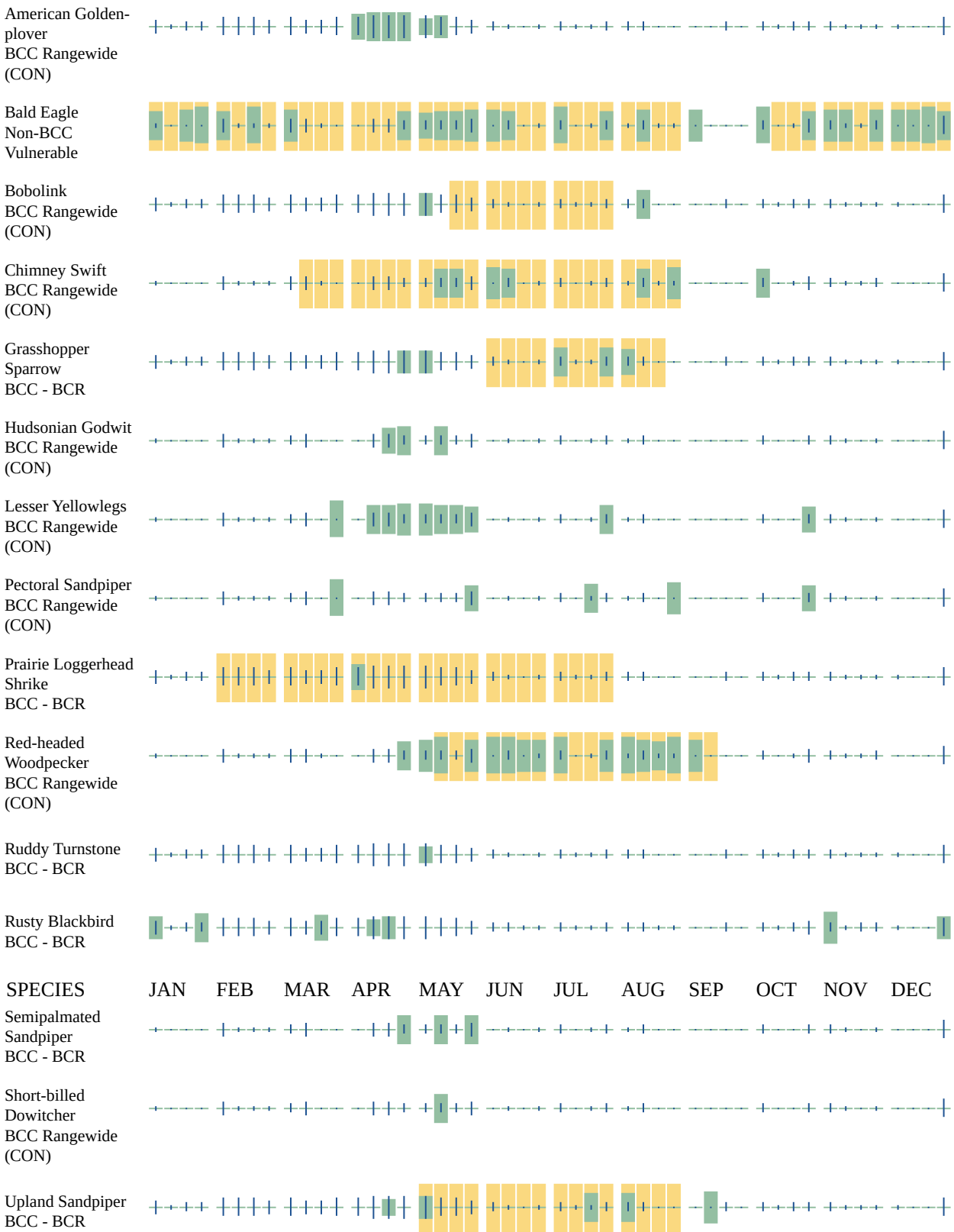
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■ probability of presence ■ breeding season | survey effort — no data

SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC



Additional information can be found using the following links:

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WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER FORESTED/SHRUB WETLAND

- PFOA

RIVERINE

- R4SBC

IPAC USER CONTACT INFORMATION

Agency: Natural Resources Conservation Service

Name: Melissa Baier

Address: 1121 Lincoln Mall Room 360

City: Lincoln

State: NE

Zip: 68508

Email: melissa.baier@usda.gov

Phone: 4024374065



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Nebraska Ecological Services Field Office
9325 B South Alda Rd., Ste B
Wood River, NE 68883-9565
Phone: (308) 382-6468 Fax: (308) 384-8835



In Reply Refer To:

09/23/2025 17:34:33 UTC

Project Code: 2024-0115387

Project Name: IPaC Report - Cottonwood 21-A Chapter 5 Analysis

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the [IPaC website](#) at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended

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If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the [Endangered Species Consultation Handbook](#) or at our [Nebraska Ecological Services Field Office - Project Review and Planning webpage](#). **For recommendations to minimize the effects of project actions on federally listed species or designated critical habitat, please view the [Nebraska Ecological Service's Field Office Conservation Measures Technical Assistance Guide](#).**

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Project Consultation Code in the header of this letter (i.e., YEAR-XXXXXXX) with any request for consultation or correspondence about your project that you submit to our office.

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Platte River system to be significant and will continue to further deteriorate the already stressed habitat conditions. Federal agencies must consult with the Service under section 7 of the ESA for projects in Nebraska that may lead to water depletions or have the potential to impact water quality in the Platte River system, because these actions may affect threatened and endangered species inhabiting the downstream reaches of these river systems. The federally listed species that could be impacted from Platte River water depletions include the federally endangered Whooping Crane (*Grus americana*), and Pallid Sturgeon (*Scaphirhynchus albus*); the threatened Piping Plover (*Charadrius melodus*) and Western Prairie Fringed Orchid (*Platanthera praeclara*). In general, depletions include evaporative losses and/or consumptive use of surface or groundwater within the affected basin, often characterized as diversions minus return flows. Project elements that could be associated with depletions include, but are not limited to: borrow sites, ponds, lakes, and reservoirs (e.g., for detention, recreating, irrigation, storage, stock watering, municipal storage, and power generation); hydrostatic testing of pipelines; wells; dust abatement; diversion structures; and water treatment facilities. For more information on consultation requirements for the Platte River species, please visit <https://fws.gov/partner/platte-river-recovery-implementation-program>.

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Attachment(s):

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This species list is provided by:

Nebraska Ecological Services Field Office

9325 B South Alda Rd., Ste B

Wood River, NE 68883-9565

(308) 382-6468

PROJECT SUMMARY

Project Code: 2024-0115387

Project Name: IPaC Report - Cottonwood 21-A Chapter 5 Analysis

Project Type: Dam - Maintenance/Modification

Project Description: The proposed action identified in the Plan-EA for dam rehabilitation includes partially filling the county road overtopping the dam and excavating a new auxiliary spillway to the east of the pool. The upstream wave berm will be lined with riprap for shoreline protection and a seepage blanket will be installed on the downstream toe to protect from potential under seepage issues. Additionally, a berm and diversion channel would be constructed downstream to protect the Bethesda Cemetery during flood events.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@41.283915,-96.7322349882984,14z>



Counties: Saunders County, Nebraska

ENDANGERED SPECIES ACT SPECIES

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See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
Piping Plover <i>Charadrius melodus</i> Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened

FISHES

NAME	STATUS
Pallid Sturgeon <i>Scaphirhynchus albus</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: Water use or contamination may adversely affect the species. Within the Platte River basin, depletions may adversely affect the species. These affects must be considered even outside occupied range. See local FWS office for more information. Species profile: https://ecos.fws.gov/ecp/species/7162 General project design guidelines: https://ipac.ecosphere.fws.gov/project/6FOYDZTEORA35F76UPLZZ6XN3E/documents/generated/8697,9357.pdf	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743 General project design guidelines: https://ipac.ecosphere.fws.gov/project/6FOYDZTEORA35F76UPLZZ6XN3E/documents/generated/8697,9357.pdf	Proposed Threatened
Suckley's Cuckoo Bumble Bee <i>Bombus suckleyi</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10885 General project design guidelines: https://ipac.ecosphere.fws.gov/project/6FOYDZTEORA35F76UPLZZ6XN3E/documents/generated/9357.pdf	Proposed Endangered

FLOWERING PLANTS

NAME	STATUS
Western Prairie Fringed Orchid <i>Platanthera praeclara</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1669 General project design guidelines:	Threatened

NAME

STATUS

<https://ipac.ecosphere.fws.gov/project/6FOYDZTEORA35F76UPLZZ6XN3E/documents/generated/8697,9357.pdf>

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act ² and the Migratory Bird Treaty Act (MBTA) ¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

1. The [Bald and Golden Eagle Protection Act](#) of 1940.
2. The [Migratory Birds Treaty Act](#) of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are Bald Eagles and/or Golden Eagles in your [project](#) area.

Measures for Proactively Minimizing Eagle Impacts

For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the [National Bald Eagle Management Guidelines](#). You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

If disturbance or take of eagles cannot be avoided, an [incidental take permit](#) may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the [Do I Need A Permit Tool](#). For assistance making this determination for golden eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local

FWS field office, state surveys, your own surveys). Please review the [Supplemental Information on Migratory Birds and Eagles](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

■ probability of presence ■ breeding season | survey effort — no data

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
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Bald Eagle
Non-BCC
Vulnerable



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) ¹ prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Golden-plover <i>Pluvialis dominica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10561	Breeds elsewhere
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31

NAME	BREEDING SEASON
Bobolink <i>Dolichonyx oryzivorus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9454	Breeds May 20 to Jul 31
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Grasshopper Sparrow <i>Ammodramus savannarum perpallidus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8329	Breeds Jun 1 to Aug 20
Hudsonian Godwit <i>Limosa haemastica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9482	Breeds elsewhere
Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Pectoral Sandpiper <i>Calidris melanotos</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9561	Breeds elsewhere
Prairie Loggerhead Shrike <i>Lanius ludovicianus excubitorides</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8833	Breeds Feb 1 to Jul 31
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Ruddy Turnstone <i>Arenaria interpres morinella</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/10633	Breeds elsewhere
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere

NAME	BREEDING SEASON
Semipalmated Sandpiper <i>Calidris pusilla</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9603	Breeds elsewhere
Short-billed Dowitcher <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Upland Sandpiper <i>Bartramia longicauda</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9294	Breeds May 1 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

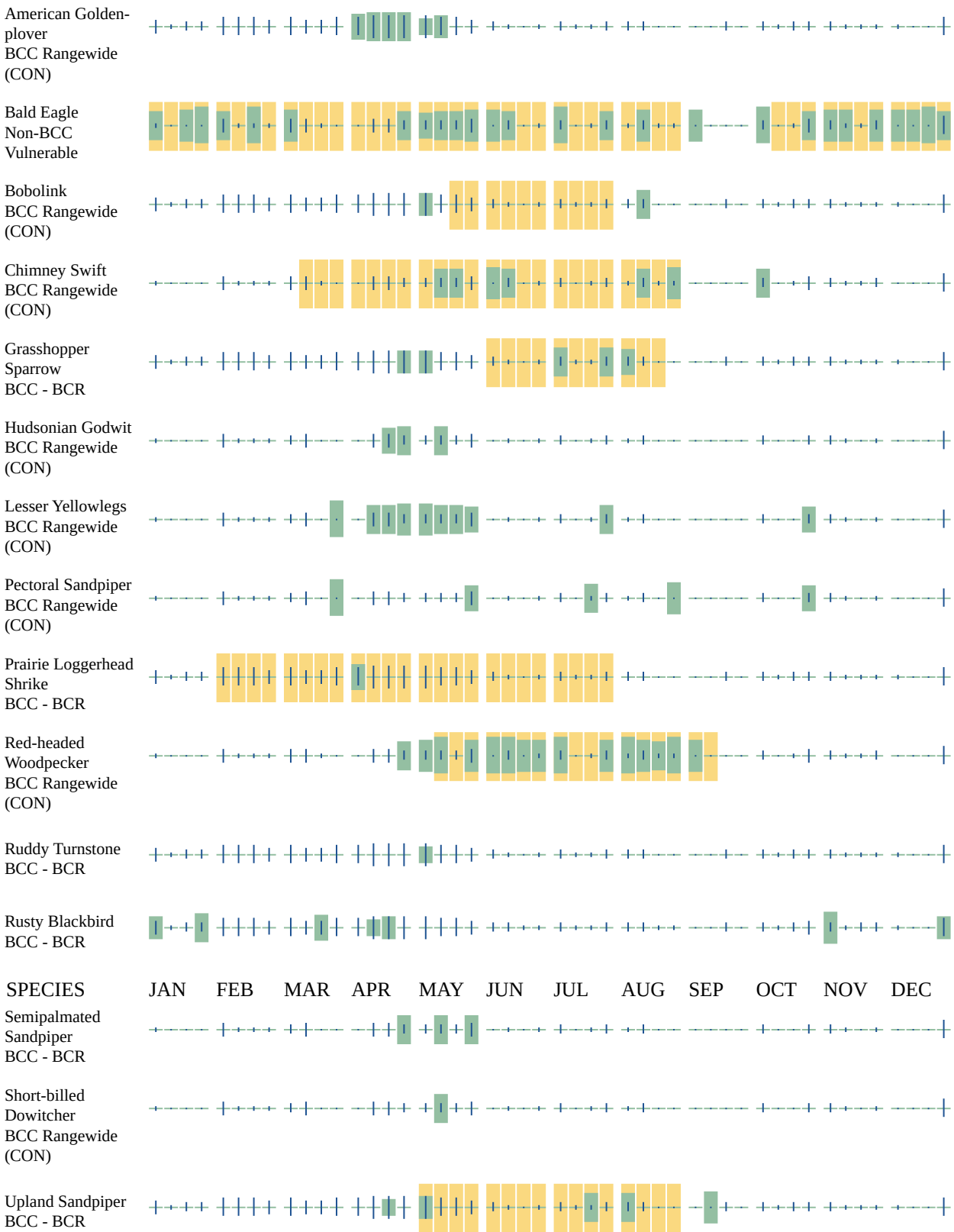
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

■ probability of presence ■ breeding season | survey effort — no data

SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

RIVERINE

- R4SBC
- R5UBH

FRESHWATER FORESTED/SHRUB WETLAND

- PFOA

FRESHWATER POND

- PUBFh

IPAC USER CONTACT INFORMATION

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