Appendix A
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Appendix B
Scoping Summary

Scoping Summary

Introduction

The Nebraska Public Power District (NPPD, applicant) is preparing a revised habitat conservation plan (HCP) in support of its anticipated resubmission of an application for an Endangered Species Act (ESA) incidental take permit (ITP) for the threatened American burying beetle (*Nicrophorus americanus*) (ABB) for activities NPPD will undertake in constructing, operating, and maintaining a new transmission line in central Nebraska, known as the R-Project (project).

The U.S. Fish and Wildlife Service (FWS) is preparing a supplemental environmental impact statement (SEIS) to the February 2019 *Final Environmental Impact Statement on Issuance of an Incidental Take Permit and Implementation of a Habitat Conservation Plan for the R-Project Transmission Line* (FEIS). The SEIS will evaluate the impacts on the human environment related to the proposed issuance of the ITP and implementation of the HCP, including addressing the issues identified by the U.S. District Court for the District of Colorado in its remand of the ITP that FWS issued June 12, 2019. The SEIS will focus specifically on information in the FEIS that requires supplementing (i.e., issues identified by the U.S. District Court) and any new information that has become available since the issuance of the FEIS and that is notable and would result in a substantial difference in the analyses.

The National Environmental Policy Act (NEPA) requires full disclosure of potential environmental effects of a proposed project and open public participation throughout the decision-making process. The SEIS is necessary for the FWS to meet their requirements under NEPA and its implementing regulations and involves a public scoping period.[1] Scoping is an early and open process for determining the scope of the issues for analysis in a SEIS, including identifying the significant issues and eliminating non-significant issues from further study (40 Code of Federal Regulations [CFR] 1501.9). Through this process, the public, organizations, and agencies assist in the development of the SEIS by identifying important issues and alternatives to the proposed action that should be considered in the SEIS.

This report describes the public noticing and engagement efforts undertaken by FWS during the scoping period and summarizes comments received during the scoping period. The full text of comments received on regulations.gov during scoping are available at the following web address: https://www.regulations.gov/document/FWS-R6-ES-2014-0048-0202/comment. The FWS also received comments via email.

[1] Note that under CEQ regulations scoping is not required for SEISs. However, for this SEIS the FWS decided to conduct scoping.

Public Notices and Distribution of Notices

Notice of Intent

The Notice of Intent (NOI) was published in the *Federal Register* (FR) on November 18, 2022 (https://www.federalregister.gov/documents/2022/11/18/2022-25217/notice-of-intent-to-prepare-a-supplemental-environmental-impact-statement-for-the-r-project). The NOI provided background information on the proposed action, the habitat conservation plan (HCP), and the National Environmental Policy Act (NEPA) process, as well as a summary of expected impacts, an estimated timeframe for the availability of the Draft SEIS, and information on how to participate in the scoping process. The NOI included the project website and provided ways to view a recording of the public scoping meeting virtually. The NOI was also made available on the FWS R-Project website at https://www.fws.gov/project/r-project-transmission-line and in a FWS press release at https://www.fws.gov/press-release/2022-11/usfws-seeks-public-input-preparation-supplemental-environmental-impact.

Email Notifications

FWS distributed notice by email to interested parties on November 17, 2022, in advance of the publication of the NOI in the Federal Register. The email notice provided an overview of the potential action and announced the opportunity to participate in virtual public scoping meetings and provide comments on the effect of the potential action. The email notifications were sent to representatives of federal, state, and local governments; elected officials; tribes; nongovernmental organizations; environmental organizations; businesses; and others who have expressed interest in the process.

Media Notifications

FWS distributed a public scoping news release to the media announcing the availability of the NOI, the opportunity to attend a virtual public meeting, and explained how to provide comments on November 17, 2022. The media release was made available to the public online at: https://www.fws.gov/press-release/2022-11/usfws-seeks-public-input-preparation-supplemental-environmental-impact. The FWS also distributed this same information via FWS social media platforms, including Facebook (https://www.facebook.com/photo?fbid=509391794564755&set=a.222353563268581) and Twitter (https://twitter.com/USFWSMtnPrairie/status/1593334269232947202).

U.S. Fish and Wildlife Service Website

Prior to the virtual public meeting, the FWS website provided a summary of the proposed action, information on how to join the virtual public meeting, information about how to provide comments and a link to www.Regulations.gov, a link to the FR notice, the public scoping news release, and a link to a Frequently Asked Questions document. Following the virtual public meeting, links to the closed-captioned recordings of the two virtual public meeting were posted on the FWS R-Project website at https://www.fws.gov/project/r-project-transmission-line.

Virtual Public Scoping Meeting

FWS held two virtual public scoping meetings on December 8, 2022. The first meeting was held in the morning at 10:00 a.m. Central Standard Time (CST) and the second was held later in the evening at 6:30 p.m. CST. The meetings were held using Zoom as the webinar platform and included a presentation by FWS and a question-and-answer session. The purpose of the meeting was to provide information to the public about the NEPA process and the proposed action, how to submit comments, and to allow participants to ask questions about the environmental review process and SEIS.

Jennifer Piggott, facilitator with ICF, a third-party contractor, opened the meeting and provided an overview of the agenda, basic functions of how to participate on the virtual meeting platform, and how to turn on closed captioning and join by phone if needed. Mark Porath, FWS project lead, described the project background, the meeting purpose, and the proposed action. He also introduced the NEPA process and the purpose of scoping. After Mark Porath's presentation, Jennifer Piggott reviewed the different methods the public could use to submit written comments. Jeff Runge, FWS Project Manager, provided an overview of Section 106 and cultural resources process and information on how to participate in the Section 106 process as a consulting party.

Following the presentations, FWS provided meeting participants the opportunity to ask clarifying questions. The first virtual public meeting held at 10:00 a.m. CST was attended by 35 individual stakeholders and the second meeting held at 6:30 p.m. CST was attended by 25 individual stakeholders.

During the virtual public meetings, FWS did not solicit, collect, or record oral public comments for the project record. Participants were provided detailed explanations on how to submit comments for the project record - written comments online via www.Regulations.gov or via mail to FWS headquarters. Participants were reminded that all comments are treated equally regardless of submission method.

Summary of Public Scoping Comments Received

During the scoping period a total of 64 comment letters were received: 1 from a federal agency, 2 from elected officials, 8 from non-profit organizations, 7 from businesses, and 46 from members of the public. From the 64 comments, 305 comments were excerpted and used in creating this report. Most comments were received via regulations.gov, which are available online at: https://www.regulations.gov/document/FWS-R6-ES-2014-0048-0202/comment.

Below is a summary of all comments received, by topic. No comments were received specific to the FEIS topics of geology and soils, transportation, air quality and greenhouse gas emissions, noise, hazardous materials and hazardous substances, or environmental justice.

HCP

Commenters provided the following comments on the HCP.

- Covered Species

  - The HCP should seek take coverage for more than just the American burying beetle, and include whooping cranes, listed bats, bald eagles, red knots, piping plovers, and other raptors.

- Mitigation
  - Concern that enhancing 500 acres of American burying beetle habitat is not enough to offset impacts.
  - In addition to implementing measures that would reduce the likelihood of Whooping Crane-power line collisions, the HCP should include funding to protect, enhance, and create wetland areas within the migration corridor that is not impacted by the project, which would lessen their dependence on the wetland foraging and roosting sites that are affected.
  - Concern with mitigation terminology like 'maximum extent practicable'; a measurable standard should be required and shown to be a benefit to the species.
  - Concern with spread of noxious weeds and cattle disease from vehicle use, and washing vehicles at county boundaries rather than landowner property boundaries.
- Monitoring and implementation
  - A before and after impact study should be implemented to determine the impact of the project.
  - Concern that landowners and ranchers will have to take on an undue burden of fixing damage caused by heavy equipment on the Sandhills.

General Support

Several commenters expressed support for the project, stating that they believe the project would improve the reliability and congestion constraints of the current transmission system, support customers interested in converting from diesel to electric, and serve the growing electric loads and needs unfailingly.

NEPA Process

One commenter requested that the NEPA process include a 30-day comment period extension to enable more people to submit comments and were concerned that the comment period overlapped with the holidays. Another commenter expressed that the SEIS public meetings should replicate those held for the FEIS and include in-person meetings with landowners impacted by the route, community informational meetings, and physical tours of the route guided by landowners and stakeholders.

Approach/Scope to SEIS Analysis

One commenter stated the scope of the SEIS should be limited to those specific issues identified by the U.S. District Court in its remand and new information, and not a re-visitation of information such as alternative routing previously evaluated that resulted in the issuance of the ITP.

Purpose and Need

FWS Purposed and Need -

- On commenter stated the FWS should be protecting the Nebraska Sandhills and the rare species that depend on this environment rather than approving a project that runs through this fragile ecosystem, and that this approval would be contrary to the purpose and goals of ESA.

NPPD Purposed and Need -

- Several comments question the R-Project's purpose and need
    - NPPD should support the claim that the project will enhance reliability and relieve congestion, and should disclose whether Nebraska is a net producer or exporter of electrical energy.
    - NPPD needs to disclose what renewable energy projects have been requested or expected to be built as a result of the R-Project.
    - NPPD needs to disclose what facts support claims that NPPD's membership in the Southwest Power Pool is beneficial to Nebraska and NPPD as compared to the burdens and obligations imposed by such membership.
    - NPPD needs to disclose how its current proposal complies with the decision of the U.S. District Court for the District of Colorado.
    - The FWS should make an independent determination on NPPD's stated goals – will the R-Project enhance reliability of NPPD's electrical transmission system and will the R-Project relieve congestion from existing transmission lines?
    - Questions on maintaining the functionality of NPPD's Gerald Gentleman Station, a coal-fired complex - If the R-Project helps facilitate continued operation of this facility then impacts of greenhouse gas emissions and other air pollutants need to be assessed (the analysis would need to occur in the SEIS, if necessary).

Alternatives

Commenters suggested that the following alternatives be analyzed in the SEIS.

- General comments requesting FWS to explore alternative routes that reduce or avoid impacts to various resources (e.g., Nebraska Sandhills).
- Use existing easements and already disturbed corridors (e.g., existing transmission line corridors, existing road corridors, etc.).
- Bury the transmission line as an alternative to an elevated powerline attached to towers to reduce impacts to resources (e.g., birds, wetland habitats).
- Revisit alternative routes there were previously studied.
- Consider a route that avoids degrading and impacting the most sensitive portions of the Sandhills.
- Avoid conservation easements, specifically the conservation easement on the Horseshoe Bar Ranch that will soon be the held by Nebraska Land Trust. The R-Line would cross the property near its crossing of the Dismal River along U.S. Highway 83. The easement is being acquired

through the Natural Resources Conservation Service (NRCS) Agricultural Easement Program (ACEP) and has qualified for the Grasslands of Special Environmental Significance (GSS) section of the program. If NPPD or any other entity proposes to condemn all or part of the easement for the R-Line, they will need to obtain approval from the NRCS.

- Suggestion that FWS conduct a full study of which the proposed route will minimize the environmental damage of the transmission line and any associated projects (wind and solar).
- Request for a route that does not impede additional views and uses no new space.
- Suggestion of an alternative that uses ultra-violet light to mitigate avian collision impacts with the transmission line.
- Suggestion of an alternative of off-site habitat restoration for species (e.g., whooping crane).
- Suggestion that the South Route be used or a route south (i.e., not going through Thedford) of the proposed route to reduce impacts on resources (e.g., wildlife, ABB).
- Suggestion that the Central Route be used to reduce impacts the Sandhills, ABB, and whooping crane.
- Suggestion to explore additional alternatives to avoid or reduce adverse impacts on O'Fallon's Bluff, or the Sand Hill Ruts, or both.
- A commenter stated that the FWS is obligated to consider not only those alternatives that NPPD asserts it is willing to ultimately adopt, but any alternatives that could satisfy the stated purpose of this action. The FWS, as the federal agency with discretion to issue or deny a legally necessary federal permit, has the duty under federal law to ensure that all reasonable alternatives for avoiding and/or minimizing harm have been thoroughly considered and disclosed in the SEIS, and that such options or measures have been adopted prior to FWS rendering any final decisions under the National Historic Preservation Act (NHPA) and the ESA. This means that as part of this decision-making process, FWS must consider even those reasonable R-Project routing alternatives with reduced impacts to affected resources that are outside of the corridors approved in 2014 by the Nebraska Power Review Board ("Board"). This is because NPPD could return to the Board and seek approval for additional R-Project routing corridors, especially given that more than eight years have passed and significantly more is known today about various relevant factors (including Whooping crane migratory paths and impacts to historic and cultural resources) that would be in front of the Board in any new proceeding to determine the most appropriate routing corridors.
- As the U.S. District Court already held in the prior litigation, FWS must, at minimum, consider all reasonable routing alternatives inside the corridors the Board approved in 2014. There are surely modifications that can be made by NPPD to its long-proposed route within the Board-approved corridors, which would avoid or reduce harm to affected resources (and in particular O'Fallon's Bluff and the Oregon-California Trail ruts).
- A commenter stated the FWS must in its SEIS consider a reasonable range of alternatives that NPPD could take to avoid or reduce impacts to affected resources—including alternatives that NPPD self-servingly states it would not ultimately accept—and they must be substantively different options, rather than slightly different transmission line tower options (monopole versus lattice) with no meaningful distinctions among the action alternatives. The commenter suggests that absent a full consideration of meaningfully different alternatives in the draft HCP

that are theoretically available (as well as in the SEIS), the FWS cannot lawfully issue any ITP for the R-Project.

- NPPD needs to disclose whether any part of the original final route will be changed.
- A commenter stated that the routes dismissed from further evaluation in the FEIS were technically and economically feasible.
- The FWS must not be constrained in its analysis by the preferred route of NPPD, nor blindly rely on its claims regarding the availability or feasibility of alternative routes.
- The FWS must analyze all potential ways to avoid impacts to wetlands, streams and rivers by limiting water crossings, locating them away from sensitive habitat areas, and using construction techniques and temporal limitations to prevent disturbance.
- NPPD has not set forth a compelling justification for placing the R-Project in this location when other financially viable options exist that would relocate the R-Project only a few miles east, thereby avoiding the major destruction of historic and cultural resources. In practice, this would mean re-routing the R-Project three miles further east from Gerald Gentleman Station and turning north on a route that was considered by NPPD at an earlier time. By going east this small distance, the habitat/setting of the Oregon Trail, Mormon Trail, and Birdwood Trails would be kept pristine and historic, and cultural treasures preserved for generations to come.

Commenters also expressed concern related to the no action alternative:

- The project is imperative for improving the reliability of Nebraska's transmission grid and avoiding congestion constraints and electricity shortages as electrical demand continues to increase.
- Without the project, irrigation customers would not be able to convert diesel-powered irrigation systems to electric, prohibiting beneficial environmental impacts.

Environmental Resource Areas

Water Resources

Commenters expressed concern with the following water resources issues:

- Potential for groundwater contamination (Ogalla Aquifer) from the project, including installation of helical piers in wetland areas, drilling at Freemont Slough, or by other means.
- Potential for adverse impacts on groundwater/water resources in areas where the water table is high (i.e., near the ground surface).
- Concern that recent long-term flooding would make construction, maintenance, and emergency repairs impossible and negatively impact landowners.
- Concern with clearing at locations where the project crosses water ways, including at Birdwood Creek, South Platte, North Platte, South Loop, Dismal, North Loup, Middle Loup, Calamus, and Cedar Rivers.
- Concern that adverse impacts on water resources would negatively impact wildlife that utilize them.

Wetlands

Commenters expressed concern with the following wetland issues:

- Potential for heavy equipment to damage sensitive wetland topography and cause irreparable harm to wetlands, particularly to swales, fens, and bogs.
- Concern transmission lines crossing sites protected by Wetlands Reserve Program would result in decreased habitat values for wetland-dependent bird and wildlife.

Vegetation

Commenters made the following suggestions regarding the vegetation resources analysis or expressed concern with the following vegetation resources issues:

- FWS must give serious consideration as to how the project would affect the largest remaining intact area of grassland (i.e., grassland would be divided into two isolated parts); this will have consequences for wildlife.
- Concern for adverse impacts on intact grassland regions given that they have critical importance to global grassland conservation efforts.
- Concern with spread of noxious weeds and cattle disease from vehicle use, and washing vehicles at county boundaries rather than landowner property boundaries.

Wildlife

Commenters made the following suggestions regarding the wildlife resources analysis or expressed concern with the following wildlife resources issues:

- General concern for potential impacts on birds protected under the Migratory Bird Treaty Act and compliance with that statute.
- General concern for bird collisions with transmission lines and towers and impacts to flight patterns.
- General concern the project will adversely impact migrating, breeding, and overwintering birds, as well as prairie chickens, bats, and other species local to the project area (e.g., sandhill crane).
- Concern that effects of the project on migratory birds have not been adequately studied.
- Concern that transmission lines will create perches and corridors for predators that will significantly reduce species population.
- Concern that clearing for the transmission line with destroy trees and habitats for bird and other wildlife species, particularly around North Platte River, Birdwood Creek, and Old Ford Road/Lower Platte Crossing.
- Concern that trumpeter swans and prairie chickens will lose habitat needed for foraging, nesting, and wintering.
- Concern that prairie chicken populations, as well as other grassland birds, will suffer due to their need for large and unfragmented habitat with various densities of grassland.

- Consider impacts to other regional taxa of conservation concern, develop a migratory bird conservation plan that is provided to the public to comment on, and analyze impacts to wildlife at each point the project crosses a water way.
- Consider species other than the American Burying Beetle in the SEIS and ensure alternatives that would minimize and mitigate any potential harm to such species are being considered.
- Additional measures for mitigating bird collisions are needed as those identified in the Migratory Bird Conservation Plan, including Bird Flight Diverters and bird deflectors, are not adequately effective.

Commenters specifically expressed concern with the following Greater Prairie-Chicken issues:

- The Sandhills provides habitat for the only prairie-chicken species not listed as endangered or threatened, making it a valuable resource.
- Greater Prairie-Chickens require unfragmented habitat and varying grassland vegetation heights to complete its life cycle.
- Transmission lines can negatively impact Greater Prairie-Chicken survival and movement as they avoid power lines and roads.
- Collision mortality events associated with transmission lines have been documented for Greater Prairie-Chickens who would benefit from buried transmission lines.

Special Status Species

Commenters made the following suggestions regarding the Special Status Species analysis or expressed concern with the following Special Status Species issues:

- Whooping Crane
    - General concern of the R-Project's potential impact on the species, including potential for take and not including the species in the HCP.
    - Analysis of the species should be included in the SEIS.
    - The SEIS analysis should include the best available science and the most recent and up to date information on whooping crane, including any recent electronic tracking data and recent studies (e.g., study by Dr. Craig Davis at Oklahoma State University).
    - Consider the 2018 study by Pearse et al. and 2017 study by Gil and Weir in the analysis.
    - Concern with collisions with the transmission line, including specific areas along the proposed route (e.g., Birdwood Creek).
    - Potential impacts on the flyway and avoidance of transmission line and related effects, including:
        - Changes to feeding and breeding behavior, including how Whooping Cranes move within and between wetlands in search of food, water, and secure roosting locations.
        - Forced temporally and spatially longer flights in the search of suitable habitats, or roosting and foraging closer to anthropogenic structures.

        - The increased likelihood of collisions with anthropogenic structures due to an expenditure of energy reserves and flying during low light conditions due to temporally and spatially longer flights.
    - Avian collision systems should be considered to reduce impacts of the transmission line (e.g., ultra-violet light systems).
    - The SEIS should strongly consider robust mitigation and habitat restoration should be considered to offset impacts.
    - Transmission line burial should be considered in high traffic wetland areas.
    - Flight diverters should not be considered as they are found to be only 50% effective.
    - Include potential impacts from any related wind energy projects.
    - One commenter commissioned a 2-year study to calculate whooping crane take from the R-Project. Publication is forthcoming and is titled "Potential Effect of the Proposed R-Project Transmission Line on the Aransas/Wood Buffalo Whooping Crane Population" (Barzen et al 2022). The study concluded with 62.8% probability that take (just over one) of whooping crane would occur from the R-project. The FWS should consider this information.
- Piping Plover
    - Demonstrate that the R-Project would not result in take for other federally listed species (e.g., piping plover).
    - Conduct or commission a take probability analysis the Piping plover that includes a collision assessment which attempts to estimate the probable risk of take and examines the direct and indirect impacts of the R-project.
- Eagles
    - Concern with protected species around Birdwood Creek, including bald eagles.
    - Concern that the R-project will result in take of golden and bald eagles.
    - Forecast based on best available understanding the anticipated risks potential future development projects would pose to bald and golden eagles.
- American Burying Beetle
    - Concern with potential impacts of the project on American burying beetle and their habitat, and mitigating for impacts.
- Migrating Birds
    - Concern that the R-project and any potential future development will cause major adverse impacts to and result in take of migratory birds.
- Northern Long-Eared Bats
    - Concern the R-project would have significant adverse impacts to northern long-eared bats.
    - Concern potential future development projects, including wind farms, would result in habitat disturbance and mortality of hundreds of northern long-eared bats.
    - Include an analysis of potential indirect and cumulative impacts to the federally endangered northern long-eared bats in the SEIS.

- Other Special Status Species
    - Concern that the R-project will negatively impact the Blanding's turtle, destroying the fragile ecosystem making up its habitat.
    - Concern the project would likely result in harm to Endangered Species Act protected birds, including red knots.
    - Concern with potential impacts on other federally listed species (e.g., northern long eared bats, piping plover) and protected species (e.g., Bald and Golden eagles) from the project and related infrastructure facilities (e.g., wind turbines).
    - Concern that clearing for the transmission line will destroy habitats for special status species (e.g., bald eagles, nesting bald eagles, piping plovers, terns etc.) along the North Platte River, Birdwood Creek, and Old Ford Road/Lower Platte Crossing.

Land Use

Commenters made the following suggestions regarding the land use resources analysis or expressed concern with the following land use resources issues:

- Potential damage to conservation values where the project crosses conservation easements.
- Concern that construction of towers will make cause blowouts and clearing of trees will create wind tunnels, ultimately making land unusable to raise cattle on.
- Concern land developed for hunting will no longer be usable.
- Concern for negative impacts to Natural Resources Conservation Service (NRCS) Conservation Stewardship Program (CSP) lands protecting species including the American Burying Beetle.
- Concern that efforts to secure portions of properties along the project's route threaten ranchers and would permanently devalue land along the route.
- Concern electrical magnetic energy will affect grazing and reproduction patterns of cattle and horses.
- Concern that not moving forward with the project would prohibit energy suppliers from meeting the electricity needs of agricultural customers who would experience electricity shortages and negative impacts to their ability to use the landscape for agricultural purposes.
- Concern with spread of noxious weeds and cattle disease from vehicle use, and washing vehicles at county boundaries rather than landowner property boundaries.
- Concern with constructing the project on areas previously damaged by the Bovee fire that has been put into U.S. Department of Agriculture Farm Service Agency set aside programs.

Recreation and Tourism

Commenters express the following concerns for recreation and tourism:

- Several commenters expressed concern with the project's potential impact on tourism, including reduced visits and revenues:
    - Ecotourism related to the wildlife (e.g., whooping crane viewing) and natural habitats of the Nebraska Sandhills, including in those in Lincoln County.

- Heritage tourism related to historical sites, particularly in Lincoln County.
- Ranchers, Airbnbs, bed and breakfasts, campgrounds, hotels, and motels who host travelers who visit to experience ranches, bird watch, stargaze, and see the unique open spaces of the Sandhills.

Cultural Resources

Commenters made the following suggestions regarding the cultural resources analysis or expressed concern with the following cultural resources issues:

- General concern with the impacts the project will have on historical and cultural sites.
- Potential impacts to the Oregon-California National Historic Trail, Mormon Pioneer National Historic Trail, and Pony Express Trails (collectively the Trails); and the trail ruts and significant historical sites associated with the Trails (e.g., O'Fallon's Bluff).
- Concerns that the intrusion of the transmission line towers and power lines will fundamentally change the character, setting, feeling, and historic value of the Trails and associated historical sites.
- Concern that the visual impact to the Trails would jeopardize the ability of the Trails to remain at a Class 1 ranking status.
- Concerned with the FWS' execution of the Section 106 process and potential lack of transparency and diligence in the Section 106 process, as well as exclusion of parties in the process and lack surveys of land parcels.
- Concerned with potential impacts on Birdwood Creek Archeological Site – 25LN113 (potentially eligible for the National Register under Criterion D). Additional investigations are recommended if soils disturbance is to occur in this area.
- Concern about whether the Area of Potential Effect is adequate and captures the appropriate areas along the 225 mile transmission line.
- Concern with potential impacts on the Birdwood Creek valley – a traditional route for ancestors of the native indigenous people; archaeological sites in the valley indicate various people-groups utilized the area.
- Concern with native graves in that the project area that could be affected by the project.
- Concern the project would go through the visible remains of the first sod schoolhouse in the north end of Garfield County. The Garfield County Historical Society has marked the location with a nearby sign.
- Concern with potential impacts on the historical remnants of the early Nebraska homesteaders.
- Concern with potential impacts on Native American campgrounds along Birdwood Creek (confirmed by State Historical Preservation).
- Concern with potential impact on Native American artifacts (arrowheads, spear points, metal objects) and burial sites around the bluffs.
- A commenter stated the FWS must ensure that NPPD to avoid, minimize, or mitigation adverse effects on historic properties (36 CFR 800.1(a)) and shall ensure that a broad range of alternatives are considered to avoid or minimize impacts to affected resources (36 CFR

800.1(c)). FWS must consider under the NHPA routing alternatives both outside the Nebraska Power Review Board (Board)-approved corridors and inside the Board-approved corridors that could reasonably achieve the R-Project's purpose while avoiding or reducing impacts to O'Fallon's Bluff, trail ruts along the Oregon-California Trails, the Mormon Pioneer Trail, and the Pony Express Trail.

- Concern the R-project would damage the view of a protected property with historical value as it makes up a part of the Black Ranch, the subject of a book by Roe R. Black, *The Horseshoe-Bar Ranch (Remembering a Prairie Childhood*).

Visual Resources and Aesthetics

Commenters expressed concern that transmission towers would adversely impact the viewshed of the Lincoln Highway Scenic & Historical Byway, the Sandhills Journey National Scenic Byway, and other historical and culturally significant sites.

Health and Safety

Commenters made the following suggestions regarding the health and safety analysis or expressed concern with the following health and safety issues:

- General concern that construction and maintenance of transmission lines will cause fires, with risks exacerbated by the project area's extreme winds, tall prairie grass, remoteness, and few fire departments.
- Concern with constructing the project on areas previously damaged by the Bovee fire.
- Concern that significant amounts of high frequency currents and electromagnetic radiation will harm human health.
- Concern that tree clearing in wide corridors would exacerbate extreme winds and produce unsafe driving conditions on the Nebraska Interstate System.

Socioeconomics

Commenters expressed concern with the following socioeconomic issues:

- Concern that landowners and ranchers will have to take on an undue burden of fixing damage caused by heavy equipment on the Sandhills, as well as financial burdens from the loss of shelter belts and changes in bale-yards and calving lots.
- Suggestion that FWS require a specified course of action from NPPD in the case of fires started by transmission lines to avoid financial burdens that would otherwise be put on ranchers.
- Concern that small towns and local economies will suffer due to negative impacts on trails, ranching, and tourism businesses, as well as people migrating out of the Sandhills.
- Concern that those who have chosen to live rurally will no longer be able to remain isolated from industrial projects.
- Concern that not moving forward with the project would force agricultural customers who rely on energy providers to experience electricity shortages, negatively impacting their ability to use the landscape for agricultural purposes and the agricultural economy as a whole.

Sandhills Ecosystem

Commenters made the following suggestions regarding the Sandhills ecosystem analysis or expressed concern with the following Sandhills ecosystem issues:

- Concern that due to the fragile nature of the Sandhills, damage to habitat, surface, soil, and grass, including ruts and blowouts, will be long-lasting or permanent.
- Concern with the project route fragmenting the Sandhills' grasslands as they protect storage of fresh water, provide habitat to species, and represent an incredibly unique ecological resource.
- The SEIS must evaluate how the project will adversely affect the ecosystem services the Sandhills provide.
- Require NPPD to purchase or preserve undeveloped off-site lands to offset harm to the Sandhills.
- Concern with constructing the project on areas previously damaged by the Bovee fire that has been put into U.S. Department of Agriculture Farm Service Agency set aside programs.
- Concern the impact current issues of drought and flooding could have, including:
    - Concern the natural grasses of the Sandhills have already been significantly damaged by blowing sand because of ongoing drought and would only be further damaged by the R-Project.
    - Concern the negative effects to the Sandhills would be significantly increased in light of the preceding flooding of the present drought.
    - Concern for the potential future scenario where multiple transmission line locations could be in feet of standing water caused by significant flooding, prohibiting any necessary construction, maintenance, or emergency repairs and negatively impacting landowners.

Cumulative Effects[2]

Commenters expressed concern over the increased likelihood of other development (e.g., renewable energy) to occur in relation to the R-Project:

- Commenters expressed concern that the R-Project would make it more likely for wind-energy development to occur in the area (e.g., Cherry County), which would result in cumulative effects to wildlife and the environment (e.g., Sand Hills).
    - Wind turbines cause night-sky impacts from blinking lights.
    - More roads and increased traffic would occur from constructing and operating wind-energy development projects, which would also result in habitat loss and degradation and increased dust.
    - Installing wind turbines could impact the Ogallala Aquifer.

[2] For simplicity and in consideration of the nature of the scoping comments received, comments concerning the relationship between the R-Project and future development are summarized here under *Cumulative Effects.* The FWS will determine in the SEIS which effects from foreseeable development are analyzed as cumulative effects and which are indirect effects..

  - Wind energy development will impact threatened and endangered species (including whooping cranes), wetlands, habitats (e.g., clearing) migratory birds, bats, and other wildlife species.
  - In addition to turbines, wind energy projects would also include construction and operation of roads, distribution lines, and other impermeable surfaces, which would result in impacts to the environment (e.g., habitat clearing).
  - Impacts from wind-energy project decommissioning, including wind turbine disposal, should be considered.
- The SEIS should analyze the direct, indirect, and cumulative effects of wind-energy projects reasonably foreseeable to be constructed and interconnected to the R-Project.
- One commenter commissioned a study to determine the amount of wind generation that can be supported by a proposed transmission line in Nebraska and the number of wind turbines that would result.
  - The study evaluated the maximum number of new wind turbines that may potentially interconnect to the R-Project by determining the amount of megawatts (MW) that the R-Project can support reliably, considering different scenarios of transmission grid usage.
  - Based on the study result, the R-project could support 35 wind farms, from as few as 700 to as many as 1,400 turbines, and a total acreage occupied by wind farms ranging from 170 to 500 thousand acres.

Commenters noted that the SEIS should assess the extent of future wind-energy development to occur in relation to the R-Project, including estimating the number and location of future turbines and/or projects using best available information.

- Southwest Power Pool estimates reasonable proliferation of industrial wind related to R-Project.
- The scope of the action area for the purposes of NEPA, the ESA, and the NHPA should include any known or reasonably foreseeable locations of wind projects.
- The SEIS should reasonably forecast the location for foreseeable wind energy development using the best available understanding of where wind energy is most profitable along the R-Project route.
- The SEIS should at minimum analyze the nature of the impacts from foreseeable future wind-energy development where there is uncertainty as to the location of future wind-energy projects.

Appendix C
Responses to Comments

Introduction

This appendix presents the following.

- A summary of the public review process (also described in Final SEIS Section 1.8.2, *Draft Supplemental Environmental Impact Statement Public Comment Period*).
- A description of the general approach to responding to comments.
- An index of comments received on the Draft SEIS and Revised HCP.
- Summaries of the substantive comments received on the Draft SEIS and Revised HCP followed by responses.

Original copies of comment letters submitted to the Service are not included in this appendix but can be viewed as follows.

- Visit https://www.regulations.gov.
- Enter Docket ID: FWS-R6-ES-2014-0048 into the home page search bar.
- Select the Environmental Impact Statement and Habitat Conservation Plan for the R-Project Transmission Line in Nebraska.
- Select "All Comments on Docket" to locate individual letters submitted. All comment letters have been entered by the commenter's name.

Summary of the Public Review Process

On February 9, 2024, the Service published a Notice of Availability in the *Federal Register* (FR) announcing a request for public comment on the Draft SEIS and Revised HCP. The Notice of Availability established a 60-day public review and comment period and provided details on how to submit comments and information about two in-person and one virtual public meeting. In response to public requests, on April 4, 2024, the Service granted a 30-day extension (87 FR 77877) to the review and comment period, increasing the public review and comment period to 90 days. The comment period closed on May 9, 2024.

The Service held one in-person meeting on February 27, 2024, at the Prairie Arts Center in North Platte, Nebraska and another on February 29, 2024, at Mid Plains Community College in Broken Bow, Nebraska. The Service also held a virtual public meeting on March 7, 2024. All public meetings included a presentation with information on the Draft SEIS and Revised HCP, how to provide comments, and next steps in the NEPA process. The virtual meeting presented the same information as the in-person meetings. Following the presentation, the Service took questions from the public and provided the opportunity to give verbal public comments, which were transcribed by a court

reporter. The Draft SEIS, public meeting presentation, and a recording of the virtual meeting are available online at https://www.fws.gov/project/r-project-transmission-line.

To ensure accessibility, the recording of the virtual public meeting is available at the following library locations:

- North Platte Public Library, 120 W 4th St, North Platte, NE 69101;
- Thomas County Library, 501 Main St, Thedford, NE 69166; and
- Taylor Public Library, 106 William St., Taylor, NE 68879.

Also available at the public libraries listed above are hard copies of the following documents: Draft SEIS; Draft SEIS Appendices; Draft HCP with Appendices; Draft Migratory Bird Conservation Plan; and 2019 Final EIS.

In addition to verbal comments at public meetings, comments were accepted electronically via www.regulations.gov on Docket No. FWS-R6-ES-2014-0048 and via mail at: Public Comments Processing; Attn: Docket No. FWS-R6-ES-2014-0048; U.S. Fish and Wildlife Service Headquarters, MS: PRB/3W; 5275 Leesburg Pike, Falls Church, VA 22041–3803.

Approach to Responding to Comments Received

All written and verbal comments were reviewed and considered in the development of the Final SEIS and the response to comments in this appendix. Each comment letter was given a unique ID and the contents of the letter were reviewed and coded by topic to allow grouping of similar comments. Comments were reviewed in the exact form in which they were provided by commenters. If a comment letter contained an attachment, the information in the attachment was reviewed, considered, and responded to if it provided substantive issues related to the Draft SEIS and Revised HCP.

Each comment or group of comments on a topic were then summarized and responded to. The responses to comments provided in this appendix represent the Service's best effort to review and consider the substantive comments, suggestions, and information provided by the commenters carefully and objectively. At the Service's request, NPPD provided input on responses to comments on R-Project design and the contents of the Revised HCP.

During the process of reviewing and responding to comments on the Draft SEIS and Revised HCP, revisions and clarifications were made to the Final SEIS and Revised HCP. These changes are referenced in the responses in this appendix. Additionally, Final SEIS Section 1.8.3, *Changes Between the Draft and Final SEIS*, describes the changes between the Draft and Final SEIS.

Indices of Commenters

The following index tables present the written and verbal comments received by commenter type: federal agencies (Table 1), local agencies and governments (Table 2), organizations and businesses (Table 3), and general public (Table 4).

The index tables provide the comment identification number, commenter name, and organization name, if applicable. Each individual comment was assigned a unique comment identification number corresponding to the last three digits of the comment's document ID from Regulations.gov.

Table 1. Federal Agencies

Comment Identification Number	First Name	Last Name	Organization Name
334	David	Cozad	U.S. Environmental Protection Agency

Table 2. Local Agencies and Governments

Comment Identification Number	First Name	Last Name	Organization Name
283	Rick	Nelson	Custer Public Power District
284	Mike	Lammers	Cedar-Knox Public Power District
307	Bruce	Vitosh	Norris Public Power District
321	Roger	Guggenmos	Blaine County Commissioner
322	Craig	Thompson	Blaine County Commissioner
323	Michael	Peterson	Blaine County Commissioner

Table 3. Organizations and Businesses

Comment Identification Number	First Name	Last Name	Organization Name
278	Darin	Bloomquist	Nebraska Electric Generation & Transmission Coop Inc.
326	Linda	Tacey	Sutherland Historical Society
338	Kristal	Stoner	Audubon Great Plains
353	Alexander	McWhirter	Ducks Unlimited
354	William	Eubanks	Eubanks & Associates
359	Art	Wiese	Nebraska Public Power District

Table 4. General Public[a,b]

Comment Identification Number	First Name	Last Name
273	Anonymous	Anonymous
274	Melanie	Coffman
275	Glenda	Phipps
276	Erik	Lingren
277	Jennifer	Galindo
279	Michelle	Swanson
280	Anonymous	
281	Anonymous	

Comment Identification Number	First Name	Last Name
282	Gordon	Moshman
286	Brent	Steffen
287	Beth	Ogle
288	Stephanie	Webb
289	Joseph	Knapik
290	Kaye	Einspahr
291	Robert	Beatty
292	Barb	Otto
293	Jeb	Barzen
294	Mark	Kirby
295	Margaret Ann	Neal
296	Anonymous	
297	Joy	Miles
298	Bette	Nygren
299	Jennifer	Miller
300	Ann	Moshman
301	Craig	Miles
302	Caleb	Miles
303	Steven	DeLawyer
305	Wanda	Simonson
306	Barbara	Netherland
308	Paul	Morrison
309	Alison	Krohn
310	Anonymous	
311	T	P
312	David	Hutchinson
313	Susan	Hutchinson
314	Sarah	Drenth
315	Jared	Drenth
316	Erwina	Peterson
317	Shauntel	Hutchinson
318	Anonymous	
319	Bill	Roberts
320	Anonymous	
324	Dan	Welch
325	Carol	Lewis
327	Sue	Switzer
328	Dan	Melton
330	Amy	Ballagh
330	Amy	Schneidereit

Comment Identification Number	First Name	Last Name
330	Amy	Warren
330	Barb	Welch
330	Barbara	Netherland
330	Bill	Manning
330	Brent	Steffen
330	Craig	Miles
330	Dan	Welch
330	David	Hutchinson
330	Gary	Phipps
330	Ivan	Schneidereit
330	Janet	Steffen
330	Jon	Hill
330	Kay	Wolfenden
330	Lemoyne	Dailey
330	Lynn	Ballagh
330	Matt	Fritz
330	Melanie	Kaufman
330	Merrial	Rhoades
330	Robert	Bernt
330	Shaylee	Scranton
330	Stuart	Scranton
330	Hutchinson	Hutchinson
330	Tom	Witt
330	Tracy	Bradley
330	Trent	Loos
330	Twyla	Witt
330	Vern	Friesen
330	Wanda	Simonson
330	Wayne	Eatinger
331	James	Haugland
332	Anonymous	
333	Glenda	Phipps
335	Amy	Schneidereit
336	Ivan and Amy	Schneidereit
337	Tracy	Bradley
339	Brent	Steffen
340	Anonymous	
341	Anonymous	
342	Jon	Gierhan
343	Barry	Keslar

Comment Identification Number	First Name	Last Name
344	Janelle	Skinner
345	Anonymous	
346	James	Fleecs
347	Debra	Sitz
348	Allison	Stark
349	Gary	Phipps
350	Mark and Myrna	Betson
351	Amber	Fleecs
352	Anonymous	
355	Anonymous	
356	James	Ducey
357	James	Ducey
358	Janet	Steffen
360	Amy	Ballagh
361	Pam	Moody
362	James	Ducey

[a] For those who provided their comments at the in-person or virtual public meetings, as well as one of the other options provided, the names may be included twice.
[b] The same comment identification number is listed for those who provided comments at either of the two in-person or one virtual public meetings, although each comment was reviewed individually.

Responses to Comments

1 Overarching

1.1 Public Comment Period Extension and Public Meetings

Summary

Multiple commenters requested an extension of the public comment period or noted concerns with their ability to review all materials provided in the allotted comment period.

Commenters also expressed concerns with the locations of and notifications about the public meetings for the Draft SEIS. Suggestions included that there should have been public meetings held in Thedford, Burwell, and Clearwater. One commenter noted that the letter notifying the public of the public meeting dates and times was not received far enough in advance. Some commenters expressed confusion and frustration about viewing the virtual meeting and availability of meeting recordings at local libraries.

One commenter expressed concern about the format of the meetings, stating that the Service staff were not allowed to answer questions at the public meetings and that the Service does not provide written feedback to inquiries about the project in an attempt to avoid including responses as part of Freedom of Information Act requests.

Response

The Service originally provided a 60-day comment period from February 9, 2024, to April 9, 2024 (89 FR 9171). To facilitate the public's review of the Draft SEIS and HCP, the Service held in-person public meetings on February 27 and 29, 2024, and a virtual public meeting on March 7, 2024. In consideration of public comments received during in-person public meetings, the Service then extended the comment period through May 9, 2024, for a total of 90 days (89 FR 24025). The PowerPoint presentation and a recording of the virtual public meeting were made available online at the following link: https://www.fws.gov/project/r-project-transmission-line.

Notification of these public meetings was sent to project contacts via email and physical mail on February 8, 2024. Additionally, the Service issued a press release including information on the public meetings to a wide range of media outlets in the project area and outlying areas.

The meeting recording and hard copies of all publicly available documents (i.e., Draft SEIS, Draft Revised HCP, and Draft Migratory Bird Conservation Plan) were all made available at the following local libraries after the public meetings:

- North Platte Public Library, 120 W 4th St., North Platte, NE 69101
- Thomas County Library, 501 Main St., Thedford, NE 69166
- Taylor Public Library, 106 William St., Taylor, NE 68879

At all three public meetings, members of the public were provided time to give verbal public comments, which were transcribed and submitted into the project record as official public comments. Verbal comments were limited to three minutes each to allow time for all attendees who wished to provide comments to do so. All comments provided verbally at these public meetings, as well as comments submitted in writing via Regulations.gov or by mail, are summarized and responded to in this appendix. There was also an open question and answer session at each public meeting, during which members of the public could ask questions to the Service representatives, who provided answers or directed the public to relevant information in the Draft SEIS.

1.2 Opposition to Public Meetings

Summary

One commenter expressed opposition to the public meetings, stating that this process already occurred in the past and that information submitted during the previous public comment period on the 2014 Draft EIS should be reviewed.

Multiple commenters submitted requests for the Service to review comments submitted during previous comment periods, including the public comment period for the Draft EIS in 2014 and the scoping period for the Draft SEIS in 2022.

Response

The Service determined that both in-person and virtual public meetings during the Draft SEIS comment period were appropriate (43 Code of Federal Regulations [CFR] 46.435). As stated in Draft SEIS Section 1.1, *Introduction*, the SEIS incorporates by reference where applicable information from

the FEIS information (43 CFR 46.120). This includes the responses to and consideration of public comments received on the 2014 Draft EIS in developing the 2018 Final EIS.

Regarding the resubmittal of scoping comments submitted during the 2022 scoping period for the Draft SEIS, the Service considered these comments in preparation of the Draft SEIS. SEIS Section 1.8, *Public and Agency Involvement*, summarizes the scoping process, and SEIS Appendix B*, Scoping Summary,* contains details on the public outreach, virtual meetings, and scoping comments. SEIS Chapter 5, *Summary of Submitted Alternatives, Information, and Analysis,* contains a summary of alternatives, information, and analysis submitted during scoping and considered in the development of the Draft SEIS.

1.3 Public Input on R-Project Siting

Summary

One commenter expressed concern with the process followed by NPPD to identify its preferred route, specifically stating that NPPD did not sufficiently consider public input in determining its final route.

Response

FEIS and SEIS Section 2.2, *NPPD Process for Selecting Its Final Route*, describes the process NPPD followed to identify its preferred route for the R-Project. SEIS Appendix C, *Nebraska Public Power District Summary of the Power Review Board and Transmission Line Routing Process*, provides additional information on NPPD's process.

As stated in FEIS Section 2.2, "the public was involved during all phases of the routing and siting process, and NPPD received and evaluated more than 2,500 public comments during this process."

SEIS Appendix D*, Nebraska Public Power District Summary of the Power Review Board and Transmission Line Routing Process*, describes that NPPD held public meetings during development of the R-Project in January 2013, September 2013, April and May 2014, and November 2014. Comments were solicited and recorded at each round of public meetings. Input from the public was incorporated into the screening criteria used to evaluate and screen potential routes.

1.4 Require Whooping Crane to be a Covered Species

Summary

Multiple commenters requested that the Service require NPPD to include whooping crane as a covered species in the HCP or deny the incidental take permit (ITP). One commenter noted that "neither NPPD nor the Service may ignore impacts to any listed species that are likely to result from the Service's authorization of an action that otherwise would not occur."

One commenter stated that "justification provided in the DEIS for not requiring whooping cranes to be treated as a covered species under the permit is insufficient" and that "the Final EIS should discuss the Service's rationale for not requiring NPPD to apply for a permit for the whooping crane, even though the R-Project transmission line and its placement within the Central Flyway presents a long-term collision risk."

Some commenters provided general statements that whooping crane should be included as a covered species, while others provided specific rationale.

Some specific concerns expressed by the commenters pertained to the R-Project's routing:

- To avoid take of the whooping crane, NPPD needs to move the route to comply with FWS Region 6 guidelines (i.e., avoid construction within 5.0 miles of designated critical habitat and documented high-use areas).
- The R-Project route is sited in the middle of the Central flyway.

Other comments pertained to the data used in the Service's effects analysis:

- NPPD and the Service disregarded certain data sources on crane collisions with power lines (i.e., data on 8 unverified crane sightings, telemetry studies; GPS data) in their determination of effects on whooping crane;
- An updated study should be completed to review the effects of the R-Project on whooping crane, including a review of the 2018 study conducted by the Service;

Other comments noted concerns with the interpretation of the quantitative effects analysis for whooping crane:

- The risk of collision is greater than 0%, and therefore NPPD should request an ITP for whooping crane.
- "Half a death/take" of whooping crane should be considered take of a whooping crane.
- Referencing the findings of Barzen et al. (2023) and considering types of effects other than collision, the probability of whooping crane take is significantly higher than 62.8% (i.e., the finding of Barzen et al. (2023) at a 95% confidence level).

Other comments pertained to types of effects considered in the effects analysis:

- The Service must consider the potential for sublethal take (i.e., injury, harassment, and harm) of whooping crane, including consideration "not only of collision mortalities from the R-Project standing alone, but also injuries (i.e., wounding) that are likely to occur via collision with the R-Project, as well as harassment and harm."
- The Service must consider the combined probability of "death, injury, harassment, and harm from the wind energy facilities (and their associated distribution lines) that will interconnect with the R-Project and are thus indirect effects of the Service's action."

Response

In an HCP, the Service requires applicants to: 1) include as covered species all wildlife species listed as threatened or endangered under the Endangered Species Act (ESA) for which incidental take is reasonably certain to occur unless take is addressed through a separate ESA mechanism, or 2) to explain or demonstrate in the HCP why take is not anticipated or will be avoided during implementation of covered activities (FWS and NMFS 2016). An applicant may exclude activities

from being covered if measures that eliminate the likelihood of take are included in the project design (FWS and NMFS 2016).

NPPD's R-Project HCP covers one species, American burying beetle (ABB) (*Nicrophorus americanus*), and includes avoidance measures for all other ESA-listed species that occur in the R-Project study area. As described in Revised HCP Section 1.5, *Considered Species,* whooping cranes were considered an "Evaluated Species," which are species for which authorization of incidental take is not being requested because take will be avoided through measures described in HCP Chapter 4, *Potential Effects to Evaluated Species*. HCP Section 4.1, *Whooping Crane*, analyzes potential effects on whooping crane from construction, operation, and maintenance of the R-Project and demonstrates why take of the whooping crane is not reasonably certain to occur. The Service provides additional analysis of the whooping crane in SEIS Section 3.7, *Special Status Species*, which analyzes effects on whooping crane in the context of NEPA. FEIS Table 3.1-2 (incorporated by reference into the SEIS) provides the effect thresholds used to evaluate the intensity of effects on resources analyzed in the FEIS, including special status species such as whooping crane. As noted in SEIS Section 3.1.4.2, *Environmental Effects*, a change was made to clarify the definition for low-intensity impacts on special-status species. Based on the intensity definitions, effects on whooping crane from the R-Project would be of low intensity, which corresponds to the Service's determination that take of whooping cranes from the proposed transmission line is not reasonably certain.

The Service conducted an intra-Service consultation pursuant to Section 7 of the ESA, which analyzed the effects of issuance of the ITP on all listed, proposed, and candidate species, including the whooping crane, and will inform its decision on issuance of the ITP. Data used to develop each of these analyses—the HCP take analysis, the SEIS, and the intra-Service consultation—estimate collision risk over the 50-year permit term. If new or additional information emerges suggesting that risk of whooping crane take is reasonably certain to occur, NPPD agrees to seek to amend the HCP and permit for the R-Project to include the whooping crane as a covered species, as described in HCP Section 6.5.3, *Whooping Crane Adaptive Management*.

Regarding comments about routing that requested the R-Project route be moved to comply with the Service's Region 6 guidelines (i.e., avoid construction within 5.0 miles of designated critical habitat and documented high-use areas) and noted the R-Project's location in the Central flyway, the closest designated critical habitat for whooping crane is approximately 70 miles south from the proposed R-Project route that encompasses a portion of the Platte River. Documented high-use areas for whooping crane include but are not limited to the central Platte River; the North, Middle, and South Loup Rivers; the Niobrara River; and the Rainwater Basin Wetland Management District. High-use areas may also occur in other geographic regions in Nebraska where high-quality wetlands are concentrated, or large wetlands/lakes occur. Areas within 1 mile of the R-Project centerline have not been documented as high-use areas for whooping cranes. The Region 6 guidelines are, as stated therein, "general considerations that may apply to most, but not every situation within the whooping crane migratory corridor." For projects in the Central flyway, the Service recommends avoidance and minimization to reduce the likelihood of take of whooping cranes due to energy development in the migration corridor. The proposed action would include bird flight diverters on all 226 miles of the proposed R-Project, including reflective and glow-in-the-dark diverters in areas identified as areas of bird use during low-light conditions. Additionally, NPPD would mark 124 miles of additional transmission lines with bird flight diverters.

Regarding comments on the Service's use of certain data sources, numerous collision risk studies have been conducted over the last decade using available data. There were similarities and differences between them. The Reasonably Certain Knowledge (RCK) method established in Skorupa and Juliusson (2018), which was used in NPPD's analysis in Revised HCP Appendix D, *Whooping Crane Risk Analysis Review*, was the most comprehensive review and risk assessment, and it used the best scientific and commercial data available, including all previous studies, to inform its updated analysis. A 2019 peer review of the RCK method indicated that the Service's assessment and underlying assumptions were based on the best available science (FWS 2019).

Regarding concerns with the Service's determination that take of whooping crane is not reasonably foreseeable, the Revised HCP's analysis of collision risk shows that less than 0.5 whooping cranes would be anticipated to collide with the line over the 50-year permit term (NPPD 2025). The Service concludes based on these findings that there is no scientifically reliable evidence that take of whooping cranes from collision with the proposed R-Project is reasonably certain to occur. Regarding comments suggesting that Barzen et al. (2023) indicates that take of a whooping crane is reasonably foreseeable, the Service considered this report in its review. Barzen et al. (2025)[1] contains numerous methods that the Service does not support, as described in SEIS Appendix H, *Whooping Crane Technical Supplement,* and the response to Comment 7.3, *Whooping Crane Risk Analysis*.

Regarding the request for the Service to consider the potential for sublethal take of whooping crane, the Service's RCK analysis included available data for sublethal injuries to whooping cranes (see the response to Comment 7.3, *Whooping Crane Risk Analysis*). SEIS Section 3.7 considers potential loss of habitat as an effect of the R-Project, concluding that avoidance of the R-Project by whooping cranes would not impact feeding, reproduction, resting, migrating, or other factors to measurably alter the number of whooping cranes in the AWBP. Sublethal effects, to rise to the level of take by resulting in harm, would have to actually kill or injure wildlife by "*significantly impairing* essential behaviors, including but not limited to, feeding, breeding, and sheltering" (50 CFR 17.3). The Service's evaluation concludes there is no scientific evidence that sublethal take of whooping cranes is reasonably certain to occur.

Regarding the comment suggesting that the Service must consider indirect effects from wind energy facilities to determine whether take of whooping crane is reasonably likely to occur, the analysis of indirect effects from the related renewable energy projects (SEIS Section 3.1.3, *Related Renewable Energy Projects*) evaluates potential collision risk of whooping cranes with wind turbines and the effects of habitat loss from wind farms associated with whooping crane avoidance of habitat within 5 kilometers (km) of wind farms (SEIS Section 3.7). The Service's ability to assess effects is commensurate with the level of publicly available information about reasonably foreseeable wind projects. The Service also considered effects from wind energy projects in its intra-Service consultation pursuant to Section 7 of the ESA.

The Service concludes that there is no scientifically reliable evidence that take of whooping cranes from the proposed transmission line is reasonably certain to occur, and that effects from the proposed transmission line would be short and long term and low intensity.

[1] The study was finalized and published in May 2025, and references to this paper in the Service's responses to comments refer to the final version (Barzen et al. 2025).

1.5 Require Reroute

Summary

Commenters requested that the Service deny NPPD's ITP application and require the project to be rerouted for various reasons, including the R-Project's potential impacts on the Sandhills and to place the project in an area of greater need. Some commenters suggested that NPPD use a different method of permanent power generation (i.e., combined cycle natural gas or diesel turbine and battery storage) in Thedford or Ainsworth to increase energy reliability.

One commenter referenced discussions between the Service, Nebraska Game and Park Commission (NGPC), and NPPD early in the project development process, stating that the Service and NGPC were coerced to comply with NPPD's routing preferences despite these agencies' initial concerns about effects on the Sandhills ecosystem.

Response

The Service's role in permit issuance is to review the documentation provided by the applicant in their permit application, including the HCP, and determine if the proposed action meets the issuance criteria set forth in Section 10 of the ESA. As part of this process, the Service may either approve the permit, deny the permit, or approve the permit with conditions. However, the Service does not have the authority to require NPPD to implement reroutes or other modifications to its proposed project, such as a different method of power generation.

Revised HCP Section 1.2.1, *R-Project Purpose and Need*, provides context for the R-Project termination points, which influence the location and siting of the proposed route, (i.e., Gerald Gentleman Station, Thedford Substation, and Holt County Substation) and NPPD's purpose and need for the R-Project. The termination points were determined by the Southwest Power Pool (SPP) Notices to Construct issued to NPPD. As described in Revised HCP Section 1.2.1, the 2013 Notice to Construct was for "a new 345 kilovolt (kV) transmission line that will extend from NPPD's Gerald Gentleman Station (GGS) Substation north to a new 345 kV substation to be located in or near Cherry County, and then extend eastward to another new 345 kV substation to be located in Holt County, which is to interconnect with Western Area Power Administration's existing Fort Thompson to Grand Island 345 kV line that is located on the eastern border of Holt County" (NPPD 2025).

Regarding early discussions between NPPD, the Service, and the NGPC during development of the R-Project, these reflect opinions provided in early conversations about the R-Project. The Service has the responsibility to use the most up-to-date information to evaluate NPPD's permit application and the HCP in the context of the applicable regulatory requirements to make a decision on permit issuance.

1.6 Adequacy of HCP's Mitigation Strategy

Summary

Commenters expressed concerns about the validity of the mitigation approach proposed by NPPD in the HCP. Regarding the 594-acre mitigation parcel in Blaine County that was purchased by NPPD, one commenter states that it is "conjecture that this [mitigation parcel] would ever change and that this habitat would ever be lost" and that "true mitigation" for the effects of the R-Project would require the restoration of previously degraded ABB habitat. Additionally, the commenter expressed

concern that the size of the mitigation parcel was not adjusted despite the increased disturbance estimates between the 2018 HCP and the Revised HCP.

One commenter noted that the mitigation property is located directly adjacent to the proposed R-Project route and felt that this decreases its mitigation value.

One commenter expressed concern with the process used to determine the location and acreages of set-asides for mitigation and stated that the required mitigation area should be determined based on the full area of the transmission line plus a buffer (105 feet) to account for the potential impacts from electric and magnetic field (EMF) exposure.

Response

The HCP is the applicant's proposal for how to avoid, minimize, and mitigate take of the covered species (i.e., ABB). As part of their review of the HCP and associated documentation, the Service will evaluate whether the HCP, including its proposed mitigation strategy, meets the required issuance criteria. As part of this process, the Service may either approve the permit, deny the permit, or approve the permit with conditions.

Revised HCP Section 6.2.2, *Mitigation Measures,* explains that the mitigation acreage for ABB was determined based on the area of estimated temporary, permanent, and emergency repair-related impacts and corresponding mitigation ratios. Revised HCP Table 6-2 presents this information. Between the 2018 Final HCP and the Revised HCP, changes to the area of estimated disturbance resulted in a 207-acre increase in temporary disturbance and a 42-acre increase in disturbance from emergency repairs. Final SEIS Section 3.1 has been revised to clarify that estimates for disturbance from temporary access increased from 258 acres in the 2019 HCP to 527 acres in the Revised HCP. This change is largely due to the reclassification of overland travel for temporary access as a covered activity under the Revised HCP, meaning that overland travel is now considered temporary disturbance and NPPD is requesting incidental take coverage for this activity. Although the acreages of temporary disturbance from temporary access have changed, this activity would still have occurred under the 2019 HCP and its effects were analyzed in the FEIS. The Revised HCP also accounts for the mitigation needed for impacts that occurred under the ITP issued in 2019 (47 acres). Applying the mitigation ratios shown in Revised HCP Table 6-2 and 6-3, this results in an increase in the total area of required mitigation from 474 acres in the 2018 Final HCP to 557 acres in the Revised HCP. Although the total amount of required mitigation has increased, it remains within the size of the 594-acre mitigation parcel purchased by NPPD to provide mitigation.

Protection and management of the mitigation parcel is expected to provide long-term conservation benefits for ABB. Just under 33 acres of ABB habitat will be permanently affected by the R-Project, while the mitigation parcel will provide 594 acres of ABB habitat that is protected and managed in perpetuity. As stated in SEIS Section 3.7, *Special Status Species*, "the Service has approved this parcel as satisfying NPPD's mitigation obligations for take of ABB."

1.7 Sufficiency of Information for Permit Decision

Summary

One commenter questioned how the Service will make a permit decision on the R-Project, based on what they perceive as vague information in the HCP and Migratory Bird Conservation Plan (MBCP).

The commenter questioned how the Service can evaluate effects without final design information and cited the following phrases used in the Revised HCP and MBCP:

- "…temporary access routes will follow the existing landform contours in designated areas where *practicable*"
- "Fly yards/assembly areas and construction yards/staging areas will be located along existing access roads and in previously disturbed areas when *practicable*"
- "[F]inal designs have not yet been completed"

The commenter also noted generally the use of language such as "unlikely," "typically," "not anticipated," and "to the maximum extent practicable" and states that the use of such terms leave "loopholes" for NPPD to avoid accountability for damage to the Sandhills landscape.

The commenter expressed concern with the MBCP's characterization of effects on the Sandhills generally, as well as on grassland and migratory birds. The commenter disagreed with the characterization of effects in MBCP Section 5.1.2, *Potential Effects from Operation and Maintenance*, and stated that although most grasslands will be spanned, native habitat will still be altered and fragmented, adversely affecting native wildlife through effects such as increased nest predation, collision risk, displacement of individuals, EMFs, increased fire risk, and disturbance from access. The commenter suggested that the area (and corresponding impact) of displacement of native grassland birds and migratory birds is underestimated, questioning whether the Service finds this acceptable, and said that the Service should use "boots-on-the-ground" information to inform its decision on the R-Project.

Response

As part of its decision as to whether to issue the ITP, the Service will review NPPD's permit application, which includes the HCP and MBCP, to determine whether it meets issuance criteria. As described in the response to Comment *1.5, Require Reroute,* the Service may either approve the permit, deny the permit, or approve the permit with conditions. However, the Service does not have the authority to require NPPD to make modifications to its proposed project.

Effects of the proposed action and alternatives on grassland and migratory birds are considered in SEIS Section 3.6, *Wildlife,* and Section 3.7, *Special Status Species.* The MBCP was developed with input and review from multiple Service biologists but, because it is a voluntary plan, is not subject to formal approval by the Service.

With respect to the extent of project design, the quoted language that "final designs have not yet been completed" is included in Revised HCP Section 2.4.10, *Foundation Excavation and Installation*, in reference to the foundation design, not the location of ground disturbance. The final design for foundations cannot be completed until construction commences, as site-specific conditions encountered during construction must be considered. However, the preliminary locations of temporary access routes and work areas have been identified, and the effects of those project components have been analyzed in the SEIS. As noted in Revised HCP Sections 4.1, *Whooping Crane*, and 6.2.1, *Avoidance and Minimization Measures*, further refinement of work area siting will be conducted in the field during final design to attempt to further minimize impacts on affected

resources. As noted in FEIS Section 3.1.2, *Environmental Effects* (incorporated by reference into the SEIS):

> "NPPD continues to work with landowners to negotiate easements, which may result in minor adjustments to the preliminary design. However, NPPD would consider minor adjustments to the proposed route design only if these adjustments would not increase the total temporary and permanent disturbance amounts above those identified for the final route in the DEIS and FEIS and would not increase impacts to other sensitive resource areas (e.g., wetlands, cultural resources, biological resources)."

The location information provided for purposes of the NEPA analysis is sufficient to disclose the potential impacts of the project; when finalizing the design based on field work, the intent will be to maintain or reduce impacts.

1.8 Enforcement of Restoration and Mitigation Commitments

Summary

Two commenters asked how the Service will enforce NPPD's commitments to avoidance and minimization measures and restoration commitments and ensure compliance with the Nebraska Nongame and Endangered Species Act (NNESCA), administered by NGPC.

Response

As noted in FEIS Section 6.2, *Section 10(a)(1)(B) Process—Habitat Conservation Plan Requirements and Guidelines,* which is incorporated by reference into the SEIS, "[d]uring the post-issuance phase, NPPD will implement the HCP and conditions of the permit, and the Service will monitor NPPD's compliance with the HCP as well as the long-term progress and success of the HCP." NPPD will also be responsible for annual reporting requirements to the Service (Revised HCP Section 6.6, *Reporting*). If disturbance estimates or take estimates may be exceeded, NPPD will be required to notify the Service immediately. The Service has the authority to suspend or revoke ITPs if a permittee is not in compliance with the conditions of the permit, or with any applicable laws or regulations governing the conduct of the permitted activity (50 CFR Section 13.27; 50 CFR Section 13.28).

Revised HCP Appendix E, *Restoration Management Plan,* and Appendix G, *Compliance Monitoring Plan*, outline how NPPD will ensure implementation of avoidance and minimization measures and restoration commitments in the HCP. As stated in Compliance Monitoring Plan (CMP) Section 1.2, the CMP "was developed to ensure all avoidance and minimization measures stipulated in the HCP are adhered to. This CMP is to be implemented during the preconstruction and construction phases of the R-Project. This provides an on-the-ground approach to compliance during project development and is designed to facilitate successful implementation." The Restoration Management Plan (RMP) includes effectiveness monitoring, performance standards, and reporting requirements for restoration efforts. The Service and NGPC were involved in review of the HCP, RMP, and CMP. The Service will use reporting associated with the HCP, RMP and CMP to ensure compliance with avoidance and minimization measures identified in the HCP.

Regarding compliance with NNESCA, NPPD will implement the avoidance and minimization measures outlined in the HCP, which were identified with the intent to ensure compliance with NNESCA. As described in Revised HCP Section 1.6.7, a determination by NGPC of "may affect but is

not likely to adversely affect" for species protected under NNESCA was based on NPPD's implementation of avoidance, minimization, and mitigation measures outlined in NGPC's September 11, 2014, letter. Those specific measures identified for the HCP's covered and evaluated species have been incorporated into the HCP. Thus, NPPD's implementation of the HCP, which will be overseen by both the Service and NGPC, will ensure compliance with NNESCA.

1.9 Require NPPD to Eliminate Access to Two-Track Roads

Summary

One commenter requested that the Service require NPPD to eliminate the option of access to the R-Project via existing two-track roads and instead consider this a lack of access. The commenter explained that use of two-track roads would cause damage to carefully managed areas of landowners' private property, including fragile pasture tracks, and that it could create erosion ruts that are very difficult to repair.

Response

All overland access, including access using two-track roads, is considered in the estimates of temporary disturbance used in the HCP and SEIS analyses.

Two-tracks are existing travel paths where overland travel has already caused some level of disturbance. Depending on the extent of travel and type of equipment that may ultimately traverse these paths, the amount of disturbance along the two-tracks may increase because of R-Project construction, but using these paths avoids disturbance of previously undisturbed areas. As noted in the FEIS Sections 3.2, *Geology and Soils*; 3.4, *Wetlands*; 3.5, *Vegetation*; and 3.6, *Wildlife*, use of existing two-track paths is a way to reduce effects on some resources compared to the creation of new access routes. SEIS Section 3.7.2.1, *Proposed Action and Alternatives,* recognizes that use of two-tracks would have this effect for ABB and several other special status species. As described in Revised HCP Section 2.4.6, *Fly Yards/Assembly Areas and Construction Yards/Staging Areas,* the use of matting may be required to prevent soil erosion and sediment runoff or soil compaction in some areas.

Revised HCP Appendix E, *Restoration Management Plan*, includes NPPD's restoration plan that will be implemented following construction.

Regarding concerns about erosion from the use of two-track roads for R-Project activities, see the effects analysis in SEIS Sections 3.2 and 3.4. Also see the response to comment 5.1, *Construction and Maintenance Access,* for additional information in response to concerns about damage (i.e., blowouts and ruts) from equipment use in the Sandhills.

1.10 Take of ABB from Ranches

Summary

Two commenters stated that landowners have a right to maintain ABB that exist on their properties, as ranchers have spent years generating populations of beetles. One commenter expressed concern that issuance of the permit is intended to kill ABB in these areas, not remove them.

Response

Although NPPD is requesting an ITP for ABB, the Revised HCP also contains measures intended to avoid and minimize effects on ABB to the maximum extent practicable from all covered activities. Revised HCP Section 6.2, *Avoidance, Minimization, and Mitigation Measures*, details these measures. Additionally, landowners would be able to continue existing land management practices following the completion of construction and restoration from temporary disturbance on their properties.

1.11 Timely Permit Issuance

Summary

One commenter requested that the Service continue the environmental review on its current timeline and issue the Record of Decision in a timeline manner due to the need for the R-Project to provide electrical transmission reliability improvements, congestion relief, and renewable energy access.

Response

The Service recognizes the desire for timely issuance of the Record of Decision.

1.12 Timing of and Access to Rights-of-Ways

Summary

One commenter suggested that the Service should wait to proceed with the process until NPPD has all rights-of-way and contracts in place in case additional route changes are needed based on access agreements.

Response

The Service is evaluating the ITP application and related materials submitted by NPPD for the proposed R-Project. As part of this process, the Service considers the R-Project route as proposed by NPPD. If major changes to the R-Project were identified, including due to challenges obtaining rights-of-way, the Service would determine the appropriate approach to restarting the process for the permit application review, including the required environmental review process.

1.13 Changes in Disturbance from FEIS

Summary

One commenter requested that the Final SEIS be updated to describe that one of the reasons for the changes in disturbance areas between the 2018 HCP and the Draft Revised HCP is refinement in project design since the drafting of the 2018 FEIS.

Response

Final SEIS Section 3.1.2, S*ummary of Changes in Disturbance Areas*, has been updated to clarify the reasons for changes in disturbance areas between the 2018 HCP and the Draft Revised HCP.

1.14 In-Person Site Visits

Summary

One commenter expressed concern that no in-person site visits have been conducted to evaluate resources such as wildlife or water resources in the study area.

Response

Qualified NPPD staff or their consultants conducted various field visits and surveys for development of the HCP, including yearly ABB surveys and field verification of wetlands and listed plant habitat. During construction of the proposed R-Project, there would also be field efforts required at various points, including field verification to determine the locations of access routes, and preconstruction surveys to ensure compliance with various requirements and stipulations, including the HCP's avoidance measures for listed species and avoidance and minimization measures for non-listed species.

1.15 Area of Disturbance for Temporary Access

Summary

One commenter disagreed with the conclusions "in each of the documents" they reviewed, that temporary access routes required for maintenance of the R-Project would result in impacts that are temporary and low intensity, with specific concerns about the potential for erosion. The commenter stated that they think the number of miles of temporary access routes will be equivalent to the length of the transmission line (226 miles), given the characteristics of the Sandhills area.

Response

The SEIS incorporates by reference the FEIS, where relevant, and addresses the effects of temporary access routes throughout Chapter 3, *Affected Environment and Environmental Consequences*. In some sections, effects are described as both long term and short term with low to moderate intensity (e.g., Section 3.4, *Wetlands*). SEIS Sections 3.2, *Geology, Mineral Resources, Paleontological Resources, and Soils*, and Section 3.5, *Vegetation*, discuss the effects of temporary road access on soils and vegetation in the study area, including from erosion.

The HCP estimates temporary access requirements based on anticipated construction needs, which total 527 acres of disturbance from temporary access and 26 acres of disturbance from permanent access. These areas were calculated based on an assumed 16-foot width of temporary access routes that would cover approximately 272 miles of temporary access routes (Revised HCP Section 2.4.5, *Access for Construction*).

Revised HCP Section 2.4.14, *Construction Contingency*, describes the HCP construction contingency, which addresses instances where additional work that could not have been foreseen at the time of HCP development is required. Examples of such work include the relocation of an access route developed for construction. This contingency includes a maximum of 40 acres of additional temporary disturbance.

Revised HCP Appendix E, *Restoration Management Plan,* provides assurances that impacts from temporary access routes will remain temporary, as the plan includes effectiveness monitoring and subsequent management actions to be taken if restoration milestones are not met.

1.16 Clarification on Road Crossings

Summary

One commenter requested clarification on the number of times the proposed R-Project route crosses Highway 83.

Response

The proposed R-Project route crosses Highway 83 eleven times.

1.17 Clarification on Covered Species

Summary

One commenter asked whether NPPD is requesting an ITP for the whooping crane.

Response

As described in Revised HCP Section 1.5, *Considered Species*, NPPD is seeking take coverage for one species: ABB. NPPD is not requesting an ITP for whooping crane.

1.18 R-Project Access Terminology

Summary

One commenter requested that the term "access road" be replaced with the term "access route" throughout the Final SEIS because this would be consistent with the 2018 FEIS and because the terminology would clarify that most of the proposed access would involve overland travel with minimal improvement, rather than new roads.

Response

The Final SEIS has been updated to reflect the use of the term "access route" rather than "access road" as appropriate.

1.19 Analysis of Future Renewable Energy Projects

Summary

Commenters stated that the impacts of future wind energy development should be included in the cumulative effects analysis, including the potential need for new network upgrades to the proposed R-Project transmission line.

One commenter stated the study area for cumulative effects was too limited, referring to Draft SEIS page 3.1-5, which described "a 7,039 square-mile (4,504,906-acre) area in Lincoln, McPherson, Logan, Hooker, Thomas, Cherry, Brown, Blaine, Rock, Loup, Garfield, Antelope, and Wheeler Counties."

One commenter stated that the Draft SEIS cumulative effects analysis "fails to account for the full array of stressors and impacts that will negatively affect whooping cranes and other migratory birds twice each year as they traverse the ever-growing gauntlet of transmission lines and wind turbines in these species' migratory flyway." The commenter stated that the cumulative effects analysis

should address “all known or reasonably foreseeable transmission lines, wind projects, and other bird-disturbing infrastructure located in this major migratory flyway” and the increased energy expenditure for whooping cranes and other migratory birds in the context of "the sheer number and size of transmission lines and wind turbines that currently exist or are proposed in this major migratory flyway.”

Two commenters stated that a cumulative impact analysis should include more than the 9 projects described in SEIS Section 3.1.

Response

The title and content of Final SEIS Chapter 4*, Effects in Addition to Environmental Consequences*, has been revised to reflect current NEPA guidance. SEIS Chapter 4 addresses additional wind energy projects that have not yet been initiated and that could occur over the life of the R-Project in the study area. SEIS Section 4.3, *Reasonably Foreseeable Future Actions*, incorporates by reference FEIS Section 4.3, *Reasonably Foreseeable Future Actions*. As stated in SEIS Section 4.3:

> Additional future renewable energy projects that have not yet been initiated could occur over the life of the R-Project in the study area. Therefore, the general development of future wind energy as a trend or type of action (as described in FEIS Section 4.3 and Table 4-3) is incorporated by reference into this SEIS.

The potential need for new network upgrades to the proposed R-Project transmission line is not considered reasonably foreseeable at this time and was not analyzed specifically in the FEIS, although similar types of actions were analyzed for electrical utilities in the study area and any impacts from future network upgrades are expected to be similar.

The study area for cumulative effects (in the Final SEIS, referred to as effects in addition to environmental consequences) is not described in SEIS Chapter 3, *Affected Environment and Environmental Consequences*, as asserted by the commenter. The commenter mistakenly referred to the description of the study area and analysis for the related renewable energy projects analyzed in SEIS Chapter 3. SEIS Section 4.1, *Methodology*, describes the study area for effects in addition to environmental consequences, which is the same as described for cumulative effects in FEIS Section 4.1, *Methodology*, and is incorporated by reference in the SEIS, with the exception of changes to the geographic scope based upon the revised study area for related renewable energy projects as described in SEIS Section 3.1.3, *Related Renewable Energy Projects*.

SEIS Chapter 4 incorporates by reference FEIS Chapter 4, which analyzed the potential impacts of other electric utilities and wind energy projects to birds and whooping cranes (FEIS Section 4.4.3, *Wildlife*, and FEIS Section 4.4.4, *Special Status Species*). The analysis in Final SEIS Chapter 4, *Effects in Addition to Environmental Consequences*, is separate, acknowledging and analyzing more projects than the nine related renewable energy projects analyzed in Chapter 3.

Commenters mistakenly referred to the analysis of the nine related renewable energy projects analyzed in SEIS Chapter 3 as indirect effects. The analysis in Chapter 4 is different and separate and analyzes more wind energy projects including those that are not known yet (SEIS Section 4.3).

1.20 Analysis of Thunderhead Wind Energy Center

Summary

One commenter suggested that the text regarding the Thunderhead project should be revised to clarify that one portion of Thunderhead operations, rather than the entire project, is considered an indirect effect of the R-Project.

Response

Final SEIS Section 3.1 has been updated to incorporate the commenter's suggested revision.

2 Alternatives

2.1 Consideration of Historic Properties in Siting the R-Project Route

Summary

Multiple commenters stated that NPPD disregarded potential effects on historic and cultural properties in its routing process. Specific comments include:

- The route change near O'Fallon's Bluff made in the Revised R-Project and HCP does not address concerns expressed throughout the project history about effects on historic properties and fails to meet the requirements of Section 106 of the National Historic Preservation Act (NHPA). One commenter stated that FWS and NPPD must "adopt" an alternative that avoids all effects on O'Fallon's Bluff or provide additional rationale as to why such an alternative cannot be adopted. The commenter also suggests that the Service must vet NPPD's assumptions "in order to satisfy its duty to ensure that NPPD has taken all necessary steps to 'avoid, minimize, or mitigate any adverse effects on historic properties,'" including but not limited to O'Fallon's Bluff.
- NPPD should "be required to actively pursue and objectively evaluate the impacts of all reasonable alternative routes for this line." The commenter stated that a viable alternative was evaluated by NPPD early in the project development process, referring to a map in Draft SEIS Appendix C, Exhibit 3, that would move the route approximately three miles east and avoid three specific historical sites.

One commenter stated that the Service should "vet the applicant's assumptions in order to satisfy its duty to ensure that NPPD has taken all necessary steps to "avoid, minimize, or mitigate any adverse effects on historic properties," and to "ensure... that a broad range of alternatives [are] considered" to avoid or minimize impacts on affected resources. Specifically, the commenter stated that FWS has a duty under NHPA to evaluate, validate, and verify NPPD's assertions of infeasibility of alternative routes or measures to avoid, minimize, or mitigate impacts on historic or cultural resources.

Response

The Service independently evaluated alternative routes to determine their reasonableness. Regarding the request that the Service and NPPD "adopt an alternative" that "avoids all effects" on historic properties, it is important to note that the Service's proposed action is the issuance of an ITP. The Service does not have the authority to require NPPD to modify its proposed route. The Service will evaluate NPPD's permit application against the issuance criteria for ITPs. The Service is

the decision-maker for the issuance of the ITP and does not have the authority to require the applicant to reroute its proposed project. Therefore, the evaluation of alternatives in the Draft SEIS informs the Service on their decision to either issue the permit, deny the permit, or issue the permit with specific conditions.

As described in Draft SEIS Section 2.7.2.1, *Alternatives Evaluated to Minimize/Avoid Effects on Historic Properties*, the Service identified multiple alternatives to minimize/avoid effects on known historic properties and evaluated them for consideration in the SEIS. These alternatives were determined not to meet the definition of reasonable alternatives for the reasons described in Section 2.7.2.1. The Service made the final determination on alternatives' feasibility by considering multiple factors, including NPPD's input on the technical and economic feasibility of alternatives. Regarding the suggestion to reconsider a route considered earlier in project development, the route provided by the commenter was developed and evaluated through NPPD's routing process as an alternate option to the proposed route. It was developed using the routing criteria listed in SEIS Appendix D, *Nebraska Public Power District Summary of the Power Review Board and Transmission Line Routing Process*, but was not moved forward, following discussion and feedback from community leaders, agencies, and the public.

The Service is also leading the NHPA Section 106 process parallel to the NEPA process. Final SEIS Section 3.10, *Cultural Resources*, has been updated to reflect the status of the Section 106 process at the time of Final SEIS publication. On January 13, 2026, the Department of the Interior approved the use of alternative procedures for compliance with Section 106 of the NHPA for the R-Project in response to the national energy emergency declared in Executive Order 14156. Based on the use of alternative procedures for compliance with Section 106, the Service is evaluating the measures that will be implemented to avoid, minimize, and mitigate adverse effects on historic properties, including tribal resources and TCPs (36 CFR 800.12(b)(2)).

Completion of the Final SEIS and Record of Decision support the Service's ITP decision. The ITP will not be issued until the NEPA process concludes with publication of the Final EIS and issuance of the Record of Decision.

2.2 Reroute to Use Existing Corridors

Summary

Multiple commenters requested the R-Project route be changed to follow existing road or rail corridors or existing transmission lines. Specific suggestions and requests included:

- Route the R-Project along the existing 115 kV line that runs east from Sutherland, crossing Interstate 80 between North Platte and Maxwell, and then runs north;
- Install the R-Project as a double circuit line along an existing 115 kV line; and
- Replace an existing 115 kV line with the 345 kV R-Project line.

Rationale for these suggestions included:

- Avoid impeding any additional views or disturbing additional areas;
- Avoid the need for new access roads and continued maintenance in remote areas; and

- Reduce intrusion into the Sandhills ecosystem and effects on migratory birds.

One commenter requested that there be an analysis comparing the costs of these options.

Response

The HCP is the applicant's (NPPD's) document. The Service is the decision-maker regarding issuance of the ITP under Section 10(a)(1)(b) of the ESA but does not have the authority to require NPPD to modify its proposed route. Per the requirements of NEPA, the Service must evaluate a range of reasonable alternatives to the proposed action (42 USC 4332). As described in the response to Comment 2.1, *Consideration of Historic Properties in Siting the R-Project Route*, the Service independently evaluated alternative routes to determine their reasonableness. The Service's proposed action is the issuance of an ITP. The Service does not have the authority to require NPPD to modify its proposed route. The evaluation of alternatives in the Draft SEIS informs the Service on their decision to either issue the permit, deny the permit, or issue the permit with specific conditions.

SEIS Section 2.1, *Approach to Alternatives*, describes the process followed to identify alternatives and SEIS Section 2.7, *Alternatives Eliminated from Detailed Study*, provides a summary of the alternatives dismissed and the rationale for dismissal. The Service considered input from NPPD on technical and economic feasibility in the alternatives development process (SEIS Appendix E, *NPPD Input on Alternatives Development*).

FEIS and SEIS Section 2.2, *NPPD Process for Selecting Its Final Route*, and SEIS Appendix D describe NPPD's process for determining the R-Project's proposed route, which also informed the Service's development of alternatives. NPPD had limitations for the termination points of the R-Project based on the Southern Power Pool Notice to Construct for the R-Project. Additionally, one of the purposes for the R-Project (Revised HCP Section 1.2.1, *R-Project Purpose and Need*) is improving the stability of the generation network in Nebraska, particularly in preparation for extreme weather events. Siting the proposed R-Project route separate from existing transmission infrastructure is intended to reduce the reduced risk of multiple parts of the generation and transmission network being affected by an extreme weather event concurrently.

2.3 Validity of Screening Criteria

Summary

Multiple commenters questioned the rationale for eliminating alternatives based on technical and economic infeasibility. The commenters stated that NPPD cannot claim that these alternatives are economically infeasible, given the expenses that NPPD has incurred from purchasing easements and materials and due to R-Project delays. One commenter expressed concern that there has been no detailed analysis by NPPD regarding the cost of routing alternatives.

Response

NEPA requires that the Service evaluate "a reasonable range of alternatives… that are technically and economically feasible, and meet the purpose and need of the proposal" (42 USC 4332(2)(C)(iii)). Therefore, economic feasibility must be considered in developing alternatives to the proposed action. The Service sought NPPD's input on alternatives' technical and economic feasibility, as NPPD is the entity responsible for implementing the proposed action.

Increased project costs resulting from project delays do not affect previous or current determinations of technical or economic feasibility. The cost of delays does not affect the cost differences between the proposed action and other routes, as these costs would be incurred regardless of route. Regarding concerns about NPPD's acquisition of easements and procurement of materials in anticipation of construction, NPPD has stated that these actions reflect the timing and logistics required for construction of a transmission line. NPPD also stated that the procurement of certain materials for projects at times when favorable pricing opportunities are available is a common procurement strategy to help control costs. These cost considerations about project delays, easements, and procurement of materials do not influence the Service's decision to either issue the permit, deny the permit, or issue the permit with specific conditions.

2.4 Alternatives Considered and Dismissed from Detailed Analysis

Summary

One commenter stated that the alternative routes considered but dismissed in SEIS Appendix E should be analyzed further with the following modifications:

- In areas where the R-Project would be in close proximity to homes, NPPD could offset the line using "pivot corner areas," as it has done in other instances, or compensate the homeowners to rebuild.
- For the center-pivot conflict, NPPD could "install taller and heavier poles…to span longer areas" or compensate the landowner for the purchase of a replacement pivot.

Response

SEIS Appendix E, *NPPD Input on Alternatives Development*, provides additional detail on NPPD's input on the technical and economic feasibility of the alternatives referenced by the commenter. SEIS Section 2.7.2.1, *Alternatives Evaluated to Minimize/Avoid Effects on Historic Properties*, describes the Service's rationale for dismissing the alternatives referenced by the commenter from detailed study. The Service has reviewed the information provided by the commenter and additional information provided by NPPD and summarized below (NPPD 2024):

- Regarding proximity to homes and center-pivot irrigation systems, NPPD's policy is to avoid forcing landowners to move or rebuild their homes.
- Using taller, heavier poles to span longer distances or replacing a center-pivot system would result in additional engineering constraints and costs.
- Under Nebraska law, NPPD is limited to siting transmission lines on section and half-section lines to exercise the right of eminent domain; therefore, siting the R-Project route along section and half-section lines was one of NPPD's primary siting criteria.

Based on the information available, the Service has determined that the rationale provided in the SEIS remains valid and the alternatives should be eliminated from detailed study.

3 Water Resources

3.1 Effects on Aquifers and Groundwater

Summary

Commenters expressed concern about effects on groundwater, emphasizing the importance of drinking water supply, agricultural water supply, and wildlife. Commenters expressed specific concerns about effects on the Ogallala Aquifer, including one comment noting that parts of the Ogallala Aquifer underly the Rosebud Reservation and multiple comments about effects in areas with a water table at or just below the ground surface. Specific concerns included groundwater contamination and depletion from excavation activities, chemical leaching from cement foundations, and spills or leaks from the transmission line. Commenters also expressed concern about the effects of related renewable energy projects on groundwater.

Response

SEIS Section 3.3, *Water Resources,* addresses potential impacts on groundwater resources, including contamination and depletion from excavation and potential spills and leaks from construction or maintenance of the transmission line. This section incorporates by reference FEIS Section 3.3, *Water Resources*, which describes the Ogallala Aquifer and the measures that NPPD would implement to reduce the intensity of effects on groundwater. The Service was unable to identify scientific or commercial data addressing chemical leaching from subsurface cement foundations of transmission towers into groundwater. The study area for the proposed action and alternatives does not encompass the Rosebud Reservation, so it is not specifically named in the analysis, although the analysis does describe effects on the Ogallala Aquifer.

SEIS Section 3.3.2.2, *Related Renewable Energy Projects*, discusses effects on groundwater from the construction and operation of related renewable energy projects. Effects would be short and long term and of low intensity.

3.2 Herbicide Use

Summary

One commenter stated that the use of "restricted-use" herbicides to control noxious weeds in areas with a high water table is a serious concern for the public.

Response

SEIS Section 3.5, *Vegetation*, which incorporates by reference FEIS Section 3.5, *Vegetation,* addresses the use of herbicides, including "restricted-use" herbicides, to control noxious weeds. This analysis notes that NPPD's RMP (Revised HCP Appendix E, *Restoration Management Plan*) addresses noxious weed management. The RMP contains measures that would be implemented during use of all herbicides. Potential impacts on groundwater are discussed in SEIS Section 3.3, *Water Resources,* which incorporates by reference FEIS Section 3.3, *Water Resources.* FEIS Section 3.3 states that chemical contamination of groundwater sources near the surface could occur from herbicide, pesticide, and chemical use in the right-of-way and along permanent access routes. This section also notes that the implementation of a Stormwater Pollution Prevention Plan and associated best management practices would reduce potential impacts on groundwater systems. Per NPPD's RMP,

restricted-use herbicides would require approval by the Service and the NGPC and would be applied by a licensed applicator.

4 Wetlands

4.1 Suggested Revisions to Section 3.4, Wetlands

Summary

One commenter provided suggested revisions to language in SEIS Section 3.4, *Wetlands*. The revisions relate specifically to the areas of permanent disturbance that would occur in wetlands and the characterization of "legal authorities" relevant to wetlands.

Response

Final SEIS Section 3.4 has been updated to incorporate the following commenter's suggested revisions, including:

- Clarifying the area of wetlands disturbed under the proposed action and Alternative B, which is the same as that analyzed in the FEIS.
- Clarifying that the area of tree clearing required in wetlands is similar to that analyzed in the FEIS.
- Clarifying that related renewable energy project developers would be required to comply with legal authorities pertaining to wetlands.

5 Vegetation

5.1 Construction and Maintenance Access

Summary

Commenters expressed concern with the characterization of long-term impacts on the Sandhills from R-Project construction and maintenance, specifically pertaining to the use of vehicles and construction equipment on sandy soils and the potential for creating "blowouts" that are very difficult or impossible to revegetate.

One commenter stated that effects from permanent access roads (estimated to be 26 acres in the Revised HCP and Draft SEIS) are "underestimated" because they would be concentrated in "the unfragmented grassland in the east/west portion of the route."

Two commenters identified concerns about emergency access during storms or fires. One commenter noted that vehicles could have difficulty accessing fires if they occur because of the R-Project and may cause damage to the landscape (e.g., ruts). One commenter stated that the effects of emergency access on the Sandhills were not adequately considered by NPPD and the Service.

Response

SEIS Section 3.2, *Geology, Mineral Resources, Paleontological Resources, and Soils*, provides a detailed analysis of the erodibility and potential for restoration of affected soils in the study area for the

proposed action and alternatives. SEIS Section 3.5, *Vegetation*, discusses the impacts of the proposed action on vegetation; Tables 3.5-6 and 3.5-7 provide the area of disturbance by land cover and vegetation type, with dune vegetation making up the largest portion of temporary disturbance areas. FEIS Section 3.5, *Vegetation*, incorporated by reference into the SEIS, characterizes the Sandhills region and the potential for blowouts. Final SEIS Section 3.5 has been updated to include additional information about the potential for blowouts from the proposed action and alternatives.

The area of temporary and permanent access routes analyzed in the SEIS is based on project design information presented in the Revised HCP. NPPD estimates that the extent of permanent access routes needed for operations and maintenance will be less than 26 acres but incorporated an estimate of 26 acres in the Revised HCP to account for requests from landowners to keep temporary access routes in place rather than restore them. This acreage serves as a cap on permanent access routes; any requests to leave access routes in place that exceeds that acreage would be rejected.

Temporary disturbance from emergency access is addressed in Revised HCP Section 2.7.6, *Emergency Repairs*, which notes that temporary disturbance from emergency repairs was assumed to comprise 20% of the total area of temporary disturbance. The Revised HCP explains that this estimate was developed based on records of storm damage to similar lines in the vicinity of the R-Project and that it is a conservative estimate, so the actual area of disturbance from emergency repairs is expected to be less than 20% of total temporary disturbance.

5.2 Impacts on Vegetation and Restoration Success

Summary

Commenters raised concerns about the characterization of temporary impacts, primarily related to a perceived lack of understanding of the Sandhills ecosystem. Commenters reference the balance of grasslands and sand that forms the foundation for the Sandhills, the area's susceptibility to blowouts, and the long-lasting effects of vehicle and equipment use on vegetation and associated uses (e.g., grazing). Commenters stated that impacts from the R-Project would not be temporary and that a 5-year period would not be sufficient for restoration from vegetation disturbance in the Sandhills.

Response

Refer to the response to Comment 5.1, *Construction and Maintenance Access,* for a discussion of how the SEIS addresses the potential for blowouts. FEIS Section 3.5, *Vegetation*, incorporated by reference into the SEIS, discusses that the Sandhills ecoregion is recognized for its highly permeable sand dunes, which are integral to the stability of the grassland ecosystem. Temporary impacts are defined in the SEIS as impacts lasting for the duration of the construction period and the time required for vegetation recovery. FEIS Section 3.5 acknowledges the susceptibility of the Sandhills to blowouts and difficulty in achieving revegetation. Final SEIS Section 3.5, *Vegetation*, has been updated to include additional information about the potential for blowouts from the proposed action and alternatives. NPPD would use low-ground-pressure equipment, avoid blowout areas wherever possible, and restore vegetation to pre-project conditions to reduce impacts. The restoration efforts, as outlined in Revised HCP Appendix E, *Restoration Management Plan*, are designed to ensure the long-term health and stability of the Sandhills ecosystem. NPPD anticipates that vegetation restoration would be completed in 3 to 5 years but would continue restoration efforts until performance standards are met. FEIS Section 3.5 (incorporated by reference into SEIS

Section 3.5) concludes that impacts on vegetation would be both short and long term, ranging from low to moderate intensity.

5.3 Noxious Weed Control

Summary

One commenter noted concerns about the spread of noxious weeds, specifically leafy spurge, from construction and maintenance activities in the Sandhills and asked who will be responsible for monitoring "preventative actions" during construction.

Response

SEIS Section 3.5, *Vegetation*, addresses noxious weeds by listing the occurrence of invasive plants found in Nebraska, identifying related regulatory measures to prevent spread, and noting measures that NPPD would implement to prevent the introduction and spread of noxious weeds during project activities. These measures, described in Revised HCP Appendix E, *Restoration Management Plan*, include cleaning equipment before entering the project area and using certified weed-free materials. NPPD would be responsible for monitoring and implementing these preventative actions during construction. NPPD would adhere to the stipulations of the RMP and conduct regular monitoring and provide reporting to the Service to ensure compliance.

6 Wildlife

6.1 Effects on Grassland Species

Summary

Commenters expressed concern about the effects of the R-Project grassland species, including western burrowing owl, red-headed woodpecker, loggerhead shrike, long-billed curlew, prairie chicken, sharp-tailed grouse, and prairie dog. One commenter stated that there is no consideration that grassland species, particularly grassland birds, depend on unfragmented prairies and grasslands and requested a study of impacts on grassland birds and ecosystem diversity.

Prairie chickens and their leks, or breeding habitat, were of particular concern to multiple commenters. One commenter requested a description of mitigation measures that would be employed to protect prairie chickens and stated that the R-Project would increase the risk of predation for prairie chickens by providing perches for raptor species.

One commenter stated that construction and maintenance could affect western burrowing owl breeding, depending on the timing of activities.

Response

SEIS Section 3.6, *Wildlife,* addresses the impacts of the proposed action and alternatives on grassland species. It incorporates by reference much of FEIS Section 3.6.2.2, *Alternative A: Tubular Steel Monopole and Steel Lattice Structure Towers*, which describes effects on ground-dwelling bird species, including prairie chickens. The potential for increased predation risk for grassland species due to perching potential for raptors is discussed in FEIS Section 3.6.2.2 and incorporated by

reference into the SEIS. This potential impact was factored into the effect conclusions for wildlife in the FEIS and SEIS.

6.2 Effects on Western Box Turtle

Summary

One commenter indicated that the ornate box turtle (*Terrapene ornata*) (also known as western box turtle) was "neglected," in the Revised HCP and Draft SEIS, referencing studies that indicate relocation of this species may not be an effective protection measure because it can disrupt breeding behavior and life history.

Response

The ornate box turtle is not ESA-listed and was not a species considered for coverage in the HCP. No relocation of the ornate box turtle is proposed in the HCP.

SEIS Section 3.6, *Wildlife*, addresses potential effects of the proposed action and alternatives on wildlife species, including the ornate box turtle. To the extent that avoidance and mitigation measures (AMM) for other species require the avoidance of grassland and prairie land cover types, potential effects on ornate box turtle could also be reduced. Additionally, AMMs for Blanding's turtle, such as turtle-proof fencing, could provide protection for the ornate box turtle where these species coexist (HCP Section 4.8.3. *Avoidance and Minimization Measures Proposed for Blandings Turtle*).

6.3 Effects of High-Voltage Electrical Current

Summary

One commenter expressed concern with potential effects of high-voltage electrical current from the R-Project transmission line on wildlife near the line.

Response

SEIS Section 3.16, *Health and Safety*, which incorporates by reference FEIS Section 3.16, *Health and Safety*, discusses potential effects from EMFs. This discussion is framed around human health and safety, but notes that similar concepts apply to livestock, as described in FEIS Section 3.16.2.2, *Alternative A: Tubular Steel Monopole and Steel Lattice Tower Structures.* This section notes that exposure to EMFs is not unique to transmission lines but is found anywhere with electricity present and that EMFs "dissipate exponentially with distance." Final SEIS Section 3.6, *Wildlife*, has been updated to reference recent research on the potential effects of EMFs on wildlife. This additional discussion does not change the conclusions regarding effects on wildlife from the proposed action.

6.4 Effects of Tree Clearing

Summary

One commenter raised concerns about the long-term impact of tree removal in the R-Project right-of-way, stating that tree belts are intentionally established over many years to benefit the Sandhills ecosystem and local ranchers. The commenter felt that the Draft SEIS underestimates the impacts of removing these tree belts, both on wildlife and on ranchers who depend on them as windbreaks for livestock. The commenter also expressed concerns that, despite plans to conduct actual tree removal

outside of migration season, it will have long-term impacts on migratory birds through permanently removing habitat.

Response

SEIS Section 3.6, *Wildlife,* which incorporates by reference much of FEIS Section 3.6, *Wildlife,* analyzes the effects of habitat removal and fragmentation on wildlife based on the amount of estimated temporary and permanent disturbance. This includes the estimated areas of tree removal, which would be required throughout the right-of-way to ensure compliance with North American Electric Reliability Corporation and National Electrical Safety Code requirements for electrical facility reliability (Revised HCP Section 2.4.4, *Right-of-Way Tree Clearing*). The FEIS acknowledges that this habitat loss would adversely affect wildlife species, particularly avian species.

Regarding the commenter's concern about the effects of tree removal on ranching activities, the effects of the proposed action and alternatives on land use from land conversion, including tree removal, are analyzed in SEIS Section 3.8, *Land Use*. FEIS Section 3.8, *Land Use*, is incorporated by reference into the SEIS and characterizes potential long-term impacts on ranchlands and farmlands, including the "[l]oss of uses that are incompatible with the transmission line right-of-way (e.g., trees, structures, or other objects that may present fire or electrical hazards)."

6.5 Characterization of Effects on Wildlife Habitat

Summary

One commenter stated that construction and operation of the R-Project would cause significant environmental impacts on wildlife habitat through habitat removal and fragmentation.

Response

SEIS Section 3.6, *Wildlife,* analyzes the effects of the proposed action and alternatives on wildlife, including from habitat removal and fragmentation. SEIS Section 3.6 incorporates by reference much of FEIS Section 3.6, *Wildlife*, which discusses fragmentation and related effects on wildlife, stating that "[t]he transmission line would not present a permanent barrier to most wildlife species that may use the surrounding areas, so effects from habitat fragmentation would be minimal for most species," with the notable exception of ground-dwelling birds, such as prairie chickens and other grouse species, which are particularly vulnerable to fragmentation. As stated in SEIS Section 3.6, effects on wildlife would be both short and long term and would range from low to moderate intensity. Adverse impacts on wildlife are not expected to be significant.

6.6 Alternative A Conclusions

Summary

One commenter proposed a revision to the Alternative A analysis in Draft SEIS Section 3.6, *Wildlife*, to state that the increased temporary disturbance under the proposed action compared to Alternative A resulted from recharacterizing overland travel as temporary disturbance.

Response

Final SEIS Section 3.1, *Introduction*, has been updated to acknowledge that the difference in estimated disturbance is due primarily to the recharacterization of overland travel as temporary

disturbance. This difference between the proposed action and Alternative A applies to all Chapter 3 resource topics. No revisions have been made to the Alternative A analysis in SEIS Section 3.6.

7 Special Status Species

7.1 Whooping Crane Data Concerns

Summary

Commenters expressed concern about the data used to evaluate effects on whooping cranes. Specific comments included the following issues.

- More recent telemetry and GPS data showing whooping crane flight patterns near the proposed R-Project should be used in the effects analysis in the HCP and SEIS. Recent GPS data indicate higher occurrence frequency of cranes in the vicinity of the R-Project than the data used in the risk assessment.
- The collision risk analysis should only have incorporated powerlines "adjacent to the migratory path;" by incorporating powerlines in areas where whooping cranes do not fly, collision risk is underestimated.
- The increase in the whooping crane population should be considered in the analysis of collision risk. The commenter referenced the use of data from 1998, when the whooping crane population was estimated at 150, stating that given the increased population, "the chances of a whooping crane hitting a line is increased 400%."
- Unconfirmed sightings should be considered in the analysis (i.e., incorporate the eight unconfirmed sightings into the analysis).
- Powerline mortality may be underreported because of the remote nature of much of the migration corridor.

Response

SEIS Section 3.7, *Special Status Species,* describes impacts on whooping crane in the context of NEPA, incorporating by reference much of FEIS Section 3.7.7, *Whooping Crane*. Revised HCP Section 4.1, *Whooping Crane*, and Revised HCP Appendix D, *Whooping Crane Risk Analysis Review,* describe the research and data used to assess effects on whooping cranes and identify AMMs.

Regarding requests to use more recent data (e.g., telemetry data, GPS data) to inform the analysis of collision risk, the collision risk analysis supported by the Service and used in the Revised HCP uses phase 1 and 2 telemetry mortality data from the Whooping Crane Tracking Partnership, as well as public sightings. Additionally, the mortality information from the phase 2 telemetry study was incorporated into Revised HCP Appendix D. As described in Final SEIS Section 3.7 and Appendix H, *Whooping Crane Technical Supplement*, the Service reviewed phase 2 telemetry data for ground-based whooping crane observations in the R-Project study area from 2017 to 2024, allowing for analysis of relative habitat use by whooping in the study area (WCTP 2025). Review of this data indicates that suitable habitat is widely dispersed and available throughout the study area and that

use of the area within or immediately adjacent to the proposed R-Project route was similar to but less than other portions of the study area.

Regarding the comment suggesting that the analysis should only have incorporated powerlines "adjacent to the migratory path," the RCK analysis methodology explained in Skorupa and Juliusson (2018) and used in Revised HCP Appendix D considers risk based on transmission lines (not all power lines) in the 95% migration corridor, the area in which approximately 95% of whooping crane sightings occur (Skorupa and Juliusson 2018). Therefore, the analysis does as the commenter suggests.

Regarding the comment suggesting that more recent population data be used in the analysis, the Service supports use of the RCK methodology described in Skorupa and Juliusson (2018) with updated population data. The Revised HCP does not, as the commenter asserts, rely on population data from 1998. Revised HCP Appendix D uses the most recently published population data for the Aransas-Wood Buffalo population and has been updated in the Final Revised HCP to assume a starting population of 550 individuals. This population estimate is used as a starting point for projected growth over the Revised HCP's 50-year permit term.

Regarding the consideration of unconfirmed sightings in the analysis, SEIS Appendix H, *Whooping Crane Technical Supplement*, describes the Service's rationale for only using confirmed sightings in its research and decision-making. The Service routinely receives erroneous reports of whooping crane sightings that are misidentifications of species such as sandhill cranes, pelicans, and snow geese, and as such require confirmation (photo or visually by a trained professional or experienced individual with necessary experience or credentials [i.e., qualified individual]).

Regarding concerns about underrepresenting collisions because of a lack of data, SEIS Appendix H acknowledges that "[p]ower line collisions are a well-known threat to whooping cranes and a known source of mortality, though estimates of the extent to which collision mortality represents the proportion of total mortality, or the proportion of mortality during migration, have varied significantly." Revised HCP Appendix D considers the body of available data and research on migration mortality and incorporates this into the collision risk analysis. It has been updated to include whooping crane collision data recorded after the original RCK analysis was developed in 2018 through January 2025.

7.2 Whooping Crane Habitat Assumptions

Summary

Commenters expressed concern with certain assumptions about whooping crane habitat in the Revised HCP and Draft SEIS:

- The acreage of affected habitat should be 84,000 acres, rather than the 8,000 acres presented.
- Certain rivers should not have been omitted from the analysis in the calculations of potential "nesting or habitat" (Loup, Middle Loup, Dismal, South Loup, North Platte, and South Platte Rivers).
- GPS data shows that whooping cranes use small waterways (i.e., less than a quarter of an acre) that were excluded from the HCP's analysis of whooping crane habitat.

Response

Regarding the amount of habitat affected, FEIS Section 3.7.7.2, *Direct and Indirect Effects*, incorporated by reference into the SEIS, states that NPPD identified approximately 8,969 acres of suitable whooping crane stopover habitat within 1 mile of the centerline of NPPD's final route. Importantly, this section states that NPPD's analysis was "conducted for the purposes of selecting line marking locations." As described in Revised HCP Appendix A, *Whooping Crane: Potentially Suitable Habitat Assessment*, this distance is consistent with the Service's *Region 6 Guidance for Minimizing Effects of Power Line Projects within the Whooping Crane Migration Corridor,* which states that new power lines within one mile of potentially suitable habitat should be marked to reduce the risk of a line strike by whooping cranes. Ellis et al (2022) found that cranes avoided habitat within 2 km of power lines during non-drought conditions. Therefore, the inference that 84,000 acres of whooping crane habitat would be affected is an overestimation of R-Project effects.

Regarding the suggestion that certain rivers should be included in the analysis as potential "nesting or habitat," individuals from the Aransas-Wood Buffalo population do not nest in Nebraska; migratory habitat is the only type of habitat present in Nebraska. The SEIS evaluates the loss of migratory habitat, as well as the potential for collision with power lines near migratory habitat.

Regarding the comment that whooping cranes use small waterways (i.e., less than 0.25 acres), the habitat assessment described in Revised HCP Section 4.1.1, *Potential Effects from Construction*, and referenced in the SEIS used methodology developed by the Watershed Institute specifically for use on power line projects. The analysis is "a landscape-scale analysis and is not intended to represent every conceivable potential use location within one mile of the R-Project." As stated in Revised HCP Appendix A:

> Wetlands larger than 2.5 acres are optimal for whooping crane stopover habitat; however, smaller wetlands are used (Watershed Institute, Inc. 2013). Armbruster (1990) concluded that a wetland equal to or less than 0.25 acre is not potentially suitable habitat. Wetlands larger than 2.5 acres are optimal for whooping crane stopover habitat; however, smaller wetlands are used (Watershed Institute, Inc. 2013). Armbruster (1990) concluded that a wetland equal to or less than 0.25 acre is not potentially suitable habitat.

Additionally, Revised HCP Section 4.1.1 references a study that showed that 90% of all wetlands used by whooping crane as stopover habitat were greater than 0.25 acre in size (Pearse et al. 2017).

7.3 Whooping Crane Risk Analysis

Summary

Two commenters challenged the Service's decision not to rely on the Barzen et al. (2023) analysis of whooping crane collision and mortality, raising the following issues.

- In response to the Draft SEIS statement that the 25 km buffer probability of a power line strike overestimates the probability of a power line strike, a 25 km buffer was not used in Barzen et al. (2023) to evaluate line encounters; rather, it was used "only to identify cranes during stopovers (not migration) that would have the potential to fly across the line upon arrival, departure or within-stopover movements."

- In response to the Draft SEIS statement that the Service finds the application of surrogate collision data unnecessary, as whooping crane data are available for use in the risk assessment, the available fatality data for the Aransas/Wood Buffalo population of whooping cranes is limited to telemetered cranes that have been killed from powerlines, which cannot be used to characterize the probability of fatalities from the R-Project because the data do not estimate exposure of birds to any particular line.

- The SEIS acknowledges that "[t]he sandhill crane is often regarded as a surrogate species for the whooping crane" when describing historical line collisions for whooping crane and sandhill crane (Draft SEIS page 3.7-26) but contradicts this statement in its evaluation of Barzen et al. (2023).

- In response to the Draft SEIS statement that Barzen et al. (2023) did not explain their use of a higher future whooping crane population, the "base population [in Barzen et. al.] was derived from Butler et al. (2020), the most recent estimate that we had access to at the time of our analysis: 506 individuals were found within the core survey area with 29 individuals residing outside the survey area, making a total of 535 whooping cranes for the base population estimate (Butler et al. 2020)." Skorupa and Juliusson (2018), used by the Service in the Draft SEIS, underestimates the starting population in its growth model by using a base population based on data from 2015 and 2016. Barzen et al. (2023) allowed for "uncertainty in the initial population size and variation in annual population growth rates," resulting in a wider projection interval over the analysis period. The 2020 data used in Barzen et al. (2023) would be out of date by the start of R-Project operation; therefore, it may underrepresent collision risk.

- In response to the Draft SEIS statement that Barzen et al. (2023) did not incorporate the impact of flight diverters into their model, "no consideration of line marking was proposed" in available reports. Prior estimates of the probability of sandhill crane collisions with marked lines are comparable to the estimated probability of collision for whooping cranes that were used in the Barzen et al. (2023) analysis.

- Barzen et al. focused only on collision risk and did not consider potential additional effects from sublethal collision injury, habitat modification, or alteration of feeding behaviors, implying that the Barzen et. al. analysis is conservative.

- "[T]here is no indication that [the Service] has itself prepared any updated RCK analysis since 2018."

Response

Final SEIS Appendix H, *Whooping Crane Technical Supplement*, contains the Service's response to the analysis presented in the Barzen et al. (2025) report.[2]

Regarding the comment that the 25-km buffer distance was only used in Barzen et al. (2023) to identify cranes that that flew over the proposed path at elevations where they could encounter the line, the Service has removed discussion of the 25 km buffer area from the Final SEIS upon revisiting Barzen et al. (2025).

[2] The study was finalized and published in May 2025, and references to this paper in the Service's responses to comments refer to the final version (Barzen et al. 2025).

Regarding the comment about the application of sandhill crane collision rate data in place of whooping crane data, SEIS Appendix H describes why the Service questions the application of sandhill crane data as a surrogate for whooping crane data. The Service finds the application of surrogates unnecessary because whooping crane data, while limited, are available for use in collision risk assessments. The studies on sandhill cranes cited in Barzen et al. (2025) as the basis for the collision risk probability targeted high-risk areas. Additionally, the species have different behavioral, demographic, and geographic factors to consider when evaluating and comparing collision risk.

The comment regarding the SEIS statement about the use of sandhill crane mortality data as a surrogate for whooping crane data is a misinterpretation of the SEIS. The SEIS references sandhill crane data, along with research on other bird species, as it pertains to the effectiveness of bird flight diverters. It should be noted that this data on bird flight diverter effectiveness does not factor into the Revised HCP's collision risk analysis; it is discussed qualitatively to further support the determination that incidental take of whooping crane is not reasonably foreseeable.

Regarding underlying population assumptions, Revised HCP Appendix D relies on the most recently published population data for the Aransas-Wood Buffalo population and has been updated in the Final Revised HCP to assume a starting population of 550 individuals. The analysis does not, as suggested in the comments, use population data from 2015 and 2016. This population estimate is used as a starting point for projected growth in the Revised HCP.

Regarding the statement that the estimates of collision probability in Barzen et al. (2023) are similar to estimates of sandhill crane collisions with marked lines, the sandhill crane studies cited by the commenter (Brown and Drewien 1995; Morkill and Anderson 1991) were intended to study the effects of marking power lines and therefore included study areas specifically selected for their higher collision potential, both with and without bird flight diverters. Importantly, these studies did not aim to establish collision risk for specific species over large areas with varied habitat value.

Regarding the statement that Barzen et al. (2023) does not consider effects other than collision risk (thereby underestimating risk), effects of sublethal collision injury are considered in the Service's analysis where possible, although data on sublethal injury are limited. For the purpose of the RCK analysis, a whooping crane documented as injured from an assumed or known collision was considered a mortality, including one instance where an injured whooping crane was captured and died in captivity. There were no additional data to quantitatively evaluate the potential for whooping crane collisions and the potential for sublethal collision impacts. Additional effects on whooping cranes from habitat modification and alteration of species behavior (e.g., feeding) are analyzed in FEIS Section 3.7, *Special Status Species*, which is incorporated by reference into the SEIS.

Regarding the comment that the Service has not updated the RCK analysis since 2018, the Service considers the RCK analysis methodology sufficient for project proponents to evaluate risk for their proposed projects. The Service coordinated with NPPD to provide the best scientific and commercial data available, including additional mortality data from the Whooping Crane Tracking Partnership's phase 2 telemetry data (WCTP 2025), to update the analysis for the Revised HCP. This analysis was updated following publication of the Draft SEIS to reflect additional data (NPPD 2025). The Service reviewed the updated RCK analysis and has determined that NPPD's application of the methods as described in Revised HCP Appendix D is appropriate.

7.4 Comments on Barzen et al. Analysis

Summary

One commenter submitted a comment on the unpublished Barzen et al. (2023) study that was submitted as a scoping comment and discussed in the Draft SEIS. The commenter perceives the Barzen et al. (2023) data and methodology as overestimating the collision risk for whooping crane from the R-Project, with the following specific concerns.

- Based on the commenter's independent analysis following the same data processing methods referenced in Barzen et al. (2023), line encounters are overestimated in Barzen et al. (2023).
- The study area overestimates the occurrence of daily foraging flights over the line, thereby overestimating potential collision risk.
- Collision rates have been explained as inaccurate and result in inaccurate estimates of predicted collisions.
- Population assumptions are incorrect and overestimate predicted fatalities.
- Statements about underestimation of risk from not considering "atypical situations" where lines were in proximity to wetlands or over roosts are incorrect because the underlying data for Barzen et al. (2023) uses studies focused on areas known for high potential for avian collision.

The same amount of whooping crane activity is assumed to occur in the area surrounding the R-Project after the project is constructed, which does not incorporate expected behavior change or the impact of line marking and bird diverters.

Response

The Service acknowledges the commenter's concerns with Barzen et al. (2025).[3] The Service's response to this paper, including a discussion of data and methodology discrepancies, is provided in SEIS Appendix H, *Whooping Crane Technical Supplement*.

7.5 Effects on Whooping Crane from Emergency Repairs

Summary

One commenter expressed concern with the effects of emergency repairs on whooping cranes and other migratory birds, citing a previous response to a public comment submitted on the 2014 Draft EIS (Concern Statement 5.8-1) and stating that this response did not acknowledge the potential for emergency repairs to be required during migration season, particularly in the east–west segment of the R-Project where the line is located further from existing access roads.

Response

SEIS Section 3.7, *Special Status Species*, discusses the anticipated effects of emergency repairs of the proposed action and alternatives on whooping cranes.

[3] The study was finalized and published in May 2025, and references to this paper in the Service's responses to comments refer to the final version (Barzen et al. 2025).

Migration constitutes roughly a third of a whooping crane's annual lifecycle, with a small proportion of that occurring in Nebraska. Potential effects from emergency repairs would only occur during this short annual window. Emergency repairs are less likely to be required during spring and fall migration compared to other times of year (e.g., strong thunderstorms are more likely to occur in the summer and snow or ice storms in the winter) but there remains some risk that these activities would temporarily impact habitat. The Revised HCP has been updated to clarify that "[a]ny emergency repairs required during the whooping crane migration period will be preceded by a whooping crane presence/absence survey that will meet or exceed the standard agency protocol in place at the time of the repair" (NPPD 2025), which would reduce this risk.

As stated in FEIS Section 3.7, *Special Status Species*, "construction-related disturbances may cause migrating whooping cranes arriving in the area to avoid potentially suitable stopover habitat in the vicinity of construction activities during active construction periods. However, migrating whooping cranes potentially disturbed by construction activities would likely use adjacent suitable, undisturbed habitats that are abundant throughout the Nebraska Sandhills." This statement would apply to emergency repairs. Additionally, the proposed action would include marking all 226 miles of the proposed R-Project with bird flight diverters, including glow-in-the-dark surfaces at river crossings and areas identified as areas of bird use during low-light conditions. Additionally, NPPD would mark additional portions of other transmission lines with bird flight diverters. This AMM is designed to deter whooping cranes from the R-Project toward other suitable habitat and reflects an increase in proposed line marking compared to the 2018 HCP.

Revised HCP Section 2.7.6, *Emergency Repairs,* references that the R-Project is designed to have storm structures installed along the line to limit storm damage and associated emergency repair needs and that the R-Project is not located in the area where most storm damage on other lines has historically occurred.

The Service maintains that the response to this Concern Statement 5.8-1 in the 2014 Draft EIS provides an accurate response regarding the effects of emergency repairs.

7.6 Efficacy of Avoidance and Minimization Measures for Whooping Crane

Summary

Commenters expressed doubts about the effectiveness of the HCP's AMMs for whooping crane.

Concerns with bird flight diverters included that they are at most 50% effective and their effectiveness can depend on local conditions (e.g., location relative to roads, presence of fog). One commenter pointed to a specific location where they felt diverters would be less effective due to fog (Birdwood Creek). One commenter questioned why the installation of bird flight diverters on an additional 124 miles of existing lines is considered to lessen the effects of the R-Project, stating that the installation of bird flight diverters in one part of the state does not "lessen the threat to birds in another part of the state." This commenter also questioned whether the bird flight diverters are worth the visual intrusion in the landscape, given that they are only up to 50% effective.

One commenter stated that the HCP should not allow for modification of avoidance measures in the event that a whooping crane injury is attributed to the R-Project and asked what the penalty would be for take of the whooping crane, if it were to occur.

Response

SEIS Section 3.7, *Special Status Species*, discusses the HCP's proposed use of bird flight diverters as an AMM. Revised HCP Section 4.1, *Whooping Crane*, presents discussion and analysis of bird flight diverters and additional AMMs to reduce impacts on whooping cranes. This discussion cites peer-reviewed research that indicates "bird flight diverters have a 50% to 80% effectiveness" (Yee 2008; Brown and Drewien 1995; Morkill and Anderson 1991) in reducing power line collisions across avian species. The study used to evaluate collision risk in the SEIS (Skorupa and Juliusson 2018) assumed a 50% reduction in power line collisions.

As stated in the Revised HCP and SEIS Section 3.7, portions of the proposed transmission line at river crossings and areas identified as being used by birds during low-light conditions will be marked with reflective and glow-in-the-dark surfaces to reduce avian collisions in low-light conditions, which may reduce risk more than standard bird flight diverters. The Service is not aware of research that specifically addresses the effectiveness of bird flight diverters in foggy conditions.

Revised HCP Section 4.1.2, *Potential Effects from Operations and Maintenance*, refers to the Service's *Region 6 Guidance for Minimizing Effects of Power Line Projects within the Whooping Crane Migration Corridor,* which states that to maintain baseline threat to whooping cranes, all new lines within 1 mile of potential habitat and an equal amount of existing line should be marked with bird flight diverters. As described in Revised HCP Section 4.1.1, *Potential Effects from Construction*, NPPD estimates that there are 124 miles of the R-Project within 1 mile of suitable whooping crane habitat. Therefore, the Revised HCP includes placement of bird flight diverters on 124 miles of additional transmission infrastructure in Nebraska.

SEIS Section 3.12, *Visual Resources,* discusses the visual effects of bird flight diverters. Specific effects would depend on the location, time of day, weather conditions, and types of diverters used.

Revised HCP Section 4.1.2, *Potential Effects from Operation and Maintenance*, states that if NPPD, the Service, or NGPC were to become aware of a wounded or deceased whooping crane discovered in the vicinity of the R-Project, they would informally notify the other parties within 24 hours of obtaining credible knowledge of the discovery. NPPD, the Service, and NGPC would work jointly to identify if there is a need for additional avoidance measures and determine if future take of a whooping crane from the R-Project can likely be avoided or if future take is reasonably certain to occur. If it were to be determined that take had become reasonably foreseeable to occur, NPPD would seek an amendment to the HCP, ITP, and related documents, as applicable, per Revised HCP Section 7.5, *Amendment Procedures*. Any whooping crane collision with the R-Project resulting in mortality or death would be considered prohibited take. The Service's acceptance of NPPD's measures to report collision-related injury or mortality should not be inferred as the Service permitting incidental take if a collision were to occur.

7.7 Effects on American Burying Beetle

Summary

Commenters expressed concern about potential effects on ABB from habitat removal, including habitat damage from the creation of sandy blowouts. Two commenters stated that there may be unevaluated impacts on ABB from EMF exposure along the R-Project route, with one commenter requesting data on the potential effects of EMFs on ABB.

Response

SEIS Section 3.7, *Special Status Species*, describes the anticipated effects of the proposed action and alternatives on ABB, including those from temporary and permanent disturbance of ABB habitat. As stated in FEIS Section 3.7, *Special Status Species*, and incorporated by reference into the SEIS, temporarily disturbed areas would be restored following construction and would become available again for ABB use.

FEIS Section 3.2, *Geology and Soils*, (incorporated by reference into the SEIS) acknowledges the potential for rutting and other soil damage from construction but notes that NPPD would be required to implement restoration and revegetation activities to return temporarily disturbed areas to their previous conditions. NPPD would establish an escrow account and submit an escrow agreement to the Service for review and approval, to be used if provisions of the RMP (Revised HCP Appendix E, *Restoration Management Plan*) regarding beetle habitat restoration are not met and NPPD is not taking appropriate steps, including adaptive management, to achieve successful restoration. For additional detail on soil disturbance and erosion, including potential for blowouts, refer to the response to Comments 5.1, *Construction and Maintenance Access* and 5.3, *Impacts on Vegetation and Restoration Success*.

As described in the response to Comment 6.3, *Effects of High-Voltage Electrical Current*, Final SEIS Sections 3.6, *Wildlife,* and 3.7, *Special Status Species,* have been updated to reference recent research on the potential effects of EMFs on wildlife.

7.8 Summary of Effects on Special Status Fish

Summary

One commenter requested revision of the executive summary's description of effects on special status fish species to remove reference to alteration of habitat from landcover conversion.

Response

The executive summary of the Final SEIS has been updated to clarify that special-status fish habitat would not be affected by land conversion.

7.9 Effects on Mountain Plover

Summary

One commenter expressed concern with effects on mountain plover, stating that it is "indigenous" to their ranch and that this species has not been adequately addressed.

Response

Impacts on mountain plover are not discussed in the Revised HCP because the R-Project area does not overlap within the species' known range. Additionally, the species is not an ESA-listed threatened or endangered species. Consideration of indirect effects on the mountain plover can be found in SEIS Section 3.7.1.2, *Related Renewable Energy Projects,* which may intersect with the species' known range.

7.10 Effects on Bald Eagle

Summary

Two commenters expressed concern with effects on bald eagles, stating that they think the R-Project and related renewable energy projects would result in bald eagle mortality and noting that the species nests and trains its young near the proposed route.

Response

Effects on bald eagles are described in SEIS Section 3.7.2.1, *Proposed Action and Alternatives,* which incorporates by reference FEIS Section 3.7.2, *Bald Eagle (Protected under BGEPA*).

7.11 Effects on Special Status Plant Species

Summary

One commenter expressed concern with effects on blowout penstemon and western prairie fringed orchid, stating that construction and maintenance of the R-Project would be harmful for continued protection of these plant species.

Response

Effects on blowout penstemon and western prairie fringed orchid are described in SEIS Section 3.7.2.1, *Proposed Action and Alternatives,* which incorporates by reference FEIS Sections 3.7.12, *Blowout Penstemon (Federally Listed Endangered Species)* and 3.7.13, *Western Prairie Fringed Orchid (Federally Listed Threatened Species).* The Revised HCP also includes AMMs for both species.

7.12 Suggested Clarifications to Effects Analysis

Summary

One commenter suggested revisions to portions of the special status species effects analysis. The first suggested revision pertains to revising the description of effects from emergency repairs on northern long-eared bat. The second suggested revision pertains to clarifying that although the project area contains suitable habitat for Topeka shiner (*Notropis topeka*), no known occurrences of the species have been observed. The last suggestion requests clarification on the reason for the difference in acreage of tree clearing between the proposed action and Alternative A.

Response

Final SEIS Section 3.7, *Special Status Species*, has been updated to clarify effects from emergency repair activities on northern long-eared bats. This section has also been updated to state that no known occurrences of Topeka shiner have been observed in the project area and to explain the reason for the difference in tree-clearing acreage between the proposed action and Alternative A.

8 Land Use

8.1 Ranching and Agriculture

Summary

One commenter expressed concern with the potential impacts on ranching activities at Birdwood Creek Trail. One commenter stated that the potential impacts of the project on ranchers and agriculture, including cattle, have not been adequately addressed in the Draft SEIS.

Response

While Birdwood Creek is not specifically mentioned in the Draft SEIS, the ranching and agricultural areas surrounding the creek were included in the study area analyzed in Draft SEIS Section 3.8, *Land Use*. SEIS Section 3.8, *Land Use,* incorporates by reference much of FEIS Section 3.8, *Land Use,* which addresses effects on ranching and agriculture, including cattle ranching. The SEIS notes that temporary disturbance during construction could affect land uses such as ranching and agriculture, but with best practices and avoidance measures, disturbed areas are expected to recover. Effects on land use would be of low to moderate intensity, with minimal long-term impacts on ranching and agricultural activities in the region.

8.2 Disturbance from Related Renewable Energy Projects

Summary

One commenter recommended revisions to text in Draft SEIS Section 3.8, *Land Use*, to clarify that agricultural land use would be impacted by solar panels in addition to wind turbines.

Response

Final SEIS Section 3.8 has been updated to include the commenter's recommended clarification.

8.3 Effects on Conservation Easements

Summary

One commenter asserted that the Draft SEIS disregards the R-Project's potential impacts on conservation easements. The commenter specifically stated that there were no AMMs included for effects on the Horseshoe Bar Ranch conservation easement and a Ducks Unlimited Conservation easement near Birdwood Creek.

Response

SEIS Section 3.8, *Land Use,* incorporates by reference the analysis of effects on conservation easements in FEIS Section 3.8, *Land Use*, which includes two easements near Birdwood Creek. SEIS Section 3.8 also provides an update on the Horseshoe Bar Ranch conservation easement and identifies additional conservation easements in the related renewable energy projects study area (SEIS Table 3.8-3). Impacts on conservation easements are addressed in SEIS Section 3.8.2, *Environmental Consequences*, which incorporates by reference the FEIS effects analysis for the proposed action and alternatives and analyzes effects on new conservation easements in the study

area for the proposed action and alternatives and conservation easements in the related renewable energy projects study area.

As described in Final SEIS Section 3.8, since publication of the Draft SEIS, NPPD worked with landowners and regulatory agencies to microsite a portion of the proposed R-Project route to avoid placing transmission line structures on the Horseshoe Bar Ranch conservation easement.

AMMs from the FEIS for land use are incorporated by reference into the SEIS and apply equally to all conservation easements. Therefore, there is no additional detail on conservation easement AMMs included in the SEIS.

8.4 Effects on Conservation Lands

Summary

One commenter provided suggested revisions to the Draft SEIS to clarify that Conservation Reserve Program and Conservation Stewardship Program lands are not subject to conservation easements, but that landowners receive payment to manage their lands to achieve the programs' goals.

Response

Final SEIS Section 3.8, *Land Use,* has been updated to include the commenter's recommended clarification.

9 Cultural Resources

9.1 Tribal Consultation

Summary

One commenter stated that public concerns and objections about the project have been ignored, including the concern that at least 543 significant historic sites need protection. The commenter stated that agencies appear to be merely going through the process without considering input received from the public. The commenter also expressed concern that after more than 10 years, the Tribal Nations have only recently been included in the consultations.

Response

The Service is evaluating effects on historic properties in compliance with Section 106 of the NHPA. The Section 106 process requires the Service to consider the effects of federal undertakings on historic properties and provide Consulting Parties an opportunity to review and comment on those effects. The regulations allow for adverse effects on historic properties and provide a process for resolution of these adverse effects.

As described in SEIS Section 3.10 and Appendix I, *Select Supplemental Section 106 Materials*, the Service has considered input from the Tribal Nations, Consulting Parties, and the public throughout the NEPA and Section 106 processes. Through this consultation, Tribal Nations have made the Service aware of their concerns with this project. The Service reinitiated consultation with Tribal Nations in 2023 and has conducted frequent outreach and held virtual and in-person meetings to discuss and seek feedback on the Section 106 process with ACHP, the Nebraska State Historic Preservation Officer (SHPO), Tribal Nations, and Consulting Parties (SEIS Appendix I). The Service

has also conducted ongoing coordination with the Cherokee Nation regarding a specific, culturally sensitive area in the area of potential effects (APE).

On January 13, 2026, the Department of the Interior approved the use of alternative procedures for compliance with Section 106 of the NHPA for the R-Project in response to the national energy emergency declared in Executive Order 14156. Based on the use of alternative procedures for compliance with Section 106 (36 CFR 800.12(b)(2)), the Service is evaluating the measures that will be implemented to avoid, minimize, and mitigate adverse effects on historic properties. Final SEIS Section 3.10, *Cultural Resources*, has been updated to reflect the status of the Section 106 process at the time of Final SEIS publication.

9.2 Need for Tribal Surveys

Summary

Commenters expressed that the Tribal Nations have not been given the opportunity to conduct cultural resource surveys, which violates Section 106 of the NHPA. Commenters urged the Service to heed the Tribal Nations' requests for surveys and compel NPPD to act on these findings.

One commenter stated that the Service unlawfully deferred the identification of sites of cultural or historic significance to tribes, hindering meaningful input in routing decisions and the development of avoidance, minimization, and mitigation measures. The commenter cites a statement in the Draft SEIS referencing the lack of Traditional Cultural Property surveys in the project area and asserts that the Service has a legal duty to engage closely with Tribal Nations and promptly identify historic and cultural resources, including Traditional Cultural Places (TCPs) and culturally significant landscapes, to inform decision-making and ensure compliance with NHPA.

One commenter stated that the Service cannot move forward in the Section 106 process until the identification of historic and cultural resources in coordination with Tribal Nations is complete.

Response

SEIS Section 3.10, *Cultural Resources*, and Appendix I, *Select Supplemental Section 106 Materials*, describe the Service's Section 106 consultation with Tribal Nations. The Service reinitiated Section 106 consultation with Tribal Nations in 2023.

SEIS Section 2.2, *NPPD Process for Selecting Its Final Route*, and Appendix D, *Nebraska Public Power District Summary of the Power Review Board and Transmission Line Routing Process,* describe the routing process. As stated in the response to Comment 1.5, *Require Reroute*, the Service does not have the authority to require NPPD to implement reroutes or other modifications to its proposed project.

SEIS Section 3.10 has been updated to reflect the status of the Section 106 process at the time of Final SEIS publication. On January 13, 2026, the Department of the Interior approved the use of alternative procedures for compliance with Section 106 of the NHPA for the R-Project in response to the national energy emergency declared in Executive Order 14156. Based on the use of alternative procedures for compliance with Section 106 (36 CFR 800.12(b)(2)), the Service is evaluating the measures that will be implemented to avoid, minimize, and mitigate adverse effects on historic properties.

9.3 Defining Traditional Cultural Properties

Summary

One commenter stated that the Service misinterprets the definition of Traditional Cultural Properties, in reference to the Draft SEIS statement that Traditional Cultural Property surveys have not been conducted in the study area. The commenter references Bureau of Land Management (BLM) departmental guidance that states the following:

> Tribal Cultural Properties are identified by consulting with the cultural groups known to have traditional interests in the target area. Consultation gives interested persons an opportunity to reveal to the BLM the specific locations of traditional cultural places that are known to them and that they want the BLM to consider during decision making. (BLM Manual 8110.22.D.2)

The commenter states that to qualify as Traditional Cultural Properties, properties should already be known to the tribes and therefore, that additional surveys are not needed to identify such places.

Response

Section 3.10 of the Final SEIS has been updated to revise all references to Traditional Cultural Properties to "Traditional Cultural Places" in accordance with the revised version of National Register Bulletin 38, issued in 2024. The revised version of National Register Bulletin 38 (2024) defines a TCP as "a building, structure, object, site, or district that may be listed or eligible for listing in the National Register for its significance to a living community because of its association with cultural beliefs, customs, or practices that are rooted in the community's history and that are important to maintaining the community's cultural identity." As described in SEIS Section 3.10, TCPs can be considered historic properties if they are associated with cultural beliefs, customs, or practices of a living community that: (1) are rooted in that community's history; and (2) are important in maintaining the community's cultural identity. Communities of any cultural or ethnic background may have places to which they ascribe traditional religious or cultural significance.

Regarding the BLM Manual 8110 citation provided by the commenter, the relevant full text excerpt is as follows:

> Identification by Consultation, Not Field Survey. Specific properties, or categories of properties, of traditional cultural or religious importance should be known to the group that ascribes traditional value to them. Accordingly, such properties are not identified using survey methods analogous to archaeological survey. Instead, they are identified by consulting with the cultural groups known to have traditional interests in the target area. Consultation gives interested persons an opportunity to reveal to the BLM the specific locations of traditional cultural places that are known to them and that they want the BLM to consider during decision making (BLM 2004:22D2).

The BLM document cited by the respondent is intended to be guidance for the BLM specifically and not the Service, and was issued two decades prior to publication of the revised National Register Bulletin 38 (2024). The revised Bulletin includes guidance on a variety of TCP identification efforts, including background research, engaging with communities, and conducting fieldwork and documentation. The Bulletin also notes that "Whether a [TCP] is known, ***found during routine survey work [emph. added],*** identified through consultation, or brought forward by the community, it must be evaluated according to the National Register criteria…" (NPS 2024:41). This passage implies that a TCP does not necessarily have to be previously known to a community.

9.4 Effects on and Avoidance of Historic Properties

Summary

Multiple commenters expressed concerns about effects on and avoidance of historic properties.

Concerns about potential effects on the Oregon-California National Historic Trail and the Mormon-Pioneer National Historic Trail included potential destruction of ruts and swales, visual impacts from the construction of the transmission line, loss of public access to these places, impacts of runoff from the placement of transmission line towers, and loss of important history associated with the historic trails. One commenter noted that O'Fallon's Bluff is one of few publicly accessible locations to view the trail ruts, making it especially important to protect.

Concerns about the Birdwood Creek area included that it contains artifacts demonstrating Native American use and occupation of the area, that it has been protected by landowners, and that Tribal Nations were not consulted about potential effects on this site. One commenter provided details on the resources identified at this area, specifically site 25LN113, and suggested that more investigation should be conducted if ground disturbance is proposed near this site.

One commenter stated there has been no concession to address visual impacts on the historic ranch just north of Stapleton (LO00-001), the historic St. John's church near Brewster (BL00-008), the State of Nebraska Scenic Overlook just north of the Dismal River on the east side of Highway 83, and the Sandhills Scenic Byway Highway 2. One commenter mentioned that the historic ranch near Stapleton may no longer exist due to a recent fire. The landowner of the historic ranch near Stapleton stated that the transmission line would directly affect the historic ranch, which was homesteaded in the "late 1800s–1900s." The landowner is specifically concerned about effects on buildings on the west side of their property, which runs along Highway 83.

One commenter asked why every place that could be eligible for listing in the NHPA was not given the same consideration of avoidance as O'Fallon's Bluff, because all historic sites should receive the same consideration and protection. Commenters also expressed concern about the lack of steps taken to avoid, minimize, and mitigate impacts on cultural sites. One commenter requested details on NPPD's plan to avoid disrupting and destroying cultural sites during construction, maintenance, and emergency repairs of the R-Project.

Response

In compliance with Section 106 of the NHPA, the Service has considered effects on historic properties in consultation with the ACHP, SHPO, Tribal Nations, and Consulting Parties. The Service prepared the Cultural Resources Inventory Report (CRIR) to summarize past inventory and evaluation efforts (Appendix I, *Select Supplemental Section 106 Materials,* Attachment 2). On January 13, 2026, the Department of the Interior approved the use of alternative procedures for compliance with Section 106 of the NHPA for the R-Project in response to the national energy emergency declared in Executive Order 14156. Based on the use of alternative procedures for compliance with Section 106 (36 CFR 800.12(b)(2)), the Service is evaluating the measures that will be implemented to avoid, minimize, and mitigate adverse effects on historic properties.

Regarding comments about specific historic properties:

- *National Historic Trails:* SEIS Chapter 2, *Alternatives*, and Appendix E, *NPPD Input on Alternatives Development*, describe the routing process and the consideration of alternatives to avoid or minimize effects on historic properties. As described in SEIS Section 2.2, *NPPD Process for Selecting Its Final Route,* the proposed action route reflects NPPD's decision to shift a segment of the transmission line 0.5 mile east of the Oregon-California Trail ruts at O'Fallon's Bluff, avoiding direct overhead crossing of the ruts and extending physical separation between the proposed route and the historic property.

  Final SEIS Section 3.10 has been updated to reflect visual impacts on historic properties that could occur under the proposed action.

  It is the Service's understanding that existing public access points to NHT remnants will continue to remain accessible to the public and will not change as a result of the R-Project.

- *Birdwood Creek archaeological site:* The Service consulted with Tribal Nations about potential effects on the Birdwood Creek archaeological site (25LN113), as described in FEIS Section 3.10 (incorporated by reference into the SEIS). As part of Section 106 consultation, the Service provided Tribal Nations with access to the report detailing additional subsurface testing on 25LN113 and the recommendation of eligibility for inclusion in the National Register of Historic Places (Bedingfield and McKenzie 2018). The Service also shared the CRIR, which discusses this site, with Tribal Nations for review (SEIS Appendix I, Attachment 2). 25LN113 was discussed in meetings between the Service and Tribal Nations in December 2023 and February 2024, and the Pawnee Nation informed the Service that this site is of concern to them.

- *St. John's Church, Historic Ranch near Stapleton, State of Nebraska Scenic Overlook:* The status of these properties is described in the CRIR (SEIS Appendix I, Attachment 2).

- *State Highway 2 (Sandhills Scenic Byway):* State Highway 2 (Sandhills Scenic Byway) was surveyed and recommended as not eligible for the National Register of Historic Places by Mead & Hunt and Heritage Research Ltd. (SEIS Appendix I). SEIS Section 3.12, Visual Resources, incorporates by reference FEIS Section 3.12, which describes visual impacts on State Highway 2 and determines that the R-Project would have a low-intensity effect on the highway.

As described in SEIS Section 3.10, the Service is evaluating the measures that will be implemented to avoid, minimize, and mitigate adverse effects on historic properties, including those listed above.

Regarding equal consideration of avoidance for historic sites other than O'Fallon's Bluff, SEIS Section 2.2 describes the decision-making process for the reroute of the transmission line 0.5 mile east of O'Fallon's Bluff (LN0-028). SEIS Chapter 2, *Alternatives*, and SEIS Appendix E describe the consideration of alternative routes for other known historic properties. As stated in the response to Comment 1.5, *Require Reroute*, the Service does not have the authority to require NPPD to implement reroutes or other modifications to its proposed project.

9.5 Suggested Revisions to Table 3.10-1

Summary

One commenter proposed revisions to SEIS Table 3.10-1. Suggested revisions included clarifying that the Sutherland State Aid Bridge (LN00-032) has been demolished and updating the eligibility status of six other archaeological sites and built-environment resources (LO00-001, LN00-032, RPKB-5, 25LN113, WH00-001, WH00-003, and WH00-004).

Response

SEIS Section 3.10.1.1, Table 3.10-4 (formerly Table 3.10-1), has been revised to reflect the commenter's suggestions for the following properties: Sutherland State Aid Bridge (LN00-032), RPKB-5, and 25LN113. WH00-001 and WH00-003 have been removed from Table 3.10-1 because they are not eligible for listing in the National Register of Historic Places.

SEIS Table 3.10-4 was not revised for LO00-001 and WH00-004 because both properties are . eligible for listing in the National Register of Historic Places.

9.6 Correspondence with Tribal Nations

Summary

One commenter stated that SEIS Section 3.10, *Cultural Resources*, should describe correspondence with the Cherokee Nation, Lower Brule Sioux Tribe, and Rosebud Sioux Tribe to ensure comprehensive documentation.

Response

Final SEIS Section 3.10 has been updated to include more information about consultation with Tribal Nations, including correspondence and meetings. Additionally, SEIS Appendix I, *Select Supplemental Section 106 Materials*, has been updated to include the Final CRIR, which describes correspondence with Tribal Nations and Consulting Parties, as Attachment 2.

10 Visual Resources

10.1 Impacts on Horseshoe Bar Ranch

Summary

One commenter recommended a clarifying edit to text in SEIS Section 3.12, *Visual Resources*, describing the effects of the proposed action on visual resources to clarify that the effects on the Horseshoe Bar Ranch were disclosed in the FEIS for Alternative A.

Response

Final SEIS Section 3.12 has been updated to include the recommended clarification.

10.2 Alternative B Impacts on Visual Resources

Summary

One commenter suggested revisions to the conclusion of effects of Alternative B on visual resources, recommending that effects be described as "similar" to those described in the FEIS for Alternative B, rather than "the same as."

Response

Final SEIS Section 3.12, *Visual Resources*,, has been updated to include the recommended clarification.

11 Recreation

11.1 Tables 3.9-1 and 3.9-2

Summary

One commenter suggested revising the column headings in SEIS Tables 3.9-1 and 3.9-2 to indicate the distances shown are from the closest "known" project areas and acknowledge that there are some related renewable energy projects for which locations are not yet known.

Response

Final SEIS Section 3.9, *Recreation*, has been updated to include the recommended revisions to column headings and footnotes in Tables 3.9-1 and 3.9-2.

12 Air Quality and Greenhouse Gases

12.1 Proposed Action Impacts on Air Quality

Summary

One commenter suggested that the conclusion in SEIS Section 3.13, *Air Quality*, for the proposed action effects should be revised from "low to moderate intensity" to "low intensity" to be consistent with the FEIS determination of effects.

Response

Final SEIS Section 3.13 has been updated to include the recommended revision regarding the intensity of potential impacts from localized increases in air and particulate emissions expected during project construction.

13 Noise

13.1 Impacts on Ranching

Summary

One commenter expressed concern that the localized increase in noise during construction of the R-Project and long-term noise associated with maintenance of the R-Project would have a negative effect on cattle ranching operations. Specific effects noted by the commenter included interruption to cattle habitat and behavior (e.g., habits), resulting in a decreased conception rate and overall decrease in production.

Response

SEIS Section 3.14, *Noise*, incorporates by reference FEIS Section 3.14, *Noise*, which addresses impacts of localized increases in noise expected during construction, operation, and maintenance of the proposed action and alternatives. NPPD would coordinate with local ranchers if it is determined that livestock may be affected by noise during key construction periods. As stated in the FEIS, NPPD would assist with livestock relocation and be responsible for certain related property damage caused by noise.

SEIS Section 3.17, *Socioeconomics*, incorporates by reference the FEIS effects analysis for socioeconomics. FEIS Section 3.17, *Socioeconomics*, analyzed impacts on cattle grazing and beef production operations. As noted, short-term effects would include temporary, loud construction noises typically caused by aircraft or implosive splicing. Localized noise could spook or stress cattle, potentially resulting in injury to themselves or to ranch infrastructure. As stated in the FEIS, NPPD would work with landowners to avoid, minimize, or mitigate adverse effects on cattle from construction noise through replacement or compensation.

14 Health and Safety

14.1 Impacts from Electric and Magnetic Fields

Summary

Multiple commenters expressed concerns about short-term and long-term health and public safety impacts of EMFs that are emitted by transmission infrastructure. Several commenters cited studies that linked EMF exposure to acute and chronic disease. Two commenters expressed concern over the potential significant impacts on individuals with pacemakers and implantable cardioverter defibrillators due to the unique risks of electromagnetic interference. Several commenters expressed similar health concerns for cattle, horses, and other domesticated animals that are exposed to EMFs. One commenter expressed concern that cell phones and other communication devices will not work properly within 0.5 mile of the R-Project. One commenter provided attachments pertaining to the effects of industrial wind turbines on humans and wildlife.

Response

SEIS Section 3.16, *Health and Safety*, incorporates by reference the information and analysis in FEIS Section 3.16, *Health and Safety*, which addresses potential short and long-term impacts of EMFs. As

stated in the FEIS, while numerous studies have been conducted to assess the potential for EMFs to cause acute and chronic health issues, results remain inconclusive. Regarding implantable medical devices, the FEIS described recommendations for affected individuals to limit their exposure to electric fields to 1 kilovolt per meter and magnetic fields to 1,000 milliGauss. However, the listed exposure limit is not applicable to the R-Project, as no known members of the public live in the transmission line right-of-way.

As stated in FEIS Section 3.16, "no biological disorder can be attributed to the exposure of livestock to EMFs generated by high-voltage lines, such as the R-Project. Analysis of data collected did not identify any harmful effect on the health, productivity, fertility, reproduction, or behavior of livestock exposed to EMFs." As stated in the response to Comment 6.3, *Effects of High-Voltage Electrical Current*, Final SEIS Sections 3.6, *Wildlife*, and 3.7, *Special Status Species*, have been updated to describe potential effects of EMFs on wildlife.

Regarding concerns about cell phones and other communication devices, based on available research, there is no known effect linking communication device failures to localized EMF exposure.

The Service reviewed the references provided by the commenter and determined that the references used in the FEIS and SEIS are adequate to characterize impacts of wind energy on humans and wildlife.

14.2 Electric Shock Risk

Summary

Commenters expressed concern regarding the health and safety risks (death or injury) to humans and animals (e.g., cattle, horses, wildlife) from electric shock or stray electric discharges. Commenters also expressed concern for the potential for grounding rods to fail and for impacts being more likely in areas with a high water table. One commenter asked how landowners or others affected by electric shock would be compensated in the event of injury or death.

Response

SEIS Section 3.16, *Health and Safety*, incorporates by reference the information and analysis in FEIS Section 3.16, *Health and Safety*, which addresses the risks associated with electric shock and stray electric discharge. As stated in the FEIS, the risk of shock to the public and livestock under the proposed action is expected to be of low intensity because the facilities that conduct induced currents (e.g., fences parallel to and near the transmission lines) would be grounded. NPPD would ensure that proper grounding measures are implemented wherever the risk of electric shock exists prior to energizing a line or moving equipment. As stated in the FEIS, spark-discharge shocks can occur when people carry conducting objects under transmission lines, but such nuisance shocks (i.e., small shocks caused when someone who is electrically grounded contacts an object that has an induced voltage) do not pose a health risk. Standing water can carry stray voltage and cause shocks, but as with the risk from equipment use, such shocks would be considered nuisance shocks. The R-Project would be designed and constructed to meet all applicable safety codes, including the National Electrical Safety Code, which ensures safety for the public and for NPPD crews working on the transmission line. The National Electrical Safety Code is the guiding document for reducing the potential risk of shock and requires that static build up caused by energized conductors must be limited to 5 mA or less.

14.3 Fire Risk

Summary

Multiple commenters expressed concerns about fire risk management, including that construction, operation, and maintenance of the R-Project could cause fires that pose a risk to public health and safety. Commenters expressed concern that due to the location of the R-Project and a lack of adequate fire-fighting equipment, local authorities and landowners would not be able to adequately control fires started by the R-Project. Commenters sought clarity on the roles and responsibilities of NPPD, the Service, and landowners for fire management, expressing concern that NPPD has stated that they would not bear responsibility or liability for fires started from R-Project construction or maintenance and that landowners would be responsible for fighting fires and paying for fire recovery.

One commenter requested that the SEIS or HCP address how ranchers who lose property due to a fire started from the R-Project would be compensated. Commenters stated that NPPD should be required to provide more landowner protection (specifically, a "mitigation plan") from fire risk before the Service can issue a permit. One commenter asked whether the Service will be responsible for overseeing activities to ensure that environmental protection practices are followed and fire risk is minimized. One commenter asked what entity would be supervising the safety standards to prevent fire.

Response

SEIS Section 3.16*. Health and Safety,* incorporates by reference much of FEIS Section 3.16, *Health and Safety*, which addresses fire risk and wildfire management. Analysis has shown that fires caused by power lines are relatively rare and more prevalent for distribution and lower voltage transmission lines (e.g., 69 kV) than higher-voltage transmission lines such as the R-Project. Additionally, wildfire threats from high-voltage transmission lines are often indirect, consisting of human-caused accidents during construction and maintenance. NPPD would implement the fire prevention AMM described in FEIS Section 3.5.3, *Avoidance, Minimization, and Mitigation Measures*, and incorporated by reference into the SEIS.

In the FEIS Analysis of Public Comment Report, the following response was provided for Concern Statement 5.12-2:

> If a fire is caused by the negligence on the part of NPPD (i.e., below-standard construction, operation, or maintenance practices), NPPD would be responsible for losses and damages to landowners, and such losses would be covered through NPPD's "self-insurance" or excess liability insurance coverage. NPPD's excess liability insurance is underwritten by Associated Electric and Gas Insurance Services Limited, a leading mutual insurance company that provides liability and property insurance coverage and related risk-management services to the energy industry. NPPD would not be liable or responsible for landowner losses resulting from fire caused by a tower or other infrastructure that is damaged by a storm or some other event resulting from natural causes without human intervention.

FEIS Section 2.4.9.10, *Foundation Excavation and Installation*, incorporated by reference into the SEIS, describes how NPPD would address fire risk from construction, including fire safety measures and mitigation plans employed during construction and maintenance. As stated in this section of the FEIS, NPPD would require its construction contractor to provide fire protection to avoid the

potential for wildfires at tower construction sites. The construction contractor would be required to have a water tank and fire extinguishers onsite during these activities and would implement additional prevention measures, such as fireproof roll-up mats and welding tents.

Environmental Compliance Monitors, project inspectors, and work crew leaders would be responsible for implementing and supervising fire-prevention measures, but all project employees would be responsible for following all safety procedures, including standards for fire prevention. As described in Revised HCP Appendix G, *Compliance Monitoring Plan*, the Worker Environmental Awareness Program training module, which all personnel working on the project are required to complete, specifically includes a discussion of fire-prevention and fire-protection measures.

15 Socioeconomics

15.1 Impacts on Agriculture

Summary

One commenter suggested revisions to the text regarding potential financial impacts on agricultural operations from the construction of the related renewable energy projects. The commenter recommended acknowledging that project developers typically compensate landowners for any financial losses through easement or lease negotiations, which minimizes the economic impacts on the landowner.

Response

Final SEIS Section 3.17, *Socioeconomics,* has been updated to include the commenter's suggested clarification and provide a corresponding citation.

15.2 Impacts from Related Renewable Energy Projects

Summary

One commenter suggested revisions to the language describing the economic benefits of the operational phase of related renewable energy projects to include the construction phases. Additionally, the commenter recommended the inclusion of a sentence mentioning the generation of tax revenues for local governments.

Response

The sentiment of the commenter's first suggested revision is correct. However, effects from the generation of jobs during both construction and operation are already discussed in SEIS Section 3.17, *Socioeconomics*. The paragraph referenced in the comment specifically discusses beneficial socioeconomic effects from the operation of related renewable energy projects.

The commenter is correct that economic benefits could result from the generation of tax revenue. Final SEIS Section 3.17.2.2, *Related Renewable Energy Projects*, was updated to reflect this potential effect.

16 Environmental Justice

16.1 U.S. Census Data Sources

Summary

One commenter recommended clarifying the data sources used in the FEIS by specifying that the 2010 Decennial Census was used for identifying minority populations, while the 2012 American Community Survey data was used for identifying low-income populations.

Response

SEIS Section 3.18, *Environmental Justice,* has been removed from the Final SEIS pursuant to Executive Order 14154, *Unleashing American Energy* (Jan. 20, 2025), and a Presidential Memorandum, *Ending Illegal Discrimination and Restoring Merit-Based Opportunity* (Jan. 21, 2025). This Order and Memorandum repeal Executive Orders 12898 (Feb. 11, 1994) and 14096 (Apr. 21, 2023), which pertained to the consideration of environmental justice in federal agency actions. Therefore, the language referenced by the commenter is not in the Final SEIS.

17 Comments on the HCP

17.1 Costs of the R-Project

Summary

One commenter asked who is responsible for the costs of the R-Project and how much the R-Project would raise energy costs.

Response

Revised HCP Chapter 8, *Funding*, describes how NPPD would fund HCP implementation through the following financial processes: (1) the SPP load-sharing cost methodology; (2) General Bonds issued for the R-Project; and (3) NPPD's annual rate-setting budgets.

NPPD expects to be able to minimize transmission rate increases with the revenue it receives from other SPP Transmission Customers per current SPP load-sharing cost methodology, but some costs associated with operating and maintaining the electric transmission and distribution system (including the R-Project) are currently included in customer rates. Based on previous analysis and current projections, NPPD anticipates customers would be responsible for approximately 6 to 7% of total project costs. Exact costs to rate payers cannot be determined until the R-Project is constructed and operational.

17.2 NPPD's Purpose and Need for the R-Project

Summary

Commenters questioned NPPD's purpose and need for the R-Project.

Multiple commenters expressed concerns included that the driver for the final route selection is to accommodate wind energy development. Two commenters cited meeting minutes from a Cherry

County Wind Energy Committee meeting in 2011, meeting minutes from Cherry County Commissioners' meetings in 2011 and 2012, and Southwest Power Pool planning documents from 2012.

Two commenters asserted that, although NPPD has stated that the power from the R-Project would be used in Nebraska, a portion of the energy transmitted by this line will be sold out of state.

One commenter stated that, although NPPD makes a case for the need for more energy in the north-central part of the state, it has not provided a clear reasoning for why the R-Project must go through the "most fragile and most native part of the Nebraska Sandhills… at a great distance from existing roads, when that would make access to construction, maintenance, and emergency repairs difficult and destructive to the sensitive Sandhills." The commenter suggests that it may be more effective to construct new sources of energy in areas of greater need (i.e., north-central Nebraska).

Response

SEIS Section 1.7, *Nebraska Public Power District's Need for the R-Project*, refers to Revised HCP Section 1.2, *Purpose and Need*, which describes the purpose and need of the R-Project. The purpose and need for the R-Project include reliability improvements, congestion relief, and renewable resource access.

As described in Revised HCP Section 1.2, approximate location needs for the R-Project were identified based on requirements in Southwest Power Pool's (SPP) 2012 Integrated Transmission Plan 10-Year Assessment Report. NPPD received a conditional Notice to Construct from SPP on April 9, 2012, for a new 345 kV transmission line, which extends from NPPD's GGS Substation north to a new 345 kV substation to be located in or near Cherry County, and then extends eastward to another new 345 kV substation to be located in Holt County, which is to interconnect with Western Area Power Administration's existing Fort Thompson to Grand Island 345 kV line on the eastern border of Holt County. SPP's 2014 High Priority Incremental Load Study identified the need for a new substation at Thedford to address overloads and voltage violations. This established Thedford as the intermediate terminal point between the GGS and the interconnection with the Holt County Substation. On November 4, 2021, SPP issued a revised Notice to Construct for the R-Project, which removed the majority of the Holt County Substation from the R-Project, allowing construction of that substation to proceed separately from the R-Project.

NPPD's purpose and need for the R-Project also includes helping to ensure the reliability of the electrical grid, which goes beyond Nebraska. Once on the grid, electrons are not identifiable as to origin or destination, and they do not stop at state boundaries. However, as noted in Revised HCP Section 1.2, the R-Project would provide a direct benefit to the existing Nebraska area transmission system by increasing the transfer capability across the NPPD system, which lessens the risk of load interruptions from storm damage or other issues on the transmission system. The R-Project would also reduce congestion within Nebraska, which would provide NPPD's customers with access to the lowest-cost generation resources to serve the load within the market.

17.3 NPPD's Interactions with Landowners

Summary

Commenters expressed concern about NPPD's interactions with landowners. Commenters described instances where they felt pressured or coerced by NPPD to sign easement documents for their property, with threats of litigation if the agreement was not signed.

Response

The Service's decision is the review of the ITP application for permit issuance. Communications between NPPD and landowners are outside of the scope of the Service's decision.

17.4 Landowner Concerns About Use of Properties for the R-Project

Summary

Multiple landowners expressed concerns related to the use of their properties for R-Project infrastructure. Commenter concerns included:

- NPPD should place poles at the edges of meadows so that landowners do not need to farm around them;
- NPPD should restore landowner roads damaged during construction, level and reseed areas where trees are removed to avoid creating pools of standing water, and restore grasslands and shelter belts;
- The HCP is not clear about who will enforce grounding of fences, maintaining gates, and ensuring safety for water sources, people, and livestock;
- The HCP is not clear how landowners would be compensated in the event of property damage or financial loss; and
- NPPD should dispose of carcasses if birds are killed via collision during storms.

One commenter stated that NPPD changed its approach for constructing gates to a method that is not preferred by landowners.

Response

NPPD continues to work with landowners to negotiate voluntary easements, which may result in minor adjustments to the project design, such as placement of poles along the edge of hay meadows.

Regarding restoration of roads and areas where trees are removed, Revised HCP Appendix E, *Restoration Management Plan*, describes NPPD's plan for completing restoration activities in all temporary disturbance areas, including access areas. RMP Section 4.3, *Effectiveness Monitoring*, and Revised HCP Appendix E, Section 4.4, *Restoration Adaptive Management*, describe how the Service would ensure monitoring is being completed and is effective. Revised HCP Appendix E, Section 1.3, *Plan Updates*, describes how NPPD would work with the Natural Resource Conservation Service and landowners if any changes need to be made to the RMP. FEIS Sections 2.4.13.2, *Safety*, and 3.16.2.2, *Alternative A: Tubular Steel Monopole and Steel Lattice Tower Structures*, which are incorporated by reference into the SEIS, discuss safety issues, such as grounding measures. FEIS Sections 3.8.2.2,

Alternative A: Tubular Steel Monopole and Steel Lattice Tower Structures; 3.17.2.2, *Alternative A: Tubular Steel Monopole and Steel Lattice Tower Structures;* and 3.17.3, *Avoidance, Minimization, and Mitigation Measures*, which are incorporated by reference into the SEIS, discuss NPPD's commitments to compensate landowners for property and for damages and losses.

The potential for avian collision with the R-Project is addressed in Revised HCP Sections 4.1 through 4.5, which address listed avian species, and in MBCP Section 5.1.2, *Potential Effects from Operation and Maintenance*. NPPD would respond to reports of birds killed or injured via collision. NPPD's procedure for reporting on dead or injured birds includes reporting such events to the NGPC and the Service. To comply with applicable state and federal laws, NPPD would only handle or transport injured birds or carcasses at the official direction of a state or federal authority.

Regarding concerns about the design of gates that require modification or replacement for the R-Project, NPPD works with landowners on a case-by-case basis to determine which gate type best suits their individual operation. NPPD's standard methods allow for both wire and steel gate options, and all gate types would be grounded.

17.5 Historical Temporary Generation Needs

Summary

One commenter requested information on NPPD's use of temporary diesel generators, specifically requesting how often they have been needed, their location, and their power capacity. The commenter also asked how much power has been added in the area where temporary generation has been required, how much power is estimated to be needed in the future, and how often there were issues before the 2012 drought.

Response

As described in Revised HCP Section 1.2.1, *R-Project Purpose and Need*, the use of mobile diesel generators is one indicator that the R-Project is needed to meet the reliability and congestion components of NPPD's stated purpose and need for the R-Project. Details regarding the use of mobile diesel generators are not within the scope of the HCP and are not required to inform the SEIS analysis.

17.6 Suitability of the Project Area for Transmission Line Structures

Summary

Commenters expressed concern with the type of proposed transmission line towers because of the terrain along the proposed R-Project route. Commenters stated that terrain and habitat considerations should be used to determine the appropriate tower types, providing the example that lattice towers should be used in rough terrain near the Dismal River. One commenter expressed concern with the use of helical pier foundations in the Sandhills, asking how NPPD can be sure that helical piers will "transfer the load…to a suitable depth of soil" and noting potential instability in areas of standing water and the potential for blowouts around tower foundations. This commenter also expressed concerns regarding potential impacts on native soils (i.e., ruts) from frequent maintenance to ensure towers are stable.

One commenter stated that NPPD should conduct extensive soil coring studies to determine the area's suitability for the proposed steel monopoles and lattice tower structures and the equipment required to install them, including evaluation of the soft, moisture-laden soils and high water table in certain portions of the study area.

One commenter expressed concern about impacts on soils from helicopter pads required for construction of lattice tower structures.

One commenter asked if the areas around towers would be fenced to exclude cattle.

Response

Revised HCP Section 2.1.1, *Structure Types and Foundations*, describes the proposed structure and foundation types, the reasons underlying the location of each type, and the reasons why various structures were selected. NPPD typically uses tubular steel monopole structures and would use tubular steel monopole structures for the R-Project when paralleling existing maintained access areas, such as Highway 83. Lattice tower foundations use helical pier foundations that do not require concrete or temporary casings. Lattice towers would be used in areas of the Sandhills where existing access roads are limited or do not exist, due to construction advantages in transportation and installation of these structures. Lattice towers can be constructed with less overall impact on the surrounding area with the use of smaller equipment and helicopter construction. The final design for foundations would be completed during construction based on site-specific conditions encountered during construction. Final SEIS Section 3.5, *Vegetation*, discusses the potential for blowouts.

Regarding concerns about the impacts of maintenance activities on native soils, as described in Revised HCP Section 2.7.4, *Transmission Line Inspection,* access to the line once operational is expected to consist of annual transmission line inspections, which could be conducted via helicopter, fixed-wing aircraft, drones, or ground patrols (which would typically use light ATVs). As described in Revised HCP Section 2.7.5, *Routine Maintenance and Repairs*, "[r]outine scheduled maintenance and repairs will not begin until 30 years after the in-service date and will occur once every 10 years for the remainder of the life of the transmission line." Revised HCP Section 2.7.6, *Emergency Repairs*, describes that emergency repairs would be conducted as needed and areas disturbed by access would be restored by NPPD.

Regarding comments suggesting that NPPD should conduct additional soil coring studies to determine the area's suitability for the proposed tower structures, NPPD conducted soil sampling and analysis during project development and may conduct additional geotechnical investigations in areas where it previously did not have access or where the route has been adjusted. As explained in the FEIS Analysis of Public Comment Report in response to Concern Statement 5.2-4:

> "Section 3.2.1, *Geology and Soils, Affected Environment*, of the FEIS evaluates the soil characteristics within the Project area in detail, including erosion potential, restoration potential, and prime farmland, and the effects of ground surface disturbance activities on soils. Soil data throughout the study area were obtained from USDA, NRCS, soil surveys and the Soil Survey Geographic database. In addition to those sources, NPPD has analyzed Project-specific soil boring samples collected along the R-Project route in Lincoln, Logan, Thomas, Blaine, Loup, Holt, Garfield, and Wheeler Counties."

The Revised HCP and SEIS both account for impacts on soils from helicopter pads in the estimates of temporary and permanent disturbance.

SEIS Section 3.2.1, *Affected Environment*, incorporates by reference the FEIS Section 3.2, *Geology and Soils,* discussion of soils for the proposed action and alternatives, as well as geology, mineral resources, erosion potential, and soil restoration potential. FEIS Section 3.2 also describes preventative measures and monitoring efforts that would be used to reduce impacts on soils from construction and maintenance efforts.

NPPD would work with landowners in cases where fencing around transmission line structures is preferred.

17.7 Helicopter Construction

Summary

One commenter expressed concern about the potential effects of helicopter use during R-Project construction. Specific concerns included the erosion of sandy soils from helicopter construction and disturbance of landowner activities (i.e., cattle grazing). The commenter requested that additional details about the use and timing of helicopters be provided so that landowners can prepare for the use of helicopters near their properties and livestock.

Response

Revised HCP Section 2.6.1, *Helicopter Construction*, describes the use of helicopters during construction and states that the helicopter pilots and construction contractor would develop an internal daily flight plan for the preferred flight path of that day's activities. These plans would likely be developed one to two days prior to the placement of structures and are heavily dependent on local weather conditions and topographic features. The daily flight plan would follow the safest and most direct route possible between the fly yard/assembly area and structure locations. As noted in Revised HCP Section 2.6.1, sensitive features that would be avoided by the daily flight plan may include, but are not limited to, occupied homes, businesses, concentrations of cattle, active bald eagle nests, and large concentrations of waterfowl or cranes. This section also describes that "matting or the use of a water truck may be required to spray the site to reduce dust" from helicopter use.

17.8 Concrete Truck and Crane Access

Summary

One commenter expressed concern with the use of concrete trucks and cranes in the Sandhills, given the instability of the landscape. The commenter stated that NPPD should visit the areas where construction is proposed to better understand the landscape and the challenges with construction in these areas.

Response

Revised HCP Section 2.1.1, *Structure and Foundation Types*, describes the structure and foundation types and the reasons underlying the use of each type. Tubular steel monopoles require cast-in-place concrete foundations. NPPD uses tubular steel monopole structures for most projects and would use tubular steel monopole structures for the R-Project when paralleling existing maintained

access areas, such as Highway 83. Lattice tower foundations use helical pier foundations that do not require concrete or temporary casings. Lattice towers would be used in areas of the Sandhills where existing access roads are limited or do not exist, due to construction advantages in transportation and installation of these structures. Lattice towers can be constructed with less overall impact on the surrounding area with the use of smaller equipment and helicopter construction. The final design for foundations would be completed during construction based on site-specific conditions encountered during construction.

17.9 Telecommunications Systems

Summary

One commenter asked for information on the locations of the regeneration communication sites along the proposed R-Project route. The commenter also asked if NPPD will lease the "dark fiber" to a communication company.

Response

As described in HCP Sections 2.1.4, *Overhead Shield (Ground) Wires*, and 2.3, *Communications System*, one of the overhead shield wires would consist of an optical ground wire used to facilitate internal NPPD communications between substations. The exact locations of the signal regeneration sites are described in Revised HCP Section 2.3, *Communications System*, and include the intersection of U.S. Highway 83 and Auble Road, along State Highway 7 where the R-Project proceeds east, and the intersection of State Highway 11 and the R-Project. NPPD has no plans to enter leases with communications or broadband companies.

17.10 Safety of Grounding

Summary

One commenter expressed concern with the safety of grounding in deep sand, especially under drought conditions, and stated that the Revised HCP does not provided data regarding the safety of grounding in these circumstances.

Response

Installation of grounding rods is described in Revised HCP Section 2.1.5, *Grounding Rods*, and FEIS Sections 3.16.2.2, *Alternative A: Tubular Steel Monopole and Steel Lattice Tower Structures*, and 3.16.3, *Alternative B: Tubular Steel Monopole Structures Only*. If the resistance to ground for a transmission structure is excessive, then additional ground rods would be installed to lower the resistance. Revised HCP Section 2.7.2, *Safety*, describes safety aspects of R-Project operations and maintenance. All fences, metal gates, and pipelines that cross or are within the transmission line right-of-way would be grounded to prevent electrical shock. NPPD operation and maintenance personnel would be responsible for maintaining electrical grounds. While grounding in sandy soils poses challenges, NPPD has experience with transmission line construction in such conditions. NPPD has transmission lines across Nebraska and has grounded and maintained those lines in all soil types, including sandy soils (NPPD 2024).

17.11 Visual Impact Mitigation for Steel Monopoles

Summary

One commenter sought clarification on what measures would be implemented to offset the visual impacts of the monopoles so that they blend in with the surrounding environment and asked if they would be left galvanized or if there would be a different color chosen to camouflage them.

Response

NPPD plans to use galvanized steel poles for the steel monopole structures. Potential impacts on visual resources are addressed in SEIS Section 3.12, *Visual Resources and Aesthetics*, which incorporates by reference FEIS Section 3.12, *Visual Resources and Aesthetics*. Visual impacts on cultural and historic resources will also be addressed through the Section 106 process. SEIS Section 3.10, *Cultural Resources*, and SEIS Appendix I*, Select Supplemental Section 106 Materials,* describe the status of the Section 106 process as of FEIS publication.

17.12 Construction Contingency

Summary

One commenter expressed concern with the Revised HCP's construction contingency, stating that this shows NPPD is uncertain about the extent of required work and associated disturbance.

Response

Revised HCP Section 2.4.14, *Incidental Take Permit Covered Activities*, describes the construction contingency and why it is included. The construction contingency addresses instances where additional work that could not have been foreseen at the time of HCP development is required. Examples of such work could include the relocation of an access route for construction. Revised HCP Section 2.4.14, Table 4-1, and Table 5-1 all describe that the construction contingency is limited to 40 acres of disturbance.

17.13 Use of Construction Pads

Summary

One commenter asked whether NPPD would use pads to protect Oregon Trail ruts and soil across pasture and hay meadows from potential adverse impacts due to construction and maintenance of the R-Project.

Response

The Revised HCP includes the use of construction matting to reduce potential impacts on wetland and stream crossings that may serve as habitat to listed species, including ABB, whooping crane, piping plover, rufa red knot, and western prairie fringed orchid. Effects on cultural resources, including historic trails, are addressed in SEIS Section 3.10, *Cultural Resources*, which incorporates by reference FEIS Section 3.10, *Cultural Resources*.

Impacts on soil resources are addressed in SEIS Section 3.2, *Geology, Mineral Resources, Paleontological Resources, and Soils,* with matting identified as an AMM to avoid or minimize impacts on wet soils through incorporation by reference of FEIS Section 3.2, *Geology and Soils*.

17.14 Bird Flight Diverter Maintenance

Summary

One commenter requested that the HCP include a requirement for NPPD to maintain all of the bird flight diverters for the lifespan of the project, including annual maintenance and replacement of any defective or missing diverters.

Response

The Revised HCP includes application of bird flight diverters as an avoidance and minimization measure to reduce potential impacts on all avian species, including those addressed in the Revised HCP as evaluated species (whooping crane, piping plover, bald eagle, golden eagle, and rufa red knot). NPPD would be responsible for the inspection and replacement of damaged line marking devices. As stated in the MBCP, "[d]uring routine inspection of the transmission line, patrols will note the general condition of the line and note any infrastructure, including line marking devices that may require repair or replacement." NPPD would remain responsible for maintaining compliance with the ESA and the Revised HCP.

17.15 Characterization of Temporary Disturbance and Restoration

Summary

One commenter expressed concern with the analysis of the effects of temporary disturbance on ABB habitat, as well as long-term damage to ABB habitat from heavy equipment. The commenter expressed concern about how restoration was factored into mitigation in the HCP. Specifically, the commenter asserted that restoration of disturbed areas will take more than 5 years. The commenter also stated that 80% recovery should not be considered complete restoration.

Response

Restoration activities are fully described in Revised HCP Section 6.3.2, *Effectiveness Monitoring*, and Revised HCP Appendix E, *Restoration Management Plan*. The RMP identifies 80% vegetative coverage as one of the criteria that must be met for the restoration to be considered successful. This criterion provides a measure to determine that a suitable amount of vegetative cover has been achieved to minimize erosion, allow for the plant community to re-establish, and provide suitable ABB habitat. The U.S. Environmental Protection Agency's guidance in *Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices* (1992) considers vegetative cover with a density of 70% to be a suitable mitigation measure to prevent erosion. NPPD anticipates that restoration would be complete in 3 to 5 years following construction but would continue restoration activities until the performance criteria are met on all restoration areas. As described in RMP Section 4.3, *Effectiveness Monitoring*, NPPD would submit annual reports to FWS, which would include results from effectiveness monitoring and document progress toward achieving the performance standards. If performance standards are not met within the initial five-year monitoring period, adaptive management measures would be implemented, and post-construction restoration effectiveness monitoring would be extended until the standards are met. RMP Section 4.4, *Restoration Adaptive Management,* describes NPPD's Restoration Adaptive Management approach.

17.16 Worker Environmental Awareness Program

Summary

One commenter expressed concern with the HCP's Worker Environmental Awareness Program, questioning the feasibility of NPPD adequately training and educating large amounts of contract workers, and alleging there have been past instances of trespassing and fence damage by NPPD contract workers. The commenter expressed concerns that NPPD has not sufficiently completed restoration for other projects in the Sandhills.

Response

Adherence to all avoidance and minimization measures, including the Worker Environmental Awareness Program (Revised HCP Section 6.2.1, *Avoidance and Minimization Measures*), is required as described in Revised HCP Appendix G, *Compliance Monitoring Plan*. The CMP describes that a Compliance Monitoring Team, consisting of a Compliance Manager and multiple Environmental Compliance Managers, would be responsible for ensuring that construction personnel comply with the requirements of the HCP and ITP.

17.17 Herbicide Use

Summary

One commenter stated that the HCP avoidance and minimization measures should not allow for any herbicide use in ABB habitat.

Response

As described in Revised HCP Section 2.8, *Covered Activities*, the application of herbicides is not a covered activity because take is not anticipated to occur from the application of herbicides. All herbicides used in vegetation management or to spread the control of noxious weed populations would be applied during daylight hours when ABB are sheltered from pesticide drift. As described in Revised HCP Section 3.2, *Covered Species*, ABB is a nocturnal species with peak activity occurring directly after sundown.

17.18 Effects Analysis for Blowout Penstemon

Summary

One commenter stated that the data presented in the Revised HCP for blowout penstemon surveys from 2015 and 2016 are likely outdated.

Response

As described in Revised HCP Section 4.10.1, *Potential Effects from Construction*, temporary disturbance areas were sited to avoid blowouts where possible based on engineering constraints such as structure span distances and access to those structures. However, construction activities may result in potential disturbance of blowouts and those identified via desktop assessment were surveyed by helicopter in June 2015 and 2016, during the blowout penstemon flowering period. No blowout penstemon plants were observed in the blowouts surveyed. In addition, Dr. James

Stubbendieck assessed the habitat of each blowout surveyed in 2015 and 2016 and found that only nine of the 74 blowouts provide good habitat quality for blowout penstemon.

Prior to construction, additional surveys would be conducted during the flowering period to confirm the 2015 and 2016 surveys. Preconstruction surveys would be conducted in blowouts previously assessed as having good habitat quality, the nearby blowout within Natural Heritage Program Project-buffered occupied habitat, and disturbance areas identified in final designs to support blowouts. If occupied habitat is identified during the preconstruction survey, the R-Project would be adjusted to avoid impacts on blowout penstemon.

17.19 Effects Analysis for American Burying Beetle

Summary

One commenter stated that basing ABB population values on trapping surveys could produce inaccurate data, either underestimated or overestimated, and asked if there is another data source or survey method that could be used.

Response

As described in Revised HCP Section 5.2.1, *ABB Density Estimate*, all survey efforts used to develop ABB density estimate for the take calculation were completed using approved Service and NGPC survey protocols. Results of surveys conducted by NPPD and other researchers working under the approved Service protocol represent the best available data on ABB populations.

17.20 Characterization of Suitable Habitat for Migratory Birds

Summary

One commenter expressed concern with the HCP's use of LANDFIRE data to assess suitable habitat for migratory birds, stating that LANDFIRE data is easily manipulated to support a project's purpose and that it would be more accurate to use information from on-the-ground observations.

Response

The United States Geological Survey develops LANDFIRE data to provide information on vegetation cover and fuels for use by natural resource managers and researchers and are the best available data to characterize the vegetation coverage of large land areas.

17.21 Consideration of Other Species

Summary

One commenter expressed concern about the statement in Revised HCP Section 4.2, *Piping Plover*, regarding perching potential for raptors, stating that piping plover migration has been seen in areas close to the proposed route and that the R-Project would increase predation risk by providing perching potential for raptor species.

Response

Potential occurrences of piping plover are summarized in Revised HCP Section 3.3.2, *Piping Plover (Charadrius melodus).* There has only been one unpublished and unverified occurrence of piping

plover in the R-Project study area. Potential impacts on piping plover are summarized in Revised HCP Section 4.2 and potential impacts on all avian species from predation are described in MBCP Section 5.1.2, *Potential Effects from Operation and Maintenance*, which states that while increased predatory pressures may occur, there is no available information to quantify the extent of these impacts. Given the native grasses and habitats surrounding the R-Project that provide suitable cover for migratory birds, the potential impact of increased predation is expected to be minimal.

18 General Comments

18.1 General Support

Summary

Commenters expressed support for the proposed action. Commenters referenced the need for the R-Project to provide reliable electricity and alleviate issues with the existing transmission system, including congestion constraints, blackouts during periods of higher demand and extreme weather events, and the need for temporary and often costly short-term solutions to energy shortages. One commenter expressed support for the inclusion of flight diverters in the Revised HCP.

Response

The Service acknowledges commenters' support for the proposed action.

18.2 General Opposition

Summary

Commenters expressed opposition to the project, citing concerns over impacts on water, wildlife, the Sandhills landscape, recreation and tourism, and areas of historic significance. Commenters also expressed opposition to the potential development of solar and wind energy projects and related infrastructure (e.g., feeder lines, substations, access roads, staging area, helicopter pads, and large equipment) and the associated effects on the environment (e.g., erosion, wildlife, and health and safety). Commenters expressed general opposition to the R-Project route and stated that the Service should implement another alternative or develop a different proposed action. Commenters also expressed opposition to the R-Project because of the relationship NPPD has had with the public throughout project development.

Response

The Service acknowledges opposition to the proposed action based on concerns about its potential impacts on resources including water, wetlands, vegetation, wildlife and special status species, recreation, and cultural resources. SEIS Chapter 3, *Affected Environment and Environmental Consequences,* evaluates potential effects of the proposed action and alternatives on these resources. Responses to specific comments on the SEIS analysis for the resources of concern are contained throughout this appendix.

The Service acknowledges opposition based on concerns over NPPD's prior public involvement. NPPD's prior communication and public engagement are outside of the scope of the Service's decision.

The Service acknowledges commenters' preference for certain alternatives. SEIS Chapter 2, *Alternatives*, explains the process used to develop alternatives and explains rationale for why certain alternatives were not carried forward for detailed analysis. Specific comments on alternatives are responded to in Section 2, *Alternatives*, of this appendix.

The Service acknowledges opposition to the development of related renewable energy projects. SEIS Section 3.1.3, *Related Renewable Energy Projects*, describes the related renewable energy projects that the Service has determined to be both reasonably foreseeable and related to the R-Project. The SEIS analyzes these as indirect effects of the proposed action and alternatives within the SEIS Chapter 3 resource sections, considering the effects of construction, operation, and maintenance of wind turbine towers, photovoltaic solar panels, and associated infrastructure.

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Appendix D

Nebraska Public Power District Summary of the Power Review Board and Transmission Line Routing Process

Nebraska Public Power District Summary of the Power Review Board and Transmission Line Routing Processes

May 17, 2023

The U.S. Fish and Wildlife Service (USFWS) has requested a summary of the Power Review Board (PRB or Board) approval process and the routing process for transmission line projects in Nebraska. Nebraska Public Power District (NPPD) provides this summary for USFWS's consideration.

Nebraska is the only state in the United States where all retail electric service is provided by consumer owned utilities. Consequently, the citizens of Nebraska are served by electric utilities for which they have direct representation through an elected city council, elected public power district board, or elected electric cooperative board. Each retail utility has an exclusive retail service area in which it has the exclusive right to serve and the obligation to serve all customers. Section 70-1001 of the Nebraska Revised Statutes (NRS) provides that, to provide the citizens of the state with adequate service at as low overall cost as possible, consistent with sound business practices, it is the state's policy to avoid and eliminate conflict and competition between public power districts. Thus, all retail electric utilities have service territories and service agreements among them that have to be approved by the PRB.

NRS Section 70-1014 provides that, to build new generation facilities or transmission lines, a utility must file an application with the PRB. Upon consideration of that application, the Board must find that (1) the application will serve the public convenience and necessity, and (2) the applicant can most economically and feasibly supply the electric service resulting from the proposed construction, without unnecessary duplication of facilities or operations. *Id.* As part of the Board's evaluation of the application, it must hold a hearing that allows interested parties to appear, file objections, and offer evidence. *Id*. § 70-1013. In accordance with this requirement, after NPPD completes its extensive routing process (described further below) and selects a final and an alternate route or routes, it files an application with the PRB to obtain approval of the proposed transmission line.

Utilities also have to obtain approval from the Public Service Commission (PSC). The PSC has general supervision over any and all wires transmitting electric current or any other wires that cross under or over any railroad track or public highway crossing. NRS § 75-702. The PSC ensures that all lines that are constructed for the transmission of electric current over the public highways meet all of the requirements for clearances and voltages of electric wires. NPPD seeks approval from the PSC after the PRB because it is usually later during the process that the engineering design of the proposed line will be sufficient to know what wires and what voltages will be crossing over which roads and railroads.

NPPD must obtain all state-level approvals that are required to construct the project before it can begin negotiating with any landowners. Under the Uniform Procedure for Acquiring Private Property for Public Use, NRS §§ 25-2501 to 25-2506, if the project requires NPPD to obtain rights or interests in more than ten separately owned tracts of land, NPPD is required to give notice and hold a public hearing at least 30 days before it can begin negotiating with the landowners along

the route. Thus, after the PRB issues an order approving the project, NPPD must hold a public hearing in each county where landowners along the route are located. NRS § 25-2504.

Because the PRB's function is to determine whether the project as proposed will serve the public convenience and necessity and that the applicant can most economically and feasibly supply the electric service without unnecessary duplication of facilities or operations, the applicant must undertake its own thorough process to identify where the project will be located prior to seeking approval from the Board. The PRB's approval is specific to the application that is filed. For the R-Project, NPPD's application included a preferred and alternative route within a routing corridor. The PRB Order found that the routing corridor satisfied the approval criteria in NRS § 70-1014.

However, this does not mean that NPPD is free to change the location of the R-Project anywhere within that corridor without further public process. Because there is no state agency with routing authority in Nebraska, NPPD has developed a robust routing process that has been honed over several decades to ensure public participation and transparency and reduce land-use, environmental, and other conflicts. As a public entity with publicly elected members of its Board of Directors and monthly public meetings, it is imperative that NPPD continue to follow this process to ensure the integrity and transparency of NPPD's transmission development in the state. Thus, if NPPD were to abandon the final route of the R-Project that NPPD's Board of Directors approved in 2015 and select another location within the PRB corridor, it would have to engage in its multi-year public process again, which is described below, with the exception of the identification of the study area and corridors.

NPPD's steps in selecting a route for its transmission lines are as follows: (1) determine the study area; (2) narrow the study area down to route corridors; (3) identify preferred route and alternative routes within corridors; and (4) select a final route. The Guiding Principles for Routing and Siting the Project are contained in **Exhibit A** attached hereto. NPPD's public involvement process requires public input and transparency, as well as collection of available data, and input from many agencies, the landowners, and all aspects of the public. To better understand how these steps are implemented, a brief summary of how NPPD selected the route for the R-Project is useful.

The R-Project study area was initially established through evaluation of the termination points of the transmission line that needed to be connected. These termination points are consistent with the Southwest Power Pool's Notice to Construct. These starting, ending, and intermediate points, along with the need to identify an area that provides for the development of reasonable alternatives, largely dictated the size and shape of the study area boundaries. Data were then acquired for the preliminary study area, including current aerial photography from National Agricultural Imagery Program, as well as Digital Globe Satellite Photography, municipal boundaries, county boundaries, roads, railroads, airports, irrigated agriculture (center pivots), residences, churches, schools, cemeteries, and sensitive environmental features. These data were mapped using Geographic Information System (GIS), and the maps were taken in the field for reconnaissance of the study area. Based on this information, reasonable R-Project study area boundaries were determined that would provide the necessary area and the flexibility needed to establish line route alternatives. During the course of data acquisition, possible exclusion areas or routing constraints were identified, such as areas around incorporated towns, cities, and villages,

public airports, Wildlife Management Areas, State Recreation Areas, Wetland Reserve Program properties, and Farm and Ranch Protection Program properties. The R-Project Study Area is shown on **Exhibit B** attached hereto.

The R-Project study area encompassed approximately 7,039 square miles of predominantly private lands with a few Federal lands managed by USFWS or the U.S. Forest Service, as well as state lands managed by the Nebraska Game and Parks Commission (NGPC) in the study area. NPPD met with representatives from USFWS and NGPC and presented a proposed study area map on December 12, 2012. The proposed study area was presented to community leaders, agencies and the general public in the first round of open house meetings in January of 2013 in Tyron, Hershey, Halsey, Mullen, Chambers and Ainsworth. Comments were solicited and recorded.

During the meetings with the public, the following key issues were identified for consideration of possible constraints for routing: (1) agriculture and irrigation, (2) residential areas, (3) communities, (4) Sandhills ecoregion, (5) special-status species, (6) National Wildlife Refuge, (7) Wildlife Management and State Recreation areas, (8) Wetlands Reserve Program and Farm and Ranch Land Protection Programs, (9) visual resources, (10) commercial and industrial development, and (11) cultural and historic resources. Data were collected and mapped.

High-resolution aerial photography of the entire study area was acquired in December 2012. Information from the initial public input and public domain and data sources were field verified where public access was available. Field observations were recorded concerning potential constraints and opportunity areas. Potential river crossings were identified and considered.

Based on siting opportunities and constraints, the R-Project Study area was narrowed to corridors. NPPD met with NGPC and USFWS on July 2, 2013, and presented and discussed the R-Project corridor map. A map of the R-Project corridors is shown on **Exhibit C** attached hereto.

Proposed corridors were mapped and presented to community leaders, agencies and the general public in open house meetings in September 2013 in Thedford, Sutherland, Dunning, Stapleton, Burwell, and Bartlett. Comments were solicited and recorded. Routing criteria were developed and used to identify preferred and alternate routes. Routing criteria are specific characteristics or traits that are measured and used as factors or points of comparison between route alternatives. Generally these criteria fall into three broad categories: (1) land use, (2) environmental, and (3) engineering data or information. Line routing becomes a process of identifying alternatives that represent a balance of the criteria that fall within the three general categories, while also considering community input and meeting the specific electric system needs. The R-Project routing criteria are provided in **Exhibit D** attached hereto.

The data collected were input into GIS. Potential route links were identified and screened. Considering the criteria, NPPD evaluated potential routes and developed end-to-end route alternatives. NPPD analyzed each section and half section within the corridors. Route opportunities were identified as section and half section lines where (1) there were no residences within 300 feet, (2) existing access was available, (3) there were no center-pivot conflicts, (4) there were no new impacts to cropland, (5) reasonable low-impact river crossings could be used, (6)

there was no conflict with airport operations, and (7) threatened and endangered species could be largely avoided.

NPPD's team identified over 2,000 miles of potential route links, which were evaluated using the routing criteria and public input from the study corridor open house meetings. Based on this analysis, the team connected route links to create potential routes that presented the least impacts with an acceptable balance of the routing criteria. Of the potential route links identified and evaluated, two potential route segments were judged to provide the best routing opportunities from GGS to the Thedford Substation, and three route segments were judged to provide the best routing opportunities from Thedford Substation to the Western Area Power Administration line.

NPPD met with representatives of the NGPC and the USFWS on April 14, 2014, and presented the R-Project Alternative Routes map with the Preferred Route identified and discussed the Project. The preferred and an alternate route, along with several alternate links were presented to community leaders, agencies and the general public in a third round of open houses in April/May 2014 in Stapleton, Sutherland, Thedford, Bartlett, Dunning and Burwell. Comments were solicited and recorded.

Based on all of the comments received and the data gathered through this lengthy public process, NPPD's team selected a proposed final route for the Project. A map of the R-Project Preferred and Alternate Routes in shown on **Exhibit E** attached hereto.

As required by Nebraska Statutes, public hearings were held in November 2014 in Stapleton, North Platte, Thedford, Brewster, Burwell, Taylor, Bartlett, and Chambers. At each hearing, NPPD described the need for the R-Project, the route selection process, the reasons for selecting the route, the right-of-way compensation process, and the rights of each landowner of property that would be impacted by the Project. NPPD recorded all public comments at the public hearings and also held a 30-day public comment period.

A summary of the attendance of people at all of the open house/public hearings and a summary of all of the most important issues to the public at all of the public meetings are shown on **Exhibits F** and **G** attached hereto.

After the publicly required hearings in each of the counties, NPPD also received a few additional suggested minor modifications to the proposed Route and evaluated them. Select changes were again incorporated that resulted in the Final Route which was announced to the public on January 20, 2015. A map of the final R-Project route is shown on **Exhibit H** attached hereto.

The final route minimizes and balances the impacts to key land uses, communities and residences, engineering issues, and environmental sensitivities. Incorporated changes within the corridor further reduced the number of homes in close proximity to the route and substantially decreased the amount of shelterbelt acres within the right-of-way.

After the U.S. District Court for the District of Colorado issued its order in June 2020, NPPD again reviewed the routing data described above to determine whether there were options for a minor

adjustment in the route to further avoid impacts to the Oregon Trails ruts at the O'Fallon's Bluff segment of the route. NPPD again used the same Guiding Principles for Routing and Siting and the R-Project criteria and considered the most important issues that landowners identified at the public meetings.

After examining the site and reviewing the field conditions with NPPD engineers, and conducting multiple discussions with the affected landowners in that segment of the route, NPPD identified a minor adjustment in the route. At considerable expense to NPPD, the route adjustment will move the transmission line one half mile to the east eliminating the direct impacts of the line passing overhead at the Oregon Trail ruts and moving the overhead line one half mile farther away from the viewshed of the ruts. This minor adjustment to the line within the PRB-approved corridor does not affect any additional landowners; in fact, the adjustment will reduce the number of landowners affected by one. The adjustment was discussed with the landowners affected by this minor adjustment. A map of the minor adjustment in the route at the location of the Oregon Trail ruts at the O'Fallon's Bluff segment of the route is shown on **Exhibit I** attached hereto.

In contrast to this minor half-mile adjustment, if NPPD were to attempt to identify a different route (as opposed to a minor route adjustment) for the R-Project within the PRB-approved corridor, it would need to reengage the public through a series of open houses, coordinate with agencies, gather updated data, reapply the Guiding Principles for Routing and Siting and the R-Project criteria, engage in additional public hearings, and submit the alternative route to the Board of Directors for approval. It would also need to develop a new habitat conservation plan for the different route and start a new incidental take permit process with USFWS, as well as seek new approval from the PSC. However, because NPPD has determined that the final route provides the optimal balance of key issues regarding land use, communities and residences, engineering requirements, and environmental sensitivities, it does not believe that undertaking a multi-year process to identify a different route is appropriate.

If NPPD were to try to identify a different route that is outside the PRB-approved corridor, the process would be even lengthier as NPPD would need to start the entire routing process over with the public, other stakeholders, and the PRB. When 30 days have passed after the date of the PRB hearing on an application, no further actions can be taken on the original application, and NPPD would need to submit a new application to the PRB. The Board would have to hold a hearing and determine whether the new proposal would satisfy NRS § 70-1014.[1] NPPD would also need to draft a new habitat conservation plan and restart the incidental take permit process with USFWS, as well as seek a new approval from the PSC.

[1] Note that even minor deviations from the PRB-approved corridor would require an application to the PRB and additional public process, the extent of which would depend on the specific circumstances of the proposed deviation.

Exhibit "A"

Guiding Principles for Routing and Siting

- Routes must meet the project need and benefit
- Routes generally use section and half-section lines in agricultural areas
- Existing access should be used as much as possible
- Shorter routes generally have less impact
- Fewer large angles generally have less impact
- Each phase of the process must provide a reasonable level of flexibility
- Routing criteria must be measureable and comparable
- Data in the study area will be continually added and refined
- Public input is essential to identify and address key project issues

Exhibit "B"

R-Project Study Area

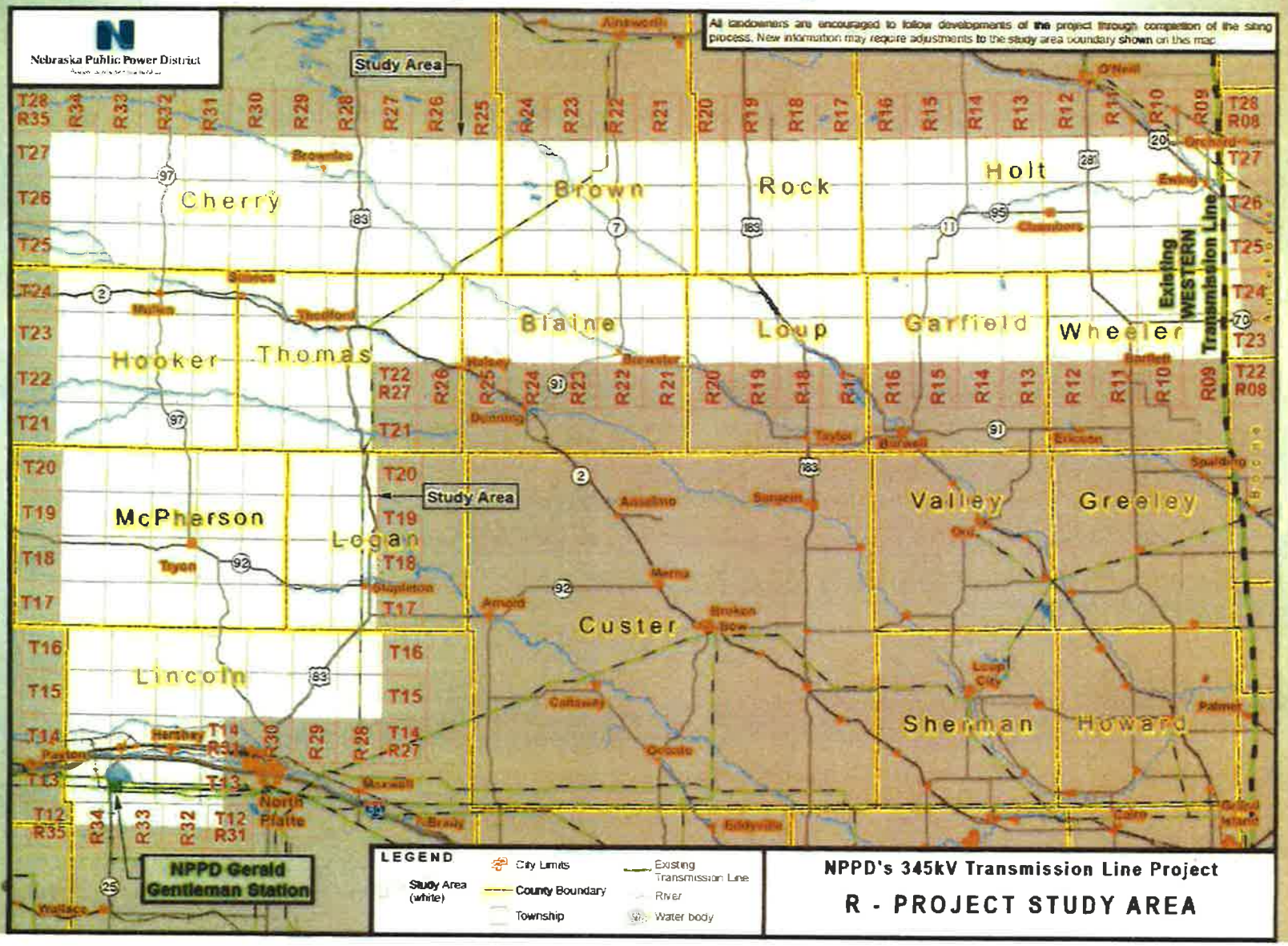


Exhibit "C"

R-Project Corridors

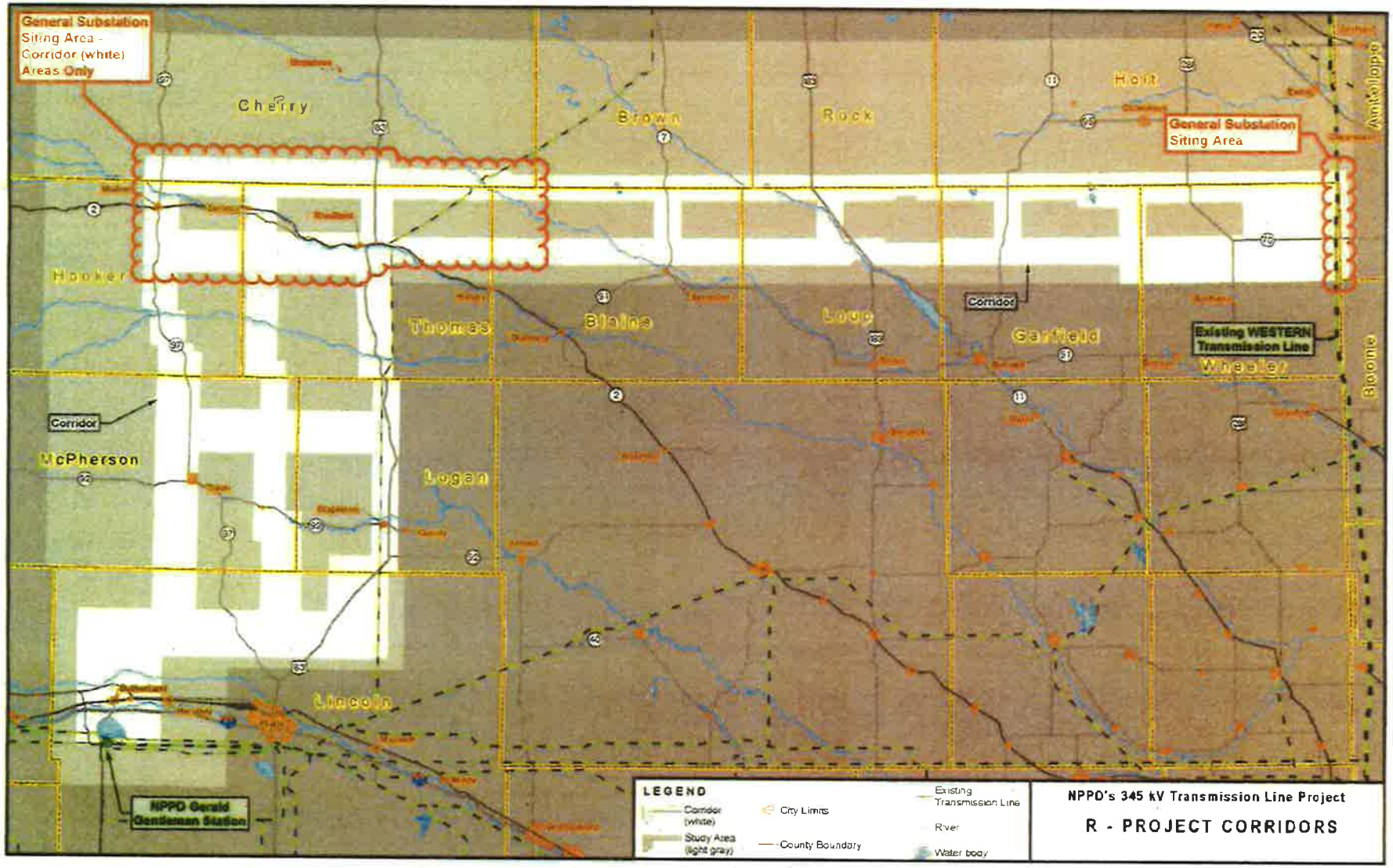


Exhibit "D" (Page 1)

R-Project Routing Criteria

Proximity to Occupied Residences

- Number less than 300 ft.
- Number over 300 ft. & less than 500 ft.
- Number over 500 ft. & less than 0.25 mile

Proximity to Towns/Villages

- Number less than or equal to 0.25 mile
- Number over 0.25 mile & less than or equal to 0.5 mile
- Number over 0.5 mile & less than 1 mile

Proximity to Other Amenities

- Number of churches within 500 ft.
- Number of schools within 0.25 mile
- Number of cemeteries within 500 ft.
- Public use airports (landing strip > 3200 ft.) within 1.5 miles
- Public use airports (landing strip < 3200 ft.) within 1.25 miles
- Private FAA registered airports within 1.25 miles
- Private non-FAA registered airports within 0.5 mile

Land Use Criteria

- Wellheads within ROW of apparent centerline
- Number of other buildings within ROW
- Proximity to platted development
- Length adjacent to platted development (ft.)
- Irrigated cropland crossed (acres in ROW)Pasture/rangeland crossed (acres in ROW)
- Dry land crops crossed (acres in ROW)
- Number of center pivot conflicts
- Cultivated field bisections

Other Land Use

- Number of parcels crossed by ROW
  Number of land owners affected by ROW

Exhibit "D" (Page 2)

R-Project Routing Criteria

Environmental Criteria

- Threatened and endangered plant habitat within ROW (acres)
- Wetland/jurisdictional water crossed (acres)
- Recorded Conservation easements crossed (ft.)
- Trees within ROW (acres)
- Shelterbelt within ROW (acres)
- Number of known cultural resources within 500 ft. (recorded only)
- Number of river crossings
- Number of named stream crossings
- Preliminary whooping crane stop over habitat (acres within 1 mile of route centerline)
- Tern and plover habitat (acres within 0.25 mile of route centerline)
- Sandhills Scenic Byway crossed (#)
- Sandhills Scenic Byway paralleled (miles)

Engineering and Construction

- Distance of floodplain crossing (ft.)
- Miles of Sandhills Crossed
- Number of heavy angles (greater than 30 degrees)
- Length (miles)
- Cost (millions of dollars)
- Subtransmission line (69 and 34.5 kV) relocation (ft.)
- Number of railroads crossed
- Length of railroads paralleled (ft.)
- Number state highways crossed
- Number US highways crossed
- Interstate highway crossing
- Number major pipelines crossed
- Length of major pipelines paralleled (within ROW)
- Number of existing 345 kV transmission line crossings
- Number of existing 230 kV transmission line crossings
- Number of existing 115 kV transmission line crossings
- Number of existing Subtransmission line (69 and 34.5 kV) crossings
- Length of existing transmission parallel <500' (ft.)
- Number of communication towers within 0.25 mile
- Existing access for construction and operation (miles)

Exhibit "E"

R-Project Route Alternatives

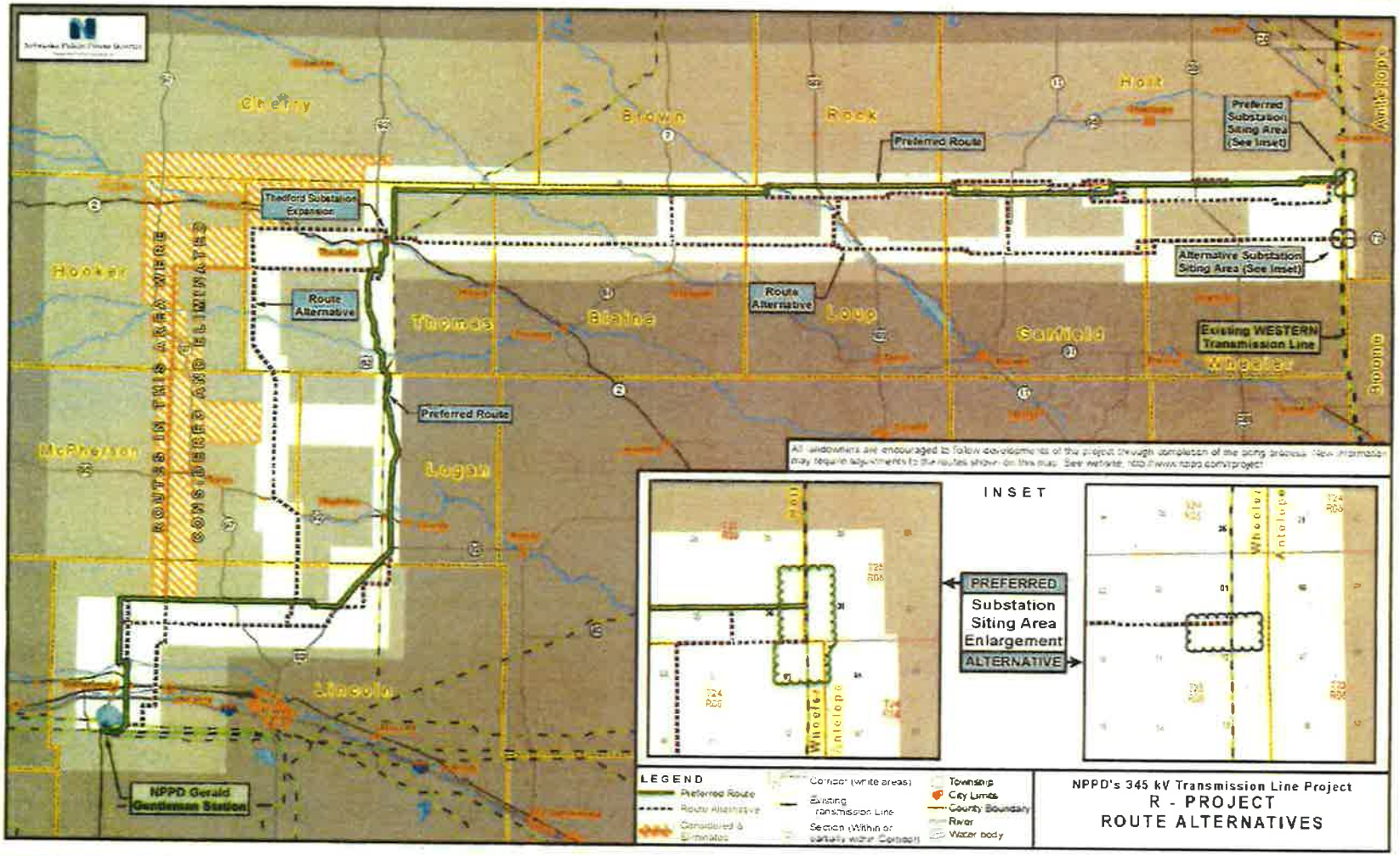


Exhibit "F"

Open House/Public Hearing Summary

	Locations	Dates	Invitations Sent	Attendance
Study Area	Tryon, Hershey, Halsey, Mullen, Chambers & Ainsworth	1/19/2013 through 1/22/2013	3,695	581
Corridors	Thedford, Sutherland, Stapleton, Bartlett, Dunning & Burwell	9/9/2013 through 9/17/2013	1,641	369
Alternate Routes	Stapleton, Sutherland, Thedford, Bartlett, Dunning & Burwell	4/29/14 through 5/7/2014	542	398
Additional Landowner Meetings	Stapleton & Brewster	8/13/2014 through 8/14/2014	77	63
Public Hearings	Stapleton, North Platte, Thedford, Brewster, Burwell, Taylor, Bartlett & Chambers	11/4/2014 through 11/12/2014	286	377

Exhibit "G"

Most Important Issue – All Meetings

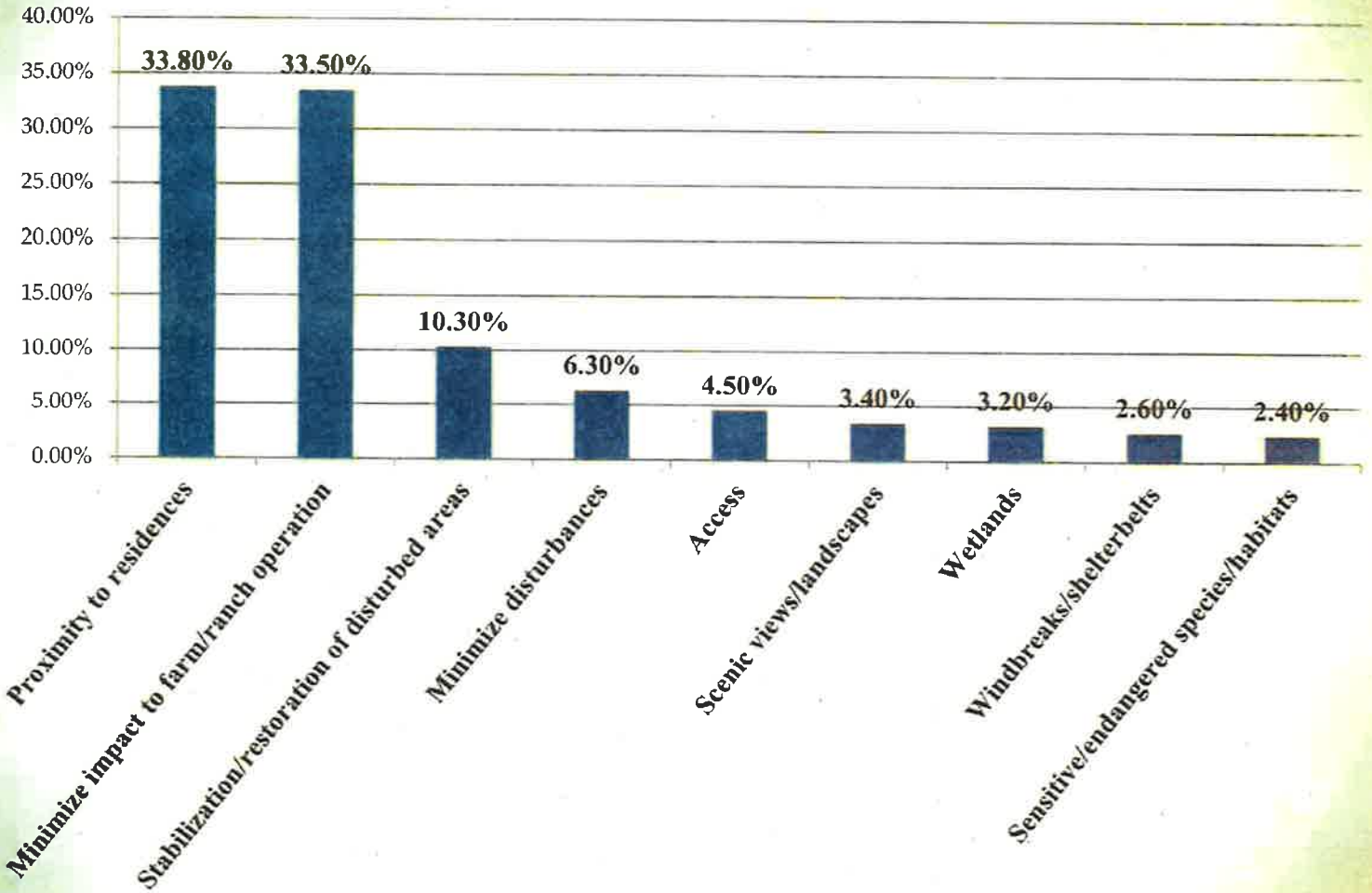


Exhibit "H"

R-Project Proposed Route

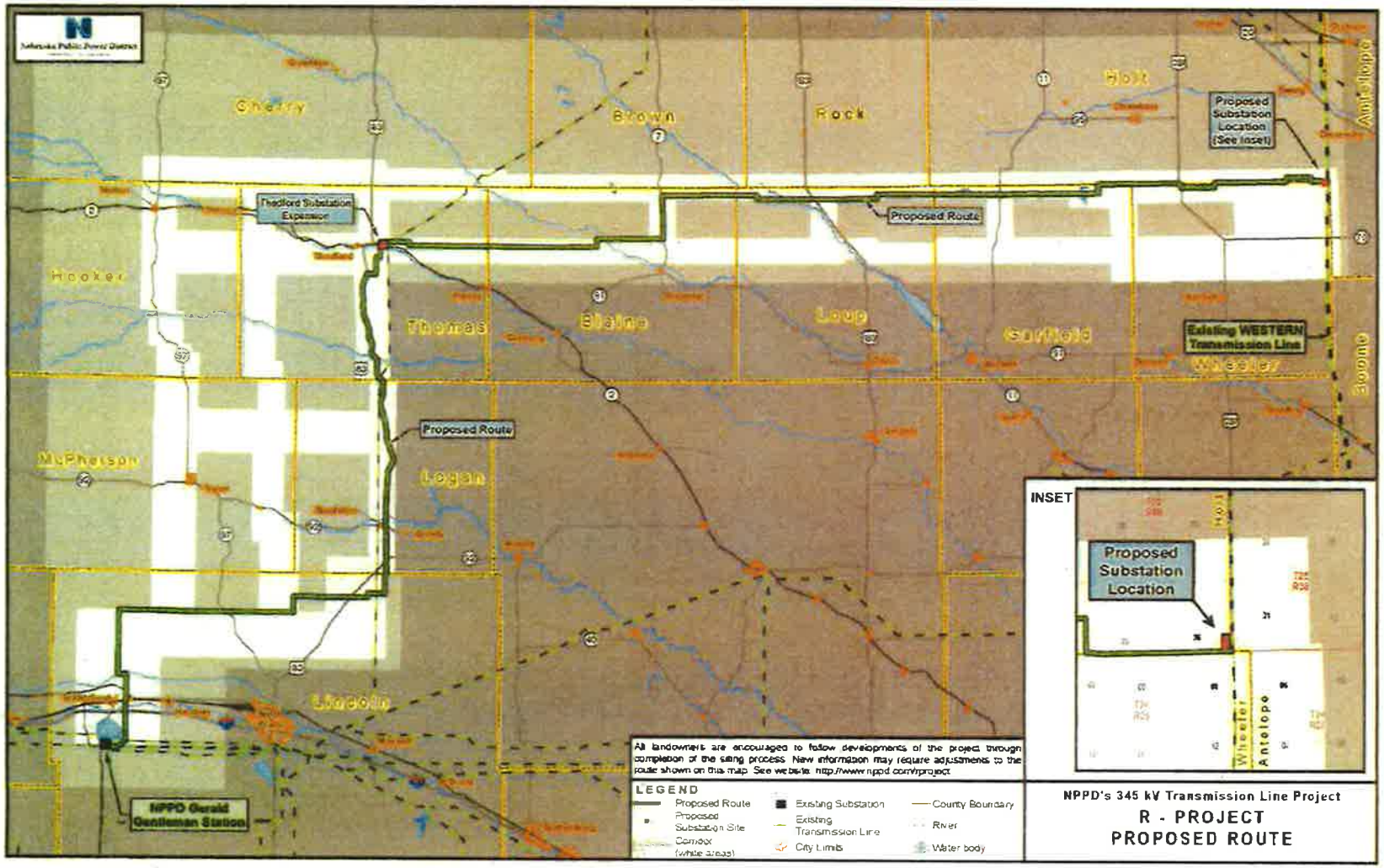
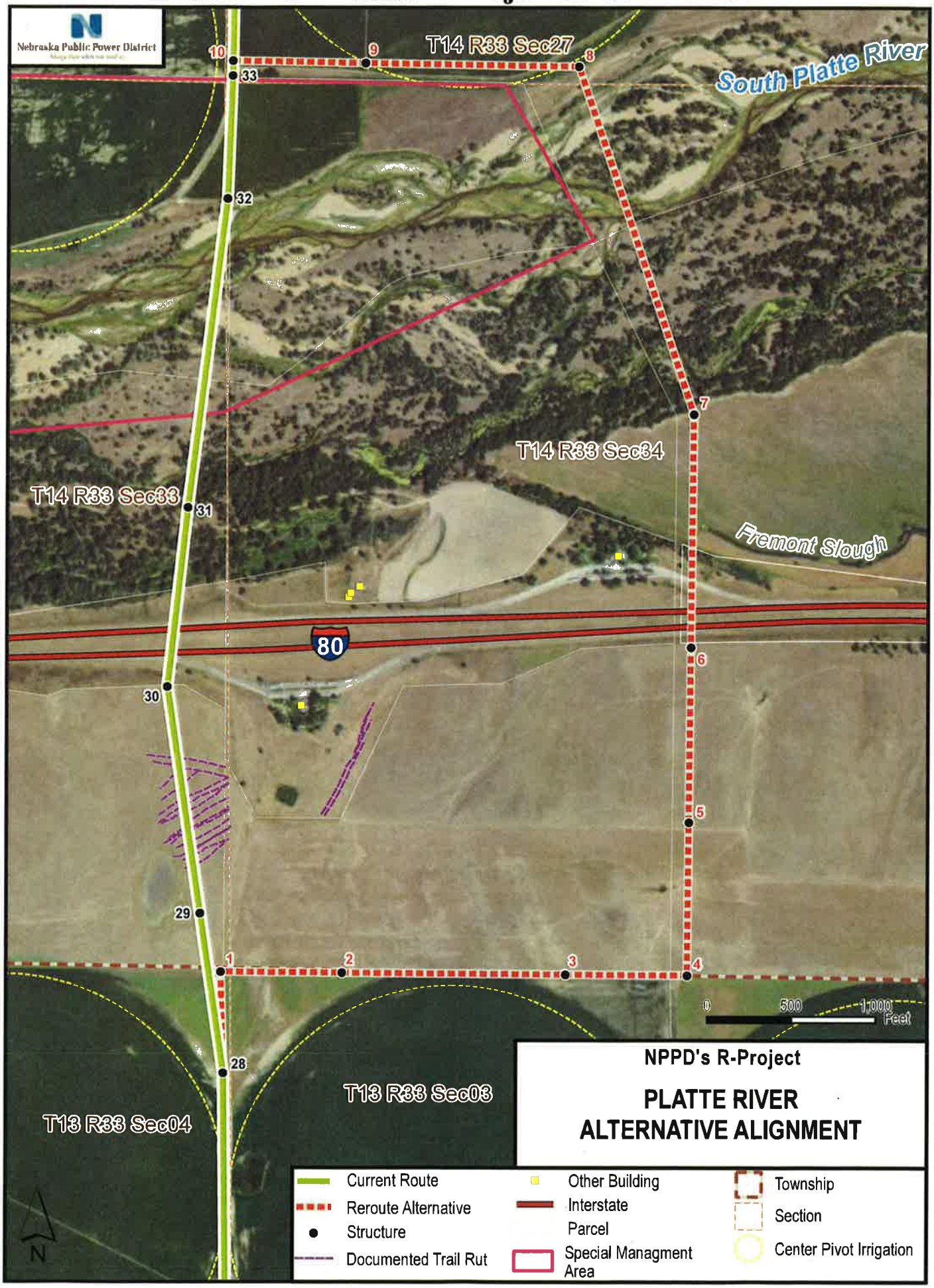


Exhibit "I" – Minor Adjustment to Line



Appendix E

Nebraska Public Power District Input on Alternatives Development

Response to Request from U.S. Fish and Wildlife Service for Feedback on Alternatives Screening for the R-Project Habitat Conservation Plan Supplemental Environmental Impact Statement

I. Introduction

On May 19, 2023, the U.S. Fish and Wildlife Service (USFWS or the Service) sent a request to Nebraska Public Power District (NPPD) for input relevant to the alternatives screening and development process that the Service is undertaking to respond to the federal district court's direction on remand. In particular, USFWS requested information as to whether there is a technically and economically feasible alternative route for the R-Project that would avoid the O'Fallon's Bluff site, the Mormon Pioneer Trail's Sand Hill Ruts Site, and Archaeological Site 25LN113; the Service also included a map showing avoidance areas for consideration. The Service also provided feedback from the National Park Service (NPS), which indicated that the project would have minimal impact by moving the route four miles to the east of the proposed route near the O'Fallon's Bluff site and five miles to the east of the proposed route near the Sand Hill Ruts Site. In this document, NPPD provides information responsive to USFWS's request.

II. Alternatives Evaluated

NPPD has previously evaluated multiple routes in the vicinity of the resources the Service has identified. Given the input from the NPS and the avoidance areas identified, NPPD is unable to identify an alternative route for this portion of the line that is reasonable as that term is defined by the Department of Interior's regulations for implementing the National Environmental Policy Act, i.e., those "that are technically and economically practical or feasible and meet the purpose and need of the proposed action."[1]

During the initial routing process in 2014, NPPD evaluated an alternative route in this area. After the routing process was complete and the final route was selected, NPPD evaluated additional routes in this area based on comments received from the public. Routes evaluated that avoid the identified avoidance areas are shown in Figure 1, the map attached to this response. The route identified in blue in Figure 1 was the one route developed during the routing process, while the routes identified in yellow and red were developed after the final route was selected. Information about these three routes is provided below. All the metrics provided in this document are from those previous analyses and have not been revisited.

In addition to the routes evaluated to the east of the cultural resources identified by the Service, NPPD considered whether any alternatives to the west of the final route in this area would be technically and economically practical or feasible. Information regarding this evaluation is also provided below.

[1] 43 C.F.R. § 46.420(b).

A. Issues Common to All Three Alternatives

The three alternatives shown in blue, yellow, and red have the following issues regarding their technical or economic feasibility or practicality in common, as would any other alternatives in this area.

- The alternatives would parallel existing transmission lines for longer distance to the east, which would increase the chances of an event impacting all the lines, thus reducing the redundancy and, ultimately, the reliability of NPPD's system, which is one of the purposes of the R-Project.

- The alternatives traverse through areas both north and south of the North Platte River that have large concentrations of swans, waterfowl, and staging sandhill cranes in the spring. These birds use the river for roosting and the cornfields and wet meadows for foraging and thus would have to cross the R-Project multiple times daily. NPPD's final route avoids this area. When NPPD was siting its final route, the crossing of the North Platte River was the subject of a discussion between the USFWS Field Office, Nebraska Game and Parks, and NPPD, and all parties agreed that avoiding this area was the best approach to protecting the birds in this area of high use.

- The North Platte River crossing area for all three alternatives spans approximately 3,000 feet (14 acres) of wooded river bottom, which would require the removal of two times more trees compared to NPPD's final route. The final route crosses the North Platte River at the existing Sutherland Bridge, which spans approximately 1,500 feet (7 acres) of wooded river bottom. Crossing at the Sutherland Bridge eliminates the need to clear cut a new corridor width through river bottom to accommodate the line. Placing crossings where infrastructure such as bridges already exist results in less impact to waterfowl and is an impact minimization measure identified by Avian Power Line Interaction Committee (APLIC), which was also adapted by NPPD in the final route.

- Each of these alternatives would have more human impact and safety issues than the final route because the transmission line would be in closer proximity to homes and buildings. NPPD's final route in this area had one home within 600 feet from the transmission centerline. More specific information for each alternative is provided below.

B. Red Alternative Route

The route shown in red in Figure 1 would be consistent with NPS's suggestion to move the line an additional four miles east of O'Fallon's Bluff and five miles east of the Mormon Trail; it would then continue north to intersect to NPPD's final line route east of Birdwood Creek. This route has the following concerns in addition to those outlined in Section II.A above.

- This alternative route would pass within 600 feet of 13 homes before intersecting with the final NPPD line route. Of these 13 homes, five would be 100 feet or less from the centerline and potentially fall within the right-of-way of the transmission line.

- This alternative had one center-pivot conflict at the time NPPD looked at this area.

- This alternative includes a cell tower along Willow Creek Road that would potentially be within 100 feet from the centerline and potentially fall within the right-of-way of the transmission line.

C. Blue Alternative Route

The route shown in blue on Figure 1 would be located an additional 3.5 miles east of O'Fallon's Bluff and 4.5 miles east of the Mormon Trail and then would continue north to intersect to NPPD's final line route east of Birdwood Creek. This route has the following concerns in addition to those outlined in Section II.A above.

- This alternative route would pass within 600 feet of five homes before intersecting with the final NPPD line route. Of these five homes, two would be 100 feet or less from the centerline and potentially fall within the right-of-way of the transmission line.

- This alternative had one center-pivot conflict at the time NPPD looked at this area.

D. Yellow Alternative Route

The route shown in yellow on Figure 1 would be located an additional 3.0 miles east of O'Fallon's Bluff and 4.0 miles east of the Mormon Trail; it would then continue north to intersect to NPPD's final line route east of Birdwood Creek. This route has the following concerns in addition to those outlined in Section II.A above.

- This alternative route would be within 600 feet of 19 homes before intersecting with the final NPPD line route. Of these 19 homes, eight would be 100 feet or less from the centerline and potentially fall within the right-of-way of the transmission line.

E. Alternative Routes to the West of the Final Route

While NPS's feedback did not suggest an alternative route to the west of the final route in the area of interest, NPPD considered whether any such route would be economically or technically feasible or practical. The following issues suggest that no such route is available.

- Any alternative to the west of the resources identified by USFWS would involve a route that would have to go far enough west from Gerald Gentlemen Station to avoid Sutherland Reservoir and the town of Sutherland. This would, at a minimum, require 4.5 miles of additional line (at least 1.5 miles west, then eventually go 3.0

miles back to the east to get back to final line route), which is inconsistent with prudent utility practice to use the shortest line length feasible in order to minimize cost (including the significant costs of heavy angle structures when a turn in the line is required), landowner impacts, and potential environmental and land-use disturbance.

- A route to the west would cross multiple existing single-circuit and double-circuit transmission lines, possibly as many as four, leading to greater risk to the reliability of NPPD's system, contrary to the purpose of the R-Project.

- Routes to the west would have potential conflicts with conservation easements along the South Platte and North Platte rivers, a Wetland Reserve Program area, and numerous homes or would require additional line miles to avoid such conflicts.

- NPS has identified other National Historic Trail resources to avoid to the west, which also present potential conflicts for routes in this area.

III. Conclusion

NPPD has provided this information to assist USFWS with its consideration of alternatives to satisfy the court's remand. NPPD has undertaken a comprehensive review of potential alternatives, both in this area and project-wide, to identify the route that is economically and technically feasible and practical. Other route options suggested to avoid impacts to cultural resources pose serious concerns about safety, reliability, and conflicts with homes, as well as variety of other undesirable impacts. If additional detail is required for this alternatives exercise, NPPD will strive to provide the Service with such information.

21573848_v2

Outside Corridor

Corridor Considered & Eliminated

T16 R34

T16 R33

T16 R32

N Prairie Trace Rd

Birdwood Creek

Fleecs Rd

N Sand Rd

T15 R34

T15 R33

Land Rd

T15 R32

Stark Rd

N Birdwood Rd

Outside Corridor

Birdwood Canal

North Platte River

W North River Rd

W Wildlife Rd

T14 R32

N Hershey Rd

T14 R34

North Platte Canal

W Suburban Rd

N Ofallons Rd

Suburban Canal

N Parkway Rd

Keith Lincoln Canal

W Snake Rd

Paxton Hershey Canal

W Platte Valley Rd

T14 R33

Sutherland

30

Hershey

W County Rd

South Platte River

Outside Corridor

Murray Ave

W Slough Rd

Beer Slough

N Dmont Rd

Fremont Slough

W South River Rd

80

Sutherland Cemetary Rd

W Oregon Trail Rd

S King Rd

Tower Rd

W Antelope Rd

Sutherland Reservoir

O Fallons Rd

Outlet Canal

T13 R34

T13 R33

T13 R32

Sutherland Canal

W State Farm Rd

GERALD GENTLEMAN STATION

MALONEY TO SUTHERLAND (NE) 115 KV

NORTH PLATTE TO GERALD GENTLEMAN 230 KV

GERALD GENTLEMAN TO NORTH PLATTE 230 KV

GERALD GENTLEMAN TO SWEETWATER 345 KV

Outside Corridor

R - PROJECT ALTERNATIVES SCREENING DISCUSSION

May 26, 2023

Nebraska Public Power District
Always there when you need us

1 inch equals 6,000 feet

0 1 2 3 Miles

Legend

- 2023 Alignment
- Yellow Alternative
- Blue Alternative
- Red Alternative

Existing Transmission Line

- 345 kV
- 230 kV
- 115 kV
- Railroad
- Municipal Boundary
- Interstate
- Township
- US Highway
- Section

Aerial Photography: NAIP 2022

*** Areas Outside Corridor Are Shaded***

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Updated Response to Request from U.S. Fish and Wildlife Service for Feedback on Alternatives Screening for the R-Project Habitat Conservation Plan Supplemental Environmental Impact Statement

June 6, 2023

I. Introduction

On May 19, 2023, the U.S. Fish and Wildlife Service (USFWS or the Service) sent a request to Nebraska Public Power District (NPPD) for input relevant to the alternatives screening and development process that the Service is undertaking to respond to the federal district court's direction on remand. In particular, USFWS requested information as to whether there is a technically and economically feasible alternative route for the R-Project that would avoid the O'Fallon's Bluff site, the Mormon Pioneer Trail's Sand Hill Ruts Site, and Archaeological Site 25LN113; the Service also included a map showing avoidance areas for consideration. The Service also provided feedback from the National Park Service (NPS), which indicated that the project would have minimal impact by moving the route four miles to the east of the proposed route near the O'Fallon's Bluff site and five miles to the east of the proposed route near the Sand Hill Ruts Site. In this document, NPPD provides information responsive to USFWS's request.

II. Alternatives Evaluated

NPPD has previously evaluated multiple routes in the vicinity of the resources the Service has identified. Given the input from the NPS and the avoidance areas identified, NPPD is unable to identify an alternative route for this portion of the line that is reasonable as that term is defined by the Department of Interior's regulations for implementing the National Environmental Policy Act, i.e., those "that are technically and economically practical or feasible and meet the purpose and need of the proposed action."[1]

During the initial routing process in 2014, NPPD evaluated an alternative route in this area. After the routing process was complete and the final route was selected, NPPD evaluated additional routes in this area based on comments received from the public. Routes evaluated that avoid the identified avoidance areas are shown in Figure 1, the map attached to this response. The route identified in blue in Figure 1 was the one route developed during the routing process, while the routes identified in yellow and red were developed after the final route was selected. Information about these three routes is provided below. The metrics provided in this document are from those previous analyses; however, a review of aerial imagery confirms that the constraints discussed in this document are still on the landscape.

In addition to the routes evaluated to the east of the cultural resources identified by the Service, NPPD considered whether any alternatives to the west of the final route in this area

[1] 43 C.F.R. § 46.420(b).

would be technically and economically practical or feasible. Information regarding this evaluation is also provided below.

A. Issues Common to All Three Alternatives

The three alternatives shown in blue, yellow, and red have the following issues regarding their technical or economic feasibility or practicality in common, as would any other alternatives in this area.

- The alternatives would parallel existing transmission lines for longer distance to the east, which would increase the chances of an event impacting all the lines, thus reducing the redundancy and, ultimately, the reliability of NPPD's system, which is one of the purposes of the R-Project.

- The alternatives traverse through areas both north and south of the North Platte River that have large concentrations of swans, waterfowl, and staging sandhill cranes in the spring. These birds use the river for roosting and the cornfields and wet meadows for foraging and thus would have to cross the R-Project multiple times daily. NPPD's final route avoids this area. When NPPD was siting its final route, the crossing of the North Platte River was the subject of a discussion between the USFWS Field Office, Nebraska Game and Parks, and NPPD, and all parties agreed that avoiding this area was the best approach to protecting the birds in this area of high use.

- The North Platte River crossing area for all three alternatives spans approximately 3,000 feet (14 acres) of wooded river bottom, which would require the removal of two times more trees compared to NPPD's final route. The final route crosses the North Platte River at the existing Sutherland Bridge, which spans approximately 1,500 feet (7 acres) of wooded river bottom. Crossing at the Sutherland Bridge eliminates the need to clear cut a new corridor width through river bottom to accommodate the line. Placing crossings where infrastructure such as bridges already exist results in less impact to waterfowl and is an impact minimization measure identified by Avian Power Line Interaction Committee (APLIC), which was also adapted by NPPD in the final route.

- Each of these alternatives would have more human impact and safety issues than the final route because the transmission line would be in closer proximity to homes and buildings. NPPD's final route in this area had one home within 600 feet from the transmission centerline. More specific information for each alternative is provided below.

In addition to these on-the-ground constraints, as noted in the summary of the routing and Power Review Board processes that NPPD provided to the Service on May 18, 2023, if NPPD were to pursue any of these alternative routes for the R-Project within the PRB-approved corridor, it would need to reengage the public through a series of open houses, coordinate with

agencies, gather updated data, reapply the Guiding Principles for Routing and Siting and the R-Project criteria, and engage in additional public hearings. It would also need to develop a new habitat conservation plan for the different route and start a new incidental take permit process with USFWS, as well as seek new approval from the Public Service Commission. This multi-year process is inconsistent with the R-Project purpose and need, as it would further delay this critical infrastructure project, the absence of which is already posing grid reliability issues. The costly mitigation measures required to address these reliability issues are also not a sustainable solution from a technical or economic perspective.

B. Red Alternative Route

The route shown in red in Figure 1 would be consistent with NPS's suggestion to move the line an additional four miles east of O'Fallon's Bluff and five miles east of the Mormon Trail; it would then continue north to intersect to NPPD's final line route east of Birdwood Creek. This route has the following concerns in addition to those outlined in Section II.A above.

- This alternative route would pass within 600 feet of 13 homes before intersecting with the final NPPD line route. Of these 13 homes, five would be 100 feet or less from the centerline and potentially fall within the right-of-way of the transmission line.
    - Having homes in such close proximity to the transmission line, some of which may be within the project right-of-way, is a non-starter for NPPD. While unlikely, a severe weather event or equipment malfunction could cause the line to fall, potentially damaging the home and/or injuring the landowner. Thus, the safety risk raised by having homes that close to the line renders the alternative technically impractical and infeasible. The proximity of homes to the route also is economically impractical from a potential liability perspective.
    - Buildings in the ROW would also affect NPPD's ability to safely maintain and repair the transmission line without impacting the landowner's use of their own property.
    - In addition to concerns about residences, when NPPD routes its lines across farms or ranches, it strives to avoid locating the right-of-way close to features used for the landowner's livelihood, such as outbuildings and cattle yards, due to safety concerns for people and livestock. While NPPD has not quantified these additional features along this alternative, they pose an additional technical and economic constraint based on safety considerations and potential liability risk.
- This alternative has one center-pivot conflict.
    - Center pivots are a sprinkler irrigation system with a pivot point at one end that is designed to efficiently irrigate large swaths of agricultural land. A pivot cannot

operate with a line structure in the way, which is contrary to prudent utility siting practices to minimize impacts to landowners.

- Similar to the homes noted above, if the pivot is too close to the transmission line, and the line falls due to a severe weather event, there are safety concerns for both the landowner and NPPD's workers. This would pose unacceptable safety and liability risks.

- This alternative includes a cell tower along Willow Creek Road that would potentially be within 100 feet from the centerline and potentially fall within the right-of-way of the transmission line. As with homes and center pivots, NPPD avoids cell towers due to safety concerns.

  - Modern cell towers in open areas where the R-Project is proposed are very tall structures, likely taller than NPPD's transmission line. Thus, they need to be located at a safe distance from the right-of-way (beyond 100 feet) to avoid outages and other infrastructure impacts if the cell tower were to fall into the transmission line or if the line were to fall into the tower.

  - There are also safety and liability concerns for the personnel of both entities who need to maintain the transmission line and the cell tower when the infrastructure is in such close proximity.

  - Thus, infrastructure and worker safety concerns would render technically infeasible a route that has such little distance between a cell tower and NPPD's transmission line. Moving the cell tower to accommodate NPPD's transmission line would be prohibitively expensive.

C. Blue Alternative Route

The route shown in blue on Figure 1 would be located an additional 3.5 miles east of O'Fallon's Bluff and 4.5 miles east of the Mormon Trail and then would continue north to intersect to NPPD's final line route east of Birdwood Creek. This route has the following concerns in addition to those outlined in Section II.A above.

- This alternative route would pass within 600 feet of five homes before intersecting with the final NPPD line route. Of these five homes, two would be 100 feet or less from the centerline and potentially fall within the right-of-way of the transmission line.

- This alternative had one center-pivot conflict at the time NPPD looked at this area.

D. Yellow Alternative Route

The route shown in yellow on Figure 1 would be located an additional 3.0 miles east of O'Fallon's Bluff and 4.0 miles east of the Mormon Trail; it would then continue north to

intersect to NPPD's final line route east of Birdwood Creek. This route has the following concerns in addition to those outlined in Section II.A above.

- This alternative route would be within 600 feet of 19 homes before intersecting with the final NPPD line route. Of these 19 homes, eight would be 100 feet or less from the centerline and potentially fall within the right-of-way of the transmission line.

E. Alternative Routes to the West of the Final Route

While NPS's feedback did not suggest an alternative route to the west of the final route in the area of interest, NPPD considered whether any such route would be economically or technically feasible or practical. The following issues suggest that no such route is available.

- Any alternative to the west of the resources identified by USFWS would involve a route that would have to go far enough west from Gerald Gentlemen Station to avoid Sutherland Reservoir and the town of Sutherland. This would, at a minimum, require 4.5 miles of additional line (at least 1.5 miles west, then eventually go 3.0 miles back to the east to get back to final line route), which is inconsistent with prudent utility practice to use the shortest line length feasible in order to minimize cost (including the significant costs of heavy angle structures when a turn in the line is required), landowner impacts, and potential environmental and land-use disturbance.

- A route to the west would cross multiple existing single-circuit and double-circuit transmission lines, possibly as many as four, leading to greater risk to the reliability of NPPD's system, contrary to the purpose of the R-Project.

- Routes to the west would have potential conflicts with conservation easements along the South Platte and North Platte rivers, a Wetland Reserve Program area, and numerous homes or would require additional line miles to avoid such conflicts.

- NPS has identified other National Historic Trail resources to avoid to the west, which also present potential conflicts for routes in this area.

III. Conclusion

NPPD has provided this information to assist USFWS with its consideration of alternatives to satisfy the court's remand. NPPD has undertaken a comprehensive review of potential alternatives, both in this area and project-wide, to identify the route that is economically and technically feasible and practical. Other route options suggested to avoid impacts to cultural resources pose serious concerns about safety, reliability, and conflicts with homes, as well as variety of other undesirable impacts. If additional detail is required for this alternatives exercise, NPPD will strive to provide the Service with such information.

Response to Additional Request from U.S. Fish and Wildlife Service for Feedback on Alternatives Screening for the R-Project Habitat Conservation Plan Supplemental Environmental Impact Statement

June 7, 2023

I. Introduction

On May 19, 2023, the U.S. Fish and Wildlife Service (USFWS or the Service) sent a request to Nebraska Public Power District (NPPD) for input relevant to the alternatives screening and development process that the Service is undertaking to respond to the federal district court's direction on remand. NPPD provided a response to that request on May 31, which it updated on June 6. On June 1, USFWS provided a second request for information as to whether there is a technically and economically feasible alternative route for the R-Project that would avoid a historic ranch in Logan County and St. John's Church near Brewster, Nebraska; the Service also included a map showing avoidance areas for consideration. In this document, NPPD provides information responsive to USFWS's request.

II. Alternatives Evaluated

A. Historic Ranch in Logan County

The corridor approved by the Power Review Board (PRB) in this area is only three miles wide, which limits the number of practicable conceptual alternate routing options that could be considered. This portion of the R-Project is also within the incidental take permit area for the American burying beetle (ABB).

The final route that NPPD selected in the vicinity of the historic ranch parallels Highway 83 (see **Figure 1** below). The primary benefits of paralleling an existing highway through the Sandhills region are that the route (1) allows for easier access during construction and maintenance, (2) eliminates the need for a new right-of-way through previously undivided land, and (3) reduces the cumulative structure footprint area by allowing for a greater portion of the line to be constructed with monopoles versus lattice towers. Following existing roads was also a common theme voiced by stakeholders throughout the routing process to minimize disturbance of sensitive areas, such as sandhills and wetlands.

In 2020, NPPD was asked to evaluate an option of shifting the line one mile east of the final line route, then one mile north, then back one mile west back to NPPD's final line route to provide further separation from the ranch home (the alternative show in blue on Figure 1). This shift would be entirely on the ranch property and involve no new landowners. NPPD evaluated this option and determined that doing so would decrease the benefits of paralleling an existing highway and would not be reasonable (i.e., economically or technically practical or feasible) for the following reasons.

- The route would result in increasing the length of the transmission line by two miles, which would result in increased temporary and permanent ground-disturbance

impacts in undisturbed areas (including wetlands), greater overall visual impacts, and increased risk to avian species.

- It would require installing 13 structures on the ranch property compared to the four structures required to follow Highway 83, including four large self-supporting structures required for 90 degree turns.

- It would result in a significant increase in construction and project costs associated with crossing this property, estimated at approximately $5 million.

- It would increase the level of calculated take of ABB due to the increase in access and work areas within the ABB permit area.

Routing alternatives going west from Highway 83 and then back to the east would result in the same impacts as routing east of Highway 83, but they would also include potential reduction in reliability due to the proximity to an existing 115-kilovolt transmission line running north to south one mile west of the ranch.

Alternative routes either east or west of the historic ranch that would fall within the PRB-approved corridor are not technically or economically feasible or practicable due to the decrease in the benefits described above of paralleling an existing highway, the significant increased costs for the line and structures, the greater disturbance from access and construction in ABB habitat and wetlands, the potential impact to an existing transmission line, and the overall increase in visual impact.



Figure 1. Alternative Considered for the Historic Ranch in Logan County

B. St. John's Church

Prior to considering alternatives specific to St. John's Church, it is also important to understand the nature of the impacts to this property. Prior to the permitting process for the R-Project, there was an existing distribution line, including power poles, along the east side of Highway 7 across from the church. To place the R-Project line along the east side of Highway 7, NPPD worked with the local utility to place the distribution line underground. This removed the distribution line and poles from view from the church. If the R-Project is constructed along the final route, the conductors of the R-Project would be visible similar as to how the distribution line's conductors were visible before it was buried. In addition, the two R-Project structures along the east side of Highway 30 that would be closest to the church were sited such that neither would be in view when looking directly across from the church.

With that context in mind, NPPD provides the following information regarding potential alternatives in the vicinity of St. John's Church. As with the historic ranch, the PRB-approved corridor in this area is only three miles wide, which limits the number of practicable conceptual alternate routing options that could be considered. This portion of the R-Project is also within the ABB permit area.

The final route that NPPD selected in the vicinity of St. John's Church parallels Highway 7 (see **Figure 2** below). Similar to the historic ranch, the primary benefits of paralleling an existing highway through the Sandhills region are to (1) allow for easier access during construction and maintenance, (2) eliminate the need for a new right-of-way through previously undivided land, and (3) reduce the cumulative structure footprint area by allowing for a greater portion of the line to be constructed with monopoles versus lattice towers. Following existing roads was also a common theme voiced by stakeholders throughout the routing process to minimize disturbance of sensitive areas, including sandhills and wetlands.

NPPD evaluated two alternative route options within the corridor—one that is 0.5 mile east of Highway 7 (shown in yellow on Figure 2) and one that is 1 mile east of Highway 7 (shown in blue on Figure 2)—both of which then go north to intersect with the NPPD final route. NPPD has determined that both alternatives would decrease the benefits of paralleling an existing highway and would not be reasonable (i.e., economically or technically practical or feasible) for the following reasons.

- Both alternatives would require installing two additional 90-degree turns with large self-supporting structures, which would result in greater overall visual impact.

- Both alternatives would increase disturbance to the natural environment as a result of the increase in access and work areas through undisturbed areas including wetlands.

- Both alternatives would increase the calculated level of take of ABB due to increased access and work areas within the ABB permit area.

- Both alternatives would increase construction costs, estimated to be approximately $1 million, due to the addition of self-supporting 90-degree turn structures.

- The alternative route 0.5 mile to the east would have one center-pivot conflict. See NPPD's June 6, 2023 response to USFWS's initial request for alternatives screening information as to the concerns with center-pivot conflicts.

- The alternative route 1 mile to the east would involve one new landowner, be within 600 feet of a home, have one potential center-pivot conflict, and cross over a feedlot. See NPPD's June 6, 2023 response to USFWS's initial request for alternatives screening information as to the concerns with proximity to homes and livestock areas.

Any routing alternatives going west from Highway 7 and then back to the east would add additional miles of line and costs, as well as include the first four impacts as described above for routing east of Highway 7. Alternative routes either east or west of the church that would fall within the corridor are not technically or economically feasible or practicable due to decrease in the benefits described above of paralleling an existing highway, increased costs, greater disturbance from access and construction in ABB habitat and wetlands, and the overall increase in visual impact.

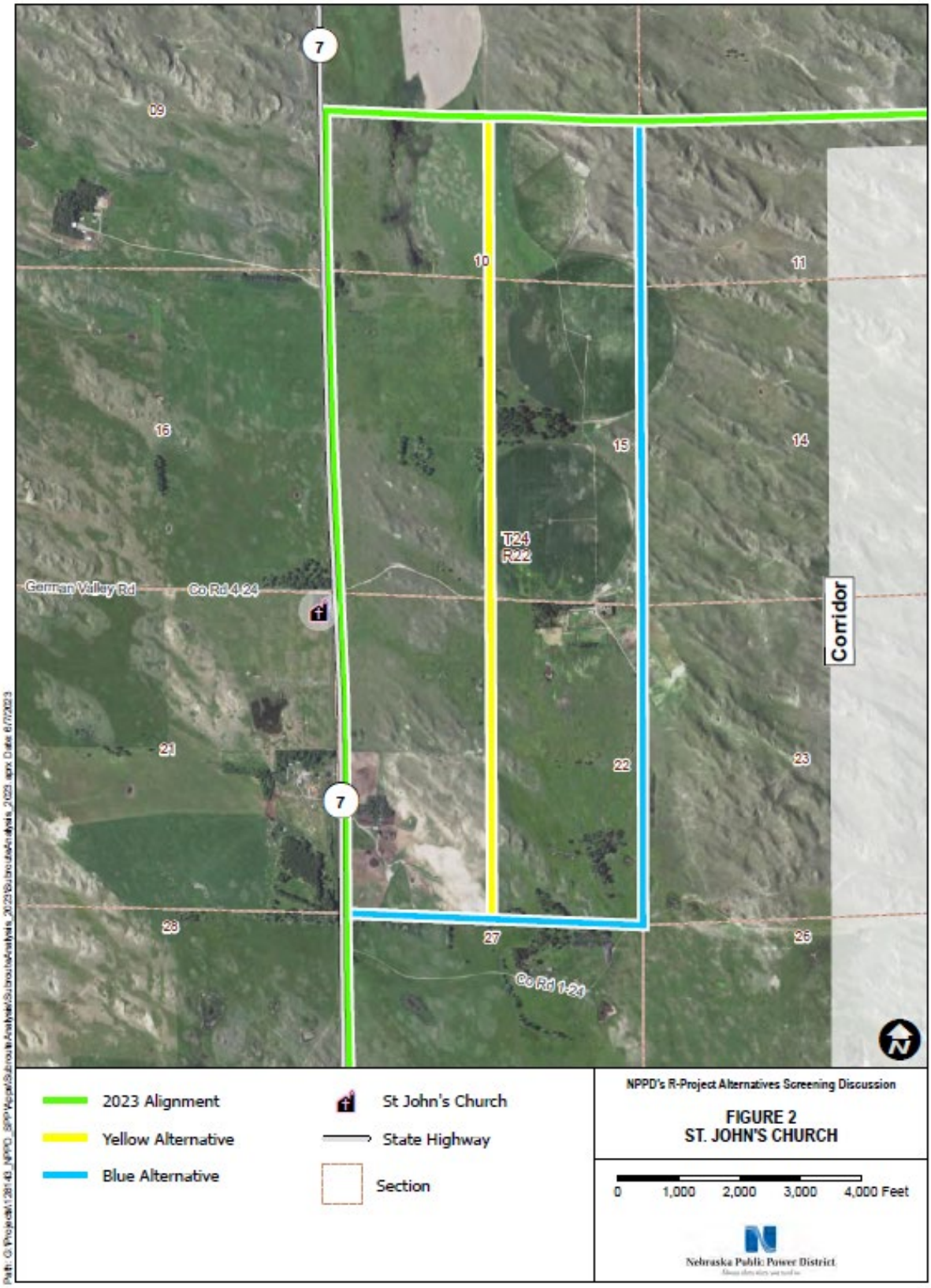


Figure 2. Alternatives Considered for St. John's Church

III. Conclusion

NPPD has provided this information to assist USFWS with its consideration of alternatives to satisfy the court's remand. NPPD has undertaken a comprehensive review of potential alternatives, both in this area and project-wide, to identify the route that is economically and technically feasible and practical. Other route options suggested to avoid impacts to cultural resources pose serious concerns about safety, reliability, and conflicts with homes, as well as variety of other undesirable impacts. If additional detail is required for this alternatives exercise, NPPD will strive to provide the Service with such information.

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NPPD R-Project HCP SEIS: Request for Feedback on Alternatives Screening

The U.S. Fish and Wildlife Service (Service) is conducting an alternatives screening and development process to identify a reasonable range of alternatives in the Supplemental Environmental Impact Statement (SEIS). This document includes the descriptions of two alternatives that were eliminated from detailed study in the 2018 FEIS for which the Service is seeking updated or additional information.

FEIS Section 2.6.2, Lattice Tower Structures Only

Under this alternative, NPPD would construct the R-Project using only lattice tower structures. Lattice towers would be installed using helical pier foundations and helicopter erection.

Reason for Elimination: During the public-involvement process, NPPD documented that the public prefers steel monopole structures to lattice structures to reduce impacts on visual and agricultural resources. Thus, using only lattice towers for the entire R-Project would result in greater impacts on resources, such as visual and agriculture, because of their larger structure profile and base footprint. The use of lattice towers with helical pier foundations along major existing roads is not as economical as the use of steel monopoles with concrete foundations. While this alternative would likely reduce the effects on the beetle by reducing the acres of temporary disturbance because of the smaller structure work area required for lattice structures, the difference in beetle take would be minimal considering NPPD's final route only uses steel monopole structures for 66 miles along major existing roads in the permit area.

Request for NPPD: Does NPPD have any updated information pertaining to the technical or economic feasibility of this alternative from what was presented in the 2018 FEIS?

NPPD's response: The updated Section 2.10.3 of the revised HCP provides the following discussion of the Lattice Tower Structures Only Alternative.

> *Under this alternative, NPPD would construct the R-Project using only lattice tower structures. Lattice towers will be installed using helical pier foundations and helicopter erection. During the public-involvement process, NPPD documented that the public prefers steel monopole structures to lattice structures to reduce impacts to visual and agricultural resources. Thus, using only lattice towers for the entire R-Project would result in greater impacts to other resources, such as visual and agriculture. Lattice structures also would have a greater impact on agricultural operations along the transmission line alignment due to their larger base footprint. The use of lattice towers with helical pier foundations along major existing roads would not be as economical as the use of steel monopoles with concrete foundations. This alternative would not result in a difference in the level of estimated ABB take. Steel monopoles require a work area that measures 200 by 200 feet to accommodate structure assembly and erection by crane. Lattice towers that would replace those structures would likely still require a 200-foot by 200-foot work area because the structures would be erected at the structure location*

and set with a crane, rather than assembled at an off-site fly yard and set with a helicopter. The steel monopoles were purposefully placed adjacent to existing access roads to accommodate concrete truck and cranes. Cranes would likely be used to set lattice towers in this scenario because they are much less expensive than helicopters. Even if helicopters were used to assemble all lattice towers, the reduction of workspace required at the structure locations would likely be mostly or totally offset by the need for additional fly yards located approximately every five miles along the route. Thus, in addition to the increased impacts to agricultural operations and visual resources noted above, the costs to employ helicopters for minimal, if any, reduction in disturbance would be unreasonable.

FEIS Section 2.6.5, Underground Construction

During public scoping, several commenters raised concerns about the potential impacts of the Project on the Birdwood Creek area, where a diversity of migratory birds are known to winter. One commenter brought up the possibility of constructing the line underground in sensitive areas such as this to decrease potential impacts on migratory birds.

Construction of underground transmission lines has been used in a number of specific applications and circumstances around the country, including:

• Areas of considerable congestion where a new, undeveloped ROW is unavailable or so limited that the reduced ROW width for undergrounding would present not just a viable alternative, but in many cases, the only practical alternative

• Areas where height restrictions (such as on or around airports) would prevent use of overhead lines

• Areas of considerable visual sensitivity (such as nationally designated scenic resources or National Register of Historic Places [NRHP] historic structures) where overhead lines would significantly affect the visual setting of the area

• Areas of significantly elevated land values where large portions of the additional costs of underground construction could be offset by significant reductions in overall Project cost obtained through the use of much narrower ROW

Reason for Elimination: High-voltage underground transmission lines (345 kV and above) have markedly different technological requirements and are more difficult to place underground than lower voltage underground distribution lines, which provide electricity to individual homes and businesses. Underground construction cost estimates are 15 to 20 times, or more, the cost of an overhead transmission line. Recent estimates for a single conductor per phase system were approximately $20,000,000 per mile. To achieve the equivalent electrical capacity of Source: NPPD 345-kV underground conductor cross-section R-Project Transmission Line HCP FEIS November 2018 2-43 NPPD's 345-kV R-Project, any underground segment would likely require a minimum of three cables per phase, or nine cables total for the circuit.

Because of the heat generated, these cables would likely need to be installed in either individual trenches or three separate duct banks. In addition, manholes/manways approximately 30 feet long, 12 feet wide, and 5 to 10 feet deep would need to be installed on each phase to allow for work access.

In some instances, underground transmission lines may be installed using conventional open-cut trenching, which results in significant, temporary ground disturbance. However, open-cut trenching is not practical or feasible for all underground transmission installation situations. In areas where open-cut trenching is not an option, a trenchless method of duct installation may be used. Common areas where open trenching may not be allowed include roadway crossings, street intersections, railroads, waterbodies, wetlands, and other environmentally sensitive areas.

Trenchless operations, while typically more costly, enable a project alignment to cross sensitive or inaccessible areas by eliminating the surface disturbance that would occur laterally along the length of the line for open-cut trenching. This method, however, does not eliminate all temporary surface disturbances and actually results in greater permanent ground impacts. Significant surface disturbance still occurs at each end of a buried line segment where the lines changes from overhead to underground. Surface disturbance also occurs for the development of roads to allow access for the heavy equipment and materials necessary for trenchless construction.

Two types of trenchless methods are commonly used: 1) jack and bore and 2) horizontal directional drilling. Horizontal directional drilling methods would likely be needed for underground construction at all river crossings on the R-Project. The horizontal directional drilling method requires a pit excavation area of significant size at the entry and exit points of the drill. A typical entry point site requires an area of about 100 feet x 150 feet and an exit area of 100 feet x 100 feet. Heavy equipment and workers would cause temporary disturbance around the entry and exit pits.

Another environmental concern during horizontal directional drilling is the potential for inadvertent return of drilling lubricant caused when excessive drilling pressure results in drilling mud propagating toward the ground surface or into a body of water. Horizontal directional drilling uses bentonite, a clay-type drilling fluid, to stabilize the bore and reduce mechanical wear. While bentonite is non-toxic, some plants and microscopic animals and fish and their eggs can be smothered by the fine bentonite particles, if discharged into waterways. For this reason, space is required to direct drilling lubricant away from any associated waterbody and then contain it within a diked area or storage containers, such as frac tanks.

Cable installation procedures and equipment are selected based on environmental conditions, equipment and material placement, and pulling requirements. In the typical cable pulling setup, the reel of cable is placed at the transition structure or at one of the manholes and the winch truck is placed at the opposite end of the conduit. Splicing of the cable commences once all the cable is pulled into a manhole from each direction. Generally, the equipment required for pulling the cable is very large and heavy, requiring good access to the pulling sites. Substantially more pulling and tensioning sites are required for long segments of underground installation compared to an overhead line, but the effects of these activities are limited and temporary. For shorter underground segments, such as at a river crossing, tensioning and pulling sites would only be required at each end of the underground segment.

Depending on the construction techniques and Project requirements, the ROW width can vary from 30 to 100 feet, although 50 feet is typical for 345 kV transmission lines. For projects with large load transfer requirements like the R-Project (3,000 amperes), a larger ROW may be needed to accommodate a multiple duct bank design. In an attempt to minimize conductor size, 10-foot, center-to-center separation between parallel duct banks is typically recommended. In addition to permanent easements, temporary construction easements may be required. All trees and vegetation in the permanent and temporary easements must be cleared for construction.

For underground transmission lines that are 345 kV or greater, areas would need to be developed at each end of each underground segment length where the aboveground line structures and all associated equipment and operation systems would be located. These areas—referred to as transition stations—are permanent facilities and can be significant in size. Transition stations for 345 kV or greater transmission lines can require installing equipment, such as reactors at both ends of each segment, to maintain proper voltage and capacity and capacitor banks. Transition stations often look very similar to an electrical substation.

For 345 kV or greater transmission lines, each transition station could be expected to range in size from 2 to 5 acres to as large as 10 acres, depending on the amount of equipment necessary for operation and the terrain. Construction of underground segments at the South Platte River and North Platte River crossings, as well as the Birdwood Creek crossing, would require construction of six separate transition stations—one at each end of each underground segment. If each transition station were 5 acres in size, 30 acres of land would be required for installation of the permanent transition facilities, more land than was purchased for the installation of the new expansion of the Thedford Substation (13 acres) and the new Holt County Substation (12 acres). Like substations, this land would need to be purchased, not held under an easement, and each transition station would be a permanently constructed utility facility, not a temporary disturbance. One benefit of underground construction instead of standard overhead construction at areas such as river crossings is a perceived reduction of the visual impact of having a line structure at each side of the river and a span of transmission line across the river. Considering the need for a permanent facility the size of a small substation at each side of a river crossing, the actual visual intrusion of underground construction may actually be more significant than that of Source: NPPD Typical transition station R-Project Transmission Line HCP FEIS November 2018 2-45 an overhead line. Installation of the underground cable or duct banks and access vaults and construction of transition stations would result in a greater temporary and permanent impact, loss of land use to the landowner, additional visual impacts, significantly increased construction cost, and increased costs to obtain the land.

The significant cost differential between overhead transmission line construction and underground construction plus the abundance of open, undeveloped land eliminated the need to consider underground construction and its associated challenges and impacts. Therefore, underground construction was eliminated from further consideration as a viable alternative for not only constructing the entire Project but also for constructing short segments in environmentally sensitive areas (e.g., wetlands and river crossings).

Impacts on biological, geological, water and cultural resources from underground transmission lines, even short segments, include 1) increased potential for invasive species to establish in the ROW; 2) increased potential for wildlife displacement resulting from the disturbance from trenching activities in the ROW; 3) increased effects on the beetle from greater temporary disturbance from trenching and cable pulling operations and greater permanent disturbance from construction of manholes, reactors, and transition stations; 4) increased potential for impacts from ground disturbance from trenching activities; 5) potential for impacts from increased soil temperatures during operation; 6) potential degradation of water quality during construction when using trenchless techniques; 7) potential for greater visual impacts resulting from transition stations; and 8) loss of land use to landowners resulting from purchase of land for permanent transition stations.

Request for NPPD: Does NPPD have any updated information pertaining to the technical or economic feasibility of this alternative from what was presented in the 2018 FEIS?

NPPD's response: NPPD can confirm that underground construction cost estimates are still 15 to 20 times, or more, the cost of an overhead transmission line. However, the estimated per-mile costs of an underground single conductor per phase system have increased from $20,000,000 to $35,000,000.

In addition, the conclusion that underground construction is not a viable alternative "for constructing short segments in environmentally sensitive areas (e.g., wetlands and river crossings)" applies with equal force to culturally sensitive areas. For example, installation of the underground cable or duct banks and access vaults and construction of transition stations required to bury the line in the vicinity of historic properties would also result in a greater temporary and permanent impact, loss of land use to the landowner, additional visual impacts, significantly increased construction cost, and increased costs to obtain the land. Thus, it would be appropriate for this section to conclude that underground construction is not a viable alternative "for constructing short segments in sensitive areas (e.g., wetlands, river crossings, and historic properties)."

Appendix F

Information from Nebraska Public Power District Regarding Thunderhead Wind Energy Operations

Information for U.S. Fish and Wildlife Service Regarding Thunderhead Wind Energy Center Operations

I. Introduction

The U.S. Fish and Wildlife Service (USFWS) is evaluating an application from Nebraska Public Power District (NPPD) for incidental take permit for its proposed R-Project, a 226-mile 345 kV transmission line in central Nebraska. Because a federal district court remanded the initial incidental take permit for additional consideration, USFWS is in the process of preparing Supplemental Environmental Impact Statement (SEIS).

On July 14, 2022, NPPD provided USFWS with a summary of new information that is relevant to the SEIS on remand, including a discussion of a change in circumstances regarding the Thunderhead Wind Energy Center (Thunderhead Wind Project), a 300 megawatt (MW) wind energy project in Wheeler and Antelope counties, Nebraska. At the time of the Final Environmental Impact Statement, the Thunderhead Wind Project was proposed to interconnect to the grid at the Holt County Substation that was being proposed as part of the R-Project. As noted in NPPD's July 2022 submission, the developer of the Thunderhead Wind Project requested approval from the Western Area Power Administration (Western) to interconnect directly to Western's Grand Island-Fort Thompson transmission line prior to the R-Project being completed. Western granted that interconnection request in July 2022, and the Thunderhead Wind Project began commercial operations in late 2022.

As a result of these changes in circumstances, the Thunderhead Wind Project is no longer an indirect effect of the R-Project because it is neither caused by the R-Project, nor does the R-Project make the Thunderhead Wind Project more likely to occur. However, the fact that the R-Project is not in service does have some minor implications for Thunderhead Wind Project operations. NPPD provides the following summary of those implications for USFWS's consideration.

II. Thunderhead Project Operations

The Southwest Power Pool (SPP) initially identified the R-Project as a Previous Network Upgrade that was needed for the Thunderhead Wind Project to be allowed to operate up to 300 MWs without restrictions. That meant that, without additional studies or remedial actions, the Thunderhead Wind Project would not be allowed to generate and inject any energy onto the transmission system without the completion of the R-Project.

Because of the delay in completing the R-Project, the developer of the Thunderhead Wind Project requested that SPP conduct a Limited Operations Impact Study (LOIS). Based on the results of the LOIS, the Thunderhead Wind Project was allowed to generate up to 195 MW until such time as the R-Project facilities are completed.

However, in order to be allowed to inject up to the full output of the Thunderhead Wind Project before completion of the R-Project, the project developer requested a temporary

Remedial Action Scheme (RAS). A RAS was approved by SPP in August 2022. Under this RAS, the output of the Thunderhead Wind Project is limited to 195 MW only when the RAS detects that the Grand Island-Holt 345 kV line is out of service. At all other times, the Thunderhead Wind Project can operate at its full 300 MW output level, subject to other unrelated reliability constraints on the transmission system.

The RAS is currently allowed for a maximum of two years from the time it is placed in-service. If the R-Project or equivalent upgrades to the grid are not completed at that point, the RAS may be extended based on the applicable Transmission Provider policies and processes for temporary RAS systems. Once the R-Project or equivalent upgrades are completed, the restrictions imposed by the LOIS and the temporary RAS, if it is still in place, will be removed.

In sum, under normal conditions, the Thunderhead Wind Project is currently able to operate at its full output level of 300 MW even in the absence of the R-Project. In the limited situation when the Grand Island-Holt 345 kV line is out of service, the Thunderhead Wind Project's output will temporarily be limited to 195 MW until that line is back in service. This restriction will not be in place once the R-Project is constructed.

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Appendix G
Soils Technical Supplement

This technical supplement includes supplemental data and information on soils in the related renewable energy projects study area. Soil characteristics for the related renewable energy projects study area were evaluated using data obtained from the Natural Resources Conservation Service Gridded Soil Survey Geographic Database (gSSURGO) (USDA, NRCS 2024) for Antelope, Cheyenne, Greeley, Holt, Jefferson, Saline, Wheeler, and York counties and for the Prairie Hills Wind, Big Blue Nebraska, and Thunderhead project areas.[1]

Erosion Potential

Soil characteristics, including wind erodibility, K Factor,[2] T Factor,[3] and slope, were used to evaluate erosion potential (Tables 1 through 8). In general, susceptibility to water erosion is relatively low because of the highly permeable nature of sandy soils, except where slopes are steep.

Table 1. Soil Erosion Factors in the Related Renewable Energy Projects Study Area, by County (Erodibility by Wind)

	Erosion Factors (acres [percentage of area])			
Total Acreage in County	**Low (5,6,7,8)**	**Moderate (3,4,4L)**	**Severe (1,2)**	**Not Rated Acres**
Antelope County				
549,184	154,801 (28%)	102,745 (19%)	289,434 (53%)	2,205 (Less than 1%)
Cheyenne County				
765,187	515,073 (67%)	222,195 (29%)	26,595 (3%)	1,248 (less than 1%)
Greeley County				
364,952	223,641 (61%)	51,190 (14%)	88,251 (24%)	1,871 (less than 1%)
Holt County				
1,546,628	160,407 (10%)	352,135 (23%)	1,019,444 (66%)	14,647 (less than 1%)
Jefferson County				
368,308	346,095(94%)	17,136(5%)	0 (0%)	5,032 (1%)
Saline County				
368,713	358,018 (97%)	7,906 (2%)	0 (0%)	2,790 (less than 1%)

[1] Rounding may result in slight variation of the acreages presented in the tables in this Appendix. Additionally, the southern borders of Cheyenne and Jefferson counties vary slightly from the corresponding boundaries in the Gridded Soil Survey Geographic Database data, resulting in a slight deficit in the total acres of data presented for those counties from the actual county acreage.

[2] K Factor is the index used to measure a soil's potential to erode and also the rate of runoff as measured compared to a standard condition. Soil K Factors can range from 0.02 to 0.6 (USDA 2001). Low K Factors were assumed to range from 0.02 to 0.25, moderate K Factors from 0.25 to 0.37, and high K Factors greater than 0.37.

[3] T Factor is an indicator of soil loss tolerance, or the amount of soil loss that can be tolerated for a soil to remain productive. The T Factors are integer values from 1 through 5 tons per acre per year. The factor of 1 ton per acre per year is for shallow or otherwise fragile soils and 5 tons per acre per year is for deep soils that are least subject to damage by erosion.

Total Acreage in County	Erosion Factors (acres [percentage of area])			
	Low (5,6,7,8)	Moderate (3,4,4L)	Severe (1,2)	Not Rated Acres
Wheeler County				
368,160	10,320 (3%)	39,650 (11%)	317,636 (86%)	556 (less than 1%)
York County				
368,263	366,731 (99%)	22 (less than 1%)	0 (0%)	1,511 (less than 1%)

Source: USDA, NRCS 2024

Notes: Wind erodibility indicates the potential for wind erosion based on slope, soil types, and wind characteristics. The SSURGO database divides wind erodibility into eight categories, and it is assumed that Groups 1 through 4 represent high to moderately wind-erodible soils with rates ranging from greater than 310 tons per acre per year (Group 1) to 86 tons per acre per year (Group 4). The range for Groups 5 through 8 is from 56 to 0 tons per acre per year.

Table 2. Soil Erosion Factors in the Related Renewable Energy Projects Study Area, Known Project Areas (Erodibility by Wind)

Total Acreage in Project Area	Erosion Factors (percentage of area)			
	Low (5,6,7,8)	Moderate (3,4,4L)	Severe (1,2)	Not Rated Acres
Big Blue Nebraska (Jefferson County)				
20,544	19,514 (95%)	752 (4%)	0 (0%)	277 (1%)
Prairie Hills Wind (Custer County)				
40,965	25,293 (62%)	15,651 (38%)	0 (0%)	21 (less than 1%)
Thunderhead (Holt, Antelope, and Wheeler Counties)				
60,862	7,912 (13%)	6,136 (10%)	46,792 (77%)	23 (less than 1%)

Source: USDA, NRCS 2024

Notes: Wind erodibility indicates the potential for wind erosion based on slope, soil types, and wind characteristics. The SSURGO database divides wind erodibility into eight categories, and it is assumed that Groups 1 through 4 represent high to moderately wind-erodible soils with rates ranging from greater than 310 tons per acre per year (Group 1) to 86 tons per acre per year (Group 4). The range for Groups 5 through 8 is from 56 to 0 tons per acre per year.

Table 3. Soil Erosion Factors in the Related Renewable Energy Projects Study Area, by County (K factor)

Total Acreage in County	Erosion Factors (acres [percentage of area])		
	K-Factor (Whole Soils) > = 0.37) (high)	K-Factor (Whole Soil) <.37) (low to moderate)	Not Rated
Antelope County			
549,184	119,241 (22%)	422,623 (77%)	7,322 (1%)
Cheyenne County			
765,187	421,712 (55%)	335,554 (44%)	7,845 (1%)
Greeley County			
364,952	137,513 (38%)	225,379 (62%)	2,061 (1%)
Holt County			
1,546,628	22,913 (1%)	770,640 (50%)	753,082 (49%)
Jefferson County			
368,308	254,162 (69%)	108,979 (30%)	5,122(1%)

Total Acreage in County	Erosion Factors (acres [percentage of area])		
	K-Factor (Whole Soils) > = 0.37) (high)	K-Factor (Whole Soil) <.37) (low to moderate)	Not Rated
Saline County			
368,713	293,078 (79%)	72,836 (20%)	2,801 (less than 1%)
Wheeler County			
368,160	7,456 (2%)	355,439 (97%)	5,267 (1%)
York County			
368,263	362,699 (98%)	3,123 (less than 1%)	2,442 (less than 1%)

Source: USDA, NRCS 2024

Notes: K Factor is the index used to measure a soil's potential to erode and also the rate of runoff as measured compared to a standard condition. Soil K Factors can range from 0.02 to 0.6 (USDA 2001). Low K Factors were assumed to range from 0.02 to 0.25, moderate K Factors from 0.25 to 0.37, and high K Factors greater than 0.37.

Table 4. Soil Erosion Factors in the Related Renewable Energy Projects Study Area, Known Project Areas (K factor)

Total Acreage in Project Area	Erosion Factors (acres [percentage of area])		
	K-Factor (Whole Soils) > = 0.37) (high)	K-Factor (Whole Soil) <.37) (low to moderate)	Not Rated
Big Blue Nebraska (Jefferson County)			
20,544	14,226 (69%)	6,000 (29%)	277 (1%)
Prairie Hills Wind (Custer County)			
40,965	26,916 (66%)	14,028 (34%)	21 (less than 1%)
Thunderhead (Holt, Antelope, and Wheeler Counties)			
60,862	4,922 (8%)	55,390 (91%)	550 (less than 1%)

Source: USDA, NRCS 2024

Notes: K Factor is the index used to measure a soil's potential to erode and also the rate of runoff as measured compared to a standard condition. Soil K Factors can range from 0.02 to 0.6 (USDA 2001). Low K Factors were assumed to range from 0.02 to 0.25, moderate K Factors from 0.25 to 0.37, and high K Factors greater than 0.37.

Table 5. Soil Erosion Factors in the Related Renewable Energy Projects Study Area, by County (T factor)

Total Acreage in County	Erosion Factors (acres [percentage of area])					
	1	2	3	4	5	Not Rated
Antelope County						
549,184	0 (0%)	4,092 (1%)	27,322 (5%)	60,959 (11%)	454,836 (83%)	1,978 (less than 1%)
Cheyenne County						
765,187	0 (0%)	108,451 (14%)	80,242 (10%)	177,146 (23%)	391,663 (51%)	7,609 (1%)
Greeley County						
364,952	0 (0%)	198 (less than 1%)	2,549 (less than 1%)	10,872 (3%)	349,464 (96%)	1,871 (less than 1%)

Total Acreage in County	Erosion Factors (acres [percentage of area])					
	1	2	3	4	5	Not Rated
Holt County						
1,546,628	396 (less than 1%)	105,156 (7%)	253,263 (16%)	58,535 (4%)	1,118,582 (72%)	10,701 (less than 1%)
Jefferson County						
368,308	4,675 (1%)	8,861 (2%)	47,699 (13%)	14,954 (4%)	287,042 (78%)	5,032 (1%)
Saline County						
368,713	0 (0%)	588 (less than 1%)	22,044 (6%)	4,174 (1%)	339,149 (92%)	2,790 (less than 1%)
Wheeler County						
368,160	20 (less than 1%)	17,191 (5%)	588 (less than 1%)	17,227 (5%)	332,581 (90%)	555 (less than 1%)
York County						
368,263	0 (0%)	0 (0%)	40,951 (11%)	23 (less than 1%)	325,779 (88%)	1,511 (less than 1%)

Source: USDA, NRCS 2024

Notes: T Factor is an indicator of soil loss tolerance, or the amount of soil loss that can be tolerated for a soil to remain productive. The T Factors are integer values from 1 through 5 tons per acre per year. The factor of 1 ton per acre per year is for shallow or otherwise fragile soils and 5 tons per acre per year is for deep soils that are least subject to damage by erosion. The analysis for the related renewable projects used a loss tolerance of 2 tons per acre per year as a guideline.

Table 6. Soil Erosion Factors in the Related Renewable Energy Projects Study Area, Known Project Areas (T factor)

Total Acreage in Project Area	Erosion Factors (acres [percentage of area])					
	1	2	3	4	5	Not Rated
Big Blue Nebraska (Jefferson County)						
20,544	0 (0%)	1 (Less than 1%)	797 (4%)	693 (3%)	18,775 (91%)	277 (1%)
Prairie Hills Wind (Custer County)						
40,965	0 (0%)	0 (0%)	67 (Less than 1%)	73 (Less than 1%)	40,804 (99%)	21 (Less than 1%)
Thunderhead (Holt, Antelope, and Wheeler Counties)						
60,862	0 (0%)	37 (Less than 1%)	91 (Less than 1%)	5,960 (10%)	54,753 (90%)	21 (Less than 1%)

Source: USDA, NRCS 2024

Notes: T Factor is an indicator of soil loss tolerance, or the amount of soil loss that can be tolerated for a soil to remain productive. The T Factors are integer values from 1 through 5 tons per acre per year. The factor of 1 ton per acre per year is for shallow or otherwise fragile soils and 5 tons per acre per year is for deep soils that are least subject to damage by erosion. The analysis for the related renewable projects used a loss tolerance of 2 tons per acre per year as a guideline.

Table 7. Soil Erosion Factors in the Related Renewable Energy Projects Study Area, by County (Slope)

Total Acreage in County	Erosion Factors (acres [percentage of area])		
	Slope >= 15%	Slope < 15%	Not Rated
Antelope County			
549,184	35,406 (6%)	512,078 (93%)	1,702 (less than 1%)
Cheyenne County			
765,187	57,195 (7%)	707,688 (92%)	229 (less than 1%)
Greeley County			
364,952	85,126 (23%)	277,844 (76%)	1,983 (less than 1%)
Holt County			
1,546,628	117,064 (8%)	1,420,318 (92%)	9,252 (less than 1%)
Jefferson County			
368,308	33,806 (9%)	331,064 (90%)	3,394 (1%)
Saline County			
368,713	8,716 (2%)	357,579 (97%)	2,420 (less than 1%)
Wheeler County			
368,160	40,424 (11%)	327,183 (89%)	556 (less than 1%)
York County			
368,263	7,836 (2%)	359,250 (98%)	1,178 (less than 1%)

Source: USDA, NRCS 2024

Notes: Soil disturbance on steep slopes would be more prone to soil erosion. To assess the areas of related renewable projects with steep slopes, a slope inclination of 15% or greater was used to define steep slopes for the related renewable projects.

Table 8. Soil Erosion Factors in the Related Renewable Energy Projects Study Area, Known Project Areas (Slope)

Total Acreage in Project Area	Erosion Factors (acres [percentage of area])		
	Slope >= 15%	Slope < 15%	Not Rated
Big Blue Nebraska (Jefferson County)			
20,544	725 (4%)	19,542 (95%)	277 (1%)
Prairie Hills Wind (Custer County)			
40,965	23,755 (58%)	17,188 (42%)	21 (Less than 1%)
Thunderhead (Holt, Antelope, and Wheeler Counties)			
60,862	2,247 (4%)	58,594 (96%)	21 (Less than 1%)

Source: USDA, NRCS 2024

Notes: Soil disturbance on steep slopes would be more prone to soil erosion. To assess the areas of related renewable projects with steep slopes, a slope inclination of 15% or greater was used to define steep slopes for the related renewable projects.

Prime Farmland

Prime farmland contains soils with the best physical and chemical characteristics for the production of food, feed, forage, fiber, and oilseed crops (7 CFR 657.5(a)(1)). It has the soil quality, growing season, and moisture supply needed to produce economically sustained high yields of crops when treated and managed according to acceptable farming methods, including water management. Undeveloped land with high crop production potential may be classified as prime farmland. The State Conservationist can designate specific soil map units as farmland of statewide importance. Tables 9 and 10 show the percentage of prime farmland, prime farmland if drained, prime farmland if irrigated, and farmland of statewide importance in the study area as mapped by USDA.

Table 9. Prime Farmland[a] in the Related Renewable Energy Projects Study Area, by County

	Sensitive Soils (acres [percentage of area])[b]				
Total Acreage in County	**Prime Farmland (acres)**	**Prime Farmland if Drained**	**Prime Farmland if Irrigated**	**Farmland of Statewide Importance**	**Not prime farmland**
Antelope County					
549,184	140,497 (26%)	5,186 (1%)	0 (0%)	141,468 (26%)	262,035 (48%)
Cheyenne County					
765,187	0 (0%)	0 (0%)	545,044 (71%)	0 (0%)	220,068 (29%)
Greeley County					
364,952	83,141 (23%)	1,921 (Less than 1%)	0 (0%)	0 (0%)	279,891 (77%)
Holt County					
1,546,628	70,412 (5%)	7,366 (Less than 1%)	49,755 (3%)	85,753 (6%)	1,329,317 (86%)
Jefferson County					
368,308	235,692 (64%)	4,871 (1%)	0 (0%)	24,356 (7%)	103,343 (28%)
Saline County					
368,713	261,606 (71%)	16,024 (4%)	0 (0%)	4,570 (1%)	86,515 (23%)
Wheeler County					
368,160	6,653 (2%)	713 (less than 1%)	0 (0%)	8,376 (2%)	352,220 (96%)
York County					
368,263	296,278 (82%)	15,355 (4%)	0 (0%)	1 (less than 1%)	56,630 (15%)

Notes:
[a] Prime farmland data from gSSURGO (USDA, NRCS 2024)
[b] Totals may not be exact as not all land uses are included in the table

Table 10. Prime Farmland[a] in the Related Renewable Energy Projects Study Area, Known Project Areas

	Sensitive Soils ((acres [percentage of area])[b]				
Total Acreage in Project Area	**Prime Farmland (acres)**	**Prime Farmland if Drained**	**Prime Farmland if Irrigated**	**Farmland of Statewide Importance**	**Not prime farmland**
Big Blue Nebraska (Jefferson County)					
20,544	13,077 (64%)	419 (2%)	0 (0%)	4,092 (20%)	2,955 (14%)
Prairie Hills Wind (Custer County)					
40,965	3,872 (9%)	0 (0%)	0 (0%)	0 (0%)	37,093 (91%)
Thunderhead (Holt, Antelope, and Wheeler Counties)					
60,862	10,117 (17%)	31 (Less than 1%)	0 (0.0%)	15,300 (25%)	35,414 (58%)

Notes:
[a] Prime farmland data from gSSURGO (USDA, NRCS 2024).
[b] Totals may not be exact as not all land uses are included in the table.

Soil Restoration Potential

Soil restoration potential indicates the ability of the soil to recover from degradation, which is often referred to as soil resilience. The ability to recover from degradation means the ability to restore functional and structural integrity after a disturbance. Several soil factors were used to evaluate the soil's restoration potential for the related renewable projects, including soil compaction potential, amount of hydric soil, and a soil revegetation potential model.

Soil compaction tends to reduce water infiltration, which 1) affects plant production and composition, 2) increases runoff (generally resulting in increased erosion rates), and 3) affects organisms living in the soil. Compaction is predominantly influenced by moisture content, but it is also influenced by depth to saturation; percent of sand, silt, and clay; soil structure; organic matter content; and content of coarse fragments. Although all soil is susceptible to compaction to varying degrees, wet soils are more readily compacted than dry, and clay loam or finer soils with poor drainage characteristics were assumed to be highly compaction prone. As a conservative measure, it was assumed that if the soil is disturbed by construction equipment or operation vehicles, soil compaction is a possibility. For purposes of this analysis, highly compactable soils are defined as fine-textured soils (sandy clay, silty clay, and clay) (USDA, NRCS 2024) and soils with somewhat poorly drained to very poorly drained characteristics.

Hydric soils are formed under saturation, flooding, or ponding for a sufficient period to develop anaerobic characteristics in the upper soil horizon. Hydric soils, combined with surface water or shallow groundwater and indicative vegetation species, are necessary indicators of wetlands (see SEIS Section 3.4, *Wetlands*). Disturbance of hydric soils may result in decreased water storage capacity of soil, decreased soil porosity, and decreased ability to replace hydrophytic vegetation. Tables 11 and 12 show soil restoration factors in the related renewable energy projects study area.

A soil revegetation potential model was used to examine the Sodium Absorption Ratio, Electrical Conductivity, and pH attributes of the soils in the study area to classify whether the soil has a high, moderate, or low potential for revegetation. Tables 13 and 14 show soil revegetation factors in the related renewable energy projects study area.

Table 11. Soil Restoration Factors in the Related Renewable Energy Project Study Area, by County

	Factors Affecting Restoration (acres [percentage of area])	
Total Acreage in County	**Compaction Prone[a]**	**Hydric Soils[b]**
Antelope County		
549,184	40,297 (7%)	20,079 (4%)
Cheyenne County		
765,187	3,409 (less than 1%)	8,114 (1%)
Greeley County		
364,952	4,209 (1%)	5,955 (2%)
Holt County		
1,546,628	4,601 (less than 1%)	166,342 (11%)
Jefferson County		
368,308	150,833 (41%)	4,577 (1%)
Saline County		
368,713	137,670 (37%)	11,744 (3%)
Wheeler County		
368,160	216 (less than 1%)	38,114 (10%)
York County		
368,263	51,991 (14%)	19,509 (5%)

Source: USDA, NRCS 2024

Notes:

[a] Compaction prone soils include those soils that are prone or more likely to incur compaction, and are defined as soils that have 28% or greater clay content in the top 20 inches.

[b] All hydric and predominantly hydric soils data from SSURGO, which includes overlap with National Wetlands Inventory wetlands.

Table 12. Soil Restoration Factors in the Related Renewable Energy Projects Study Area, Known Project Areas

Total Acreage in Project Area	Factors Affecting Restoration (acres [percentage of area])	
	Highly Compaction Prone[a]	**All Hydric Soils[b]**
Big Blue Nebraska (Jefferson County)		
20,544	9,988 (49%)	275 (1%)
Prairie Hills Wind (Custer County)		
40,965	1,385 (3%)	429 (1%)
Thunderhead (Holt, Antelope, and Wheeler Counties)		
60,862	281 (less than 1%)	670 (1%)

Source: USDA, NRCS 2024

Notes:

[a] Compaction prone soils include those soils that are prone or more likely to incur compaction, and are defined as soils that have 28% or greater clay content in the top 20 inches.

[b] All hydric and predominantly hydric soils data from SSURGO, which includes overlap with National Wetlands Inventory wetlands.

Table 13. Soil Revegetation Potential in the Related Renewable Energy Projects Study Area, by County[a]

Total Acreage in County	Factors Affecting Restoration (acres, percent of area)			
	High	Moderate	Low	Not Rated
Antelope County				
549,184	546,351 (99%)	806 (less than 1%)	0 (0%)	2,029 (less than 1%)
Cheyenne County				
765,187	759,737 (99%)	4,389 (less than 1%)	0 (0%)	985 (less than 1%)
Greeley County				
364,952	361,867 (99%)	1,133 (less than 1%)	0 (0%)	1,953 (less than 1%)
Holt County				
1,546,628	802,156 (52%)	1 (less than 1%)	3,862 (less than 1%)	740,615 (48%)
Jefferson County				
368,308	362,676 (98%)	465 (less than 1%)	0 (0%)	5,122 (1%)
Saline County				
368,713	365,240 (99%)	680 (less than 1%)	0 (0%)	2,794 (less than 1%)
Wheeler County				
368,160	367,535 (100%)	69 (less than 1%)	1 (less than 1%)	556 (less than 1%)
York County				
368,263	366,567 (99%)	186 (Less than 1%)	0 (0%)	1,511 (Less than 1%)

Source: USDA, NRCS 2024

Notes:

[a] The Revegetation Potential model populates the Sodium Adsorption Ratio (SAR), the Electrical Conductivity (EC), and the pH attributes. SAR: A measure of the amount of Sodium (Na) relative to Calcium (Ca) and Magnesium (Mg) in the water from saturated soil paste. EC: The electrical conductivity of an extract from saturated soil paste. pH: The negative logarithm to the base 10, of the hydrogen ion activity in the soil using the 1:1 soil-water ratio method. A numerical expression of the relative acidity or alkalinity of a soil sample. It then uses these attributes to classify soils by revegetation potential (ReVegPot):

Low: SAR >= 13 OR EC >= 4 OR (pH >= 9 or pH <= 4.4).

Moderate: (SAR >= 6 and SAR < 13) OR (EC >= 2 and EC < 4) OR (pH >= 8.5 and pH < 9) OR (pH <= 5 and pH > 4.4).

High: ReVegPot is null and (SAR is not null OR EC is not null or pH is not null).

Table 14. Soil Revegetation Potential in the Related Renewable Energy Projects Study Area[a]

Total Acreage in Project Area	Factors Affecting Restoration (acres, percent of area)			
	High	Moderate	Low	Not Rated
Big Blue Nebraska (Jefferson County)				
20,544	20,234 (98%)	32 (Less than 1%)	(0%)	277 (1%)
Prairie Hills Wind				
40,965	40,943 (100%)	(0%)	(0%)	21 (Less than 1%)
Thunderhead Wind Energy Center				
60,082	60,476 (99%)	(0%)	(0%)	386 (1%)

Source: USDA, NRCS 2024

Notes:

[a] The Revegetation Potential model populates the Sodium Adsorption Ratio (SAR), the Electrical Conductivity (EC), and the pH attributes. SAR: A measure of the amount of Sodium (Na) relative to Calcium (Ca) and Magnesium (Mg) in the water from saturated soil paste. EC: The electrical conductivity of an extract from saturated soil paste. pH: The negative logarithm to the base 10, of the hydrogen ion activity in the soil using the 1:1 soil-water ratio method. A numerical expression of the relative acidity or alkalinity of a soil sample. It then uses these attributes to classify soils by revegetation potential (ReVegPot):

Low: SAR >= 13 OR EC >= 4 OR (pH >= 9 or pH <= 4.4).

Moderate: (SAR >= 6 and SAR < 13) OR (EC >= 2 and EC < 4) OR (pH >= 8.5 and pH < 9) OR (pH <= 5 and pH > 4.4).

High: ReVegPot is null and (SAR is not null OR EC is not null or pH is not null).

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United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). 2024. Gridded Soil Survey Geographic (gSSURGO), Soil Survey Staff. Database for Nebraska. Available online at http://datagateway.nrcs.usda.gov/. 20220908 (20240830 official release). Accessed December 12, 2024.

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Appendix H
Whooping Crane Technical Supplement

This appendix describes data and information about whooping crane reviewed by the Service in preparation of the SEIS. This includes additional whooping crane sighting and mortality information, summarized data from the Whooping Crane Tracking Partnership's (WCTP) phase 2 telemetry study, and a study assessing the effects of the R-Project on the Aransas-Wood Buffalo population of whooping cranes.

Service Review of Whooping Crane Sightings and Mortalities

The Service reviews and evaluates reports of probable, unconfirmed, and confirmed whooping crane sightings reported by the public as part of a decades long monitoring program. Unconfirmed and probable reports were historically maintained as official records along with confirmed sightings. More recently, due to the increase in the population from early tracking efforts, probable and unconfirmed sightings are primarily used in season as a supplemental aid in confirming sightings and then discarded after the migration season. Confirmed sightings are those verified by a qualified biologist or expert, or by photo or video evidence, and are the only sightings the Service supports using in research or decision making. Historic confirmed sightings combined with new records are entered and maintained in a long-term GIS database. The Service routinely receives erroneous reports of whooping crane sightings that are misidentifications of species such as sandhill cranes (including leucistic), pelicans, and snow geese, and as such require confirmation (photo or visually by a trained professional or experienced individual with necessary experience or credentials [i.e., qualified individual]).

Additionally, the Service maintains the original source information for whooping crane mortality records when available and provided, including a select number of power line mortality records reported as part of the whooping crane public sightings tracking database (i.e., the record that was first submitted, evaluated, and recorded by the Service). The Service does not support the use of whooping crane sightings or mortalities in analyses unless they meet the definition of a confirmed sighting.

In 2018, the Service completed a cumulative review and assessment of seven risk analyses, additional supplemental information, rebuttals, as well as peer reviews that evaluated the likelihood of a whooping crane colliding with the proposed R-Project transmission line. From this evaluation, the Service developed a comprehensive risk assessment termed the "reasonably certain knowledge" (RCK) analysis (Skorupa and Juliusson 2018). Since the Skorupa and Juliusson (2018) analysis, the Service conducted a review of all existing mortality data and identified a discrepancy in two publications of historic whooping crane mortality (Stehn and Wassenich 2008; Stehn and Haralson-Strobel 2016). Because these data were used in Skorupa and Juliusson (2018) and the discrepancy was related to confirmation status, mortality dates, or types of power lines (transmission vs. distribution), the Service subsequently reviewed the accuracy of source data reported in those publications.

Specifically, the record for the October 1988 Nebraska power line mortality reported in Stehn and Wassenich (2008) and Stehn and Harralson-Strobel (2016) was found on file as a hard copy record. However, this record was not included in the GIS database of confirmed sightings. The Service determined that this was because the original record for this observation did not meet the scientific standard of a confirmed sighting, which supports its absence in the database of confirmed sightings. Therefore, the statement in Stehn and Wassenich (2008) that "historically, at least nine whooping cranes in the Aransas-Wood Buffalo population (AWBP) died from collisions with power lines during 1956–2006" is inaccurate because one of these sightings/mortalities was not confirmed. Inclusion of this record as a confirmed whooping crane mortality is inconsistent with the official observational record, and for these reasons, this record was removed from the updated RCK analysis completed by NPPD, as reflected in Revised HCP Appendix D and this SEIS.

The Service is worked with several whooping crane experts to update all mortality records as part of the North American Crane Working Group Workshop conducted in 2023. The publication of proceedings from that workshop have been peer-reviewed and were published in 2025 (Brightwell et al. 2025). The publication includes all mortality of fledged AWBP whooping cranes through 2023 throughout their range.

Service Evaluation of Whooping Crane Tracking Partnership Phase 2 Summary Data

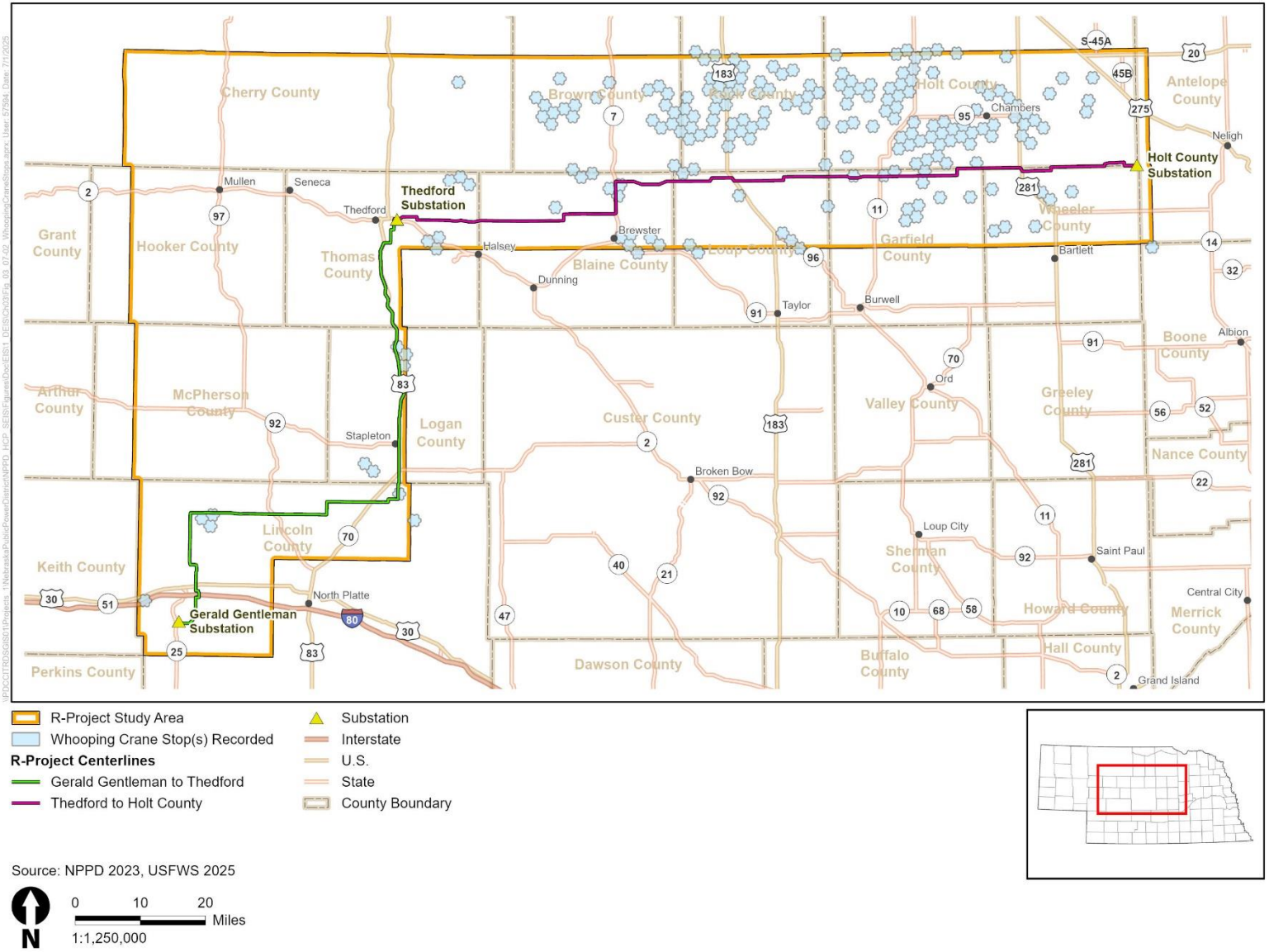
Telemetry data showing ground-based whooping crane observations collected from 2017 to 2024 by advanced cellular telemetry units affixed to whooping cranes (known as phase 2) was reviewed in April 2025 (WCTP 2025). During this period, 127 unique whooping cranes were tracked with cellular telemetry units providing data as often as every 10 minutes. An average of 6.6% (+/- 3.3%) of the AWBP was actively monitored during this period.

WCTP summarized the data using the "Nested Hexagon Framework" (NHF) (Houts et al. 2023), which is a hierarchical multiscale hexagonal mapping grid of 1 square (sq) kilometer (km) hexagons, 7 sq km cogs, 49 sq km wheels, and 343 sq km rings covering all of North America. The data requested and reviewed by the Service was for the R-Project study area.

The summarized phase 2 telemetry data allow for a visual analysis of relative habitat use by whooping cranes in the study area. This summarized data does not include raw data points showing individual locations and unique bird identifiers but it does allow for general evaluation of spatial use patterns of a whooping cranes in the study area, total bird days, unique birds, and unique years in which cranes were present in the study area at the various NHF scales.

The Service reviewed and evaluated use within the 4 spatial NHF scales and concluded that suitable habitat was widely dispersed and available throughout the entire R-Project study area and that use of the area within or immediately adjacent to the proposed R-line route was similar, but less-used than other portions throughout the remainder of the study area. Figure H-1 illustrates this finding.

In addition to showing relative whooping crane use in the R-Project study area, the phase 2 telemetry data documented additional mortality information for multiple forms of mortality, including power line collision. The data were also provided to the Service and are included in the collision risk analysis for the R-Project (Revised HCP Appendix D).



Note: Each hexagon shown on the map indicates at least one documented whooping crane stopover.

Figure H-1. Whooping Crane Use of Habitat in the Study Area

Service Evaluation of Barzen et al. (2025)

During the scoping period for the SEIS, the Service received an unpublished study assessing the effects of the R-Project on the AWBP of whooping cranes (Barzen et al. 2023). The study was finalized and published in May 2025, and subsequent references to this paper refer to the final version (Barzen et al. 2025). The following subsections describe differences between the Revised HCP's collision risk analysis (Revised HCP Appendix D) and Barzen et al. in the following data and methods: 1) use of sandhill crane data as surrogate, 2) use of different population growth models, and 3) consideration of minimization measures.

Use of Sandhill Crane Data as Surrogate

Power line collisions are a well-known threat to whooping cranes and a known source of mortality, though estimates of the extent to which collision mortality represents the proportion of total mortality, or the proportion of mortality during migration, have varied significantly. Barzen et al. (2025) relied on sandhill crane data in their risk assessment to determine the estimated risk of fatality due to collision with a power line for whooping cranes. The Service finds the application of surrogates unnecessary because whooping crane data, while limited, are available for use in collision risk assessments. The studies on sandhill cranes cited in Barzen et al. as the basis for the study's collision risk probability targeted high-risk areas. Additionally, the species have different behavioral, demographic, and geographic factors to consider when evaluating and comparing collision risk.

The sandhill crane studies used in Barzen et al. to establish the model's collision rate were intentionally conducted over transmission lines considered to be the highest risk for low-level flights and collisions (e.g., spanning rivers or wetlands where the species roosts, spanning two closely located roosting or feeding areas) (Faanes 1987, Morkill and Anderson 1991, Brown and Drewien 1995). These studies chose such areas to suit their research objectives. Faanes (1987) aimed to study the magnitude of bird mortality from collisions at sites "selected to represent 'worst case' situations" where power lines crossed areas with large communities of birds. Morkill and Anderson (1991) and Brown and Drewien (1995) aimed to detect differences in collision with marked versus unmarked power lines and studied specific line segments that bisected known habitat for their subject species. Importantly, these studies did not aim to establish collision risk for specific species over large areas with varied habitat value.

Additionally, whooping cranes are morphologically and biologically different from sandhill cranes. While whooping cranes are larger and would seem to be less maneuverable, the sandhill crane strike rate studies were conducted in locations where large concentrations of sandhill cranes encountered the line in large, dense flocks. Sandhill cranes are likely significantly less maneuverable under these conditions, as are all avian species in large, dense flocks. Migrating whooping cranes typically fly in much smaller flocks with more air space compared to sandhill cranes who often fly in large, dense flocks. Murphy et al. (2009) and the Avian Power Line Interaction Committee (2012) indicate increasing risk of mortality from collisions with power lines with larger flocks. This confounds comparison of the two species' abilities to avoid and maneuver around a power or transmission line and casts doubt on the use of sandhill crane power line collision rates as a surrogate for whooping cranes.

Sandhill cranes are also behaviorally different than whooping cranes in that they have a higher tolerance for using habitat near power lines and other disturbance features. Ellis et al. (2022) demonstrated that whooping cranes are less likely to use habitat near powerlines than would be expected if the power line was not present. This behavioral difference could lead to higher strike rates for sandhill cranes and suggests that using sandhill crane collision rates as a surrogate for whooping cranes over-estimates collision risk to whooping cranes. Barzen et al.'s statement that "no data suggest whooping cranes avoid transmission or distribution lines that are associated with energy development" is not supported by the Ellis et al. (2022) research.

The limited applicability of the sandhill crane studies cited in Barzen et al. to estimating whooping crane risk of colliding with the R-Project and the behavioral differences between how sandhill cranes and whooping cranes interact with powerlines suggest that the assumptions used in Barzen et al. are biased to higher collision rates and may not be appropriate to apply to calculations of collision risk for the R-Project. The Service continues to rely on the best available data for known confirmed whooping crane mortalities as the key source of data in the RCK analysis, and this remains the preferred approach instead of using surrogate data.

Consideration of Minimization Measures

The proposed action's minimization measures include marking the entirety of the R-Project with bird flight diverters, including reflective and glow-in-the-dark diverters at areas with known high avian densities. Bird flight diverters have been shown to have a 50% to 80% effectiveness rate (Yee 2008; Brown & Drewien 1995; Morkill & Anderson 1991) in reducing power line collisions across avian species. Barzen et al. did not consider a reduction in collision risk from bird flight diverters as a component of their collision risk analysis and, therefore, overestimate collision risk.

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Appendix I
Select Supplemental Section 106 Materials

This appendix includes select information and documents supporting the Service's compliance with Section 106 of the National Historic Preservation Act following the court decision in 2020 (Oregon-California Trails Association v. Walsh, 1:19-cv-01945-WJM, D. Colo 2020). This appendix includes a summary of select Section 106 correspondence since the court decision (Attachment 1), a summary and a copy of the Final Cultural Resources Inventory Report (CRIR)(Attachment 2), and a summary of Section 106 meetings open to all Tribal Nations and Consulting Parties. This appendix also provides a table listing all known unevaluated, NRHP-eligible, and NRHP-listed cultural resources in the area of potential effects (APE) (Attachment 3).

Select Section 106 Correspondence

The following select letters and emails from the Section 106 process are included as Attachment 1. In addition to the correspondence listed below, the Service conducted extensive consultation throughout the Section 106 process with individual Tribal Nations and Consulting Parties via phone calls, virtual meetings, emails, and written correspondence. The Service tracked these efforts separately as part of the project record, and the list below is only a portion of the Section 106 and Tribal consultation that has occurred throughout the life of the project.

- Letter from the Nebraska State Historic Preservation Officer (SHPO) to POWER Engineers in response to the 2018 survey report, dated January 28, 2019
- Letter from SHPO to POWER Engineers in response to the 2019 survey report, dated January 9, 2020
- Letter from the Rosebud Sioux Tribe to the Secretary of the Department of the Interior concerning the NEPA process, NHPA consultation, and the ITP, dated September 17, 2021
- Letter from the Service to the Rosebud Sioux Tribe in response to the September 17, 2021, letter, dated December 13, 2021
- Letter from the Advisory Council on Historic Preservation (ACHP) to the Service, dated October 19, 2022
- Letter from the Service to the ACHP in response to the letter received on October 19, 2022, dated December 22, 2022
- Letter from the Service to ACHP, SHPO, Tribal Nations, and Consulting Parties initiating the Section 106 process, dated July 10, 2023
- Letter from SHPO to the Service indicating concurrence on the proposed APE, dated July 21, 2023
- Letter from the Service to Tribal Nations regarding Tribal cultural specialist (TCS) surveys, dated June 12, 2024
- Letter from the Service to Tribal Nations regarding NPPD's selection of a contractor to lead development of the Tribal Participation Plans, dated September 27, 2024

- Letter from the Service to ACHP, SHPO, Tribal Nations, and Consulting Parties regarding project communication protocols, dated September 27, 2024
- Letter from the Rosebud Sioux Tribe to the Service concerning the draft Finding of Effect Report, dated November 6, 2024
- Letter from the Rosebud Sioux Tribe to the Service concerning the Programmatic Agreement (PA), dated November 15. 2024
- Letter from the Service to the Rosebud Sioux Nation in response to letters received on November 6 and 15, 2024, dated January 9, 2025
- Letter from the Service to SHPO requesting concurrence on the Draft 2020/2023 Survey Report, dated February 18, 2025
- Email from the SHPO to the Service providing concurrence on the Draft 2020/2023 Survey Report, dated March 31, 2025
- Email from the Service to ACHP, SHPO, Tribal Nations, and Consulting Parties regarding modified approach to TCS surveys in the APE for Physical Effects, dated July 15, 2025
- Emails from the Service to Tribal Nations and Consulting Parties providing the Revised Draft 2020/2023 Survey Report, dated September 22, 2025
- Letter and enclosures from the Service to ACHP, SHPO, and Tribal Nations explaining DOI's approval of the use of alternative procedures for compliance with Section 106 of the NHPA in response to the National Energy Emergency, dated January 13, 2026

Additional consultation and correspondence are anticipated to occur as the Service implements alternative procedures for compliance with Section 106 of NHPA in response to the National Energy Emergency.

The distribution list for the Initiation of Section 106 Consultation letters, dated July 10, 2023, is as follows:

- Linda Tacey, Southerland History Center
- John Briggs, Oregon-California Trails Association
- Tom Kent, NPPD
- James Griffin, Lincoln County Historical Museum
- Ryan Saltzgiver, Church History Department – The Church of Jesus Christ of Latter-Day Saints
- Michael Kelly
- James Haugland
- Alexis Clark, ACHP
- Lisa Burke, Visit North Platte
- Jordan Jarrett, National Park Service – National Trails
- James Fleecs
- Betty Gillespie, Nebraska State Historic Preservation Office

- Rosebud Sioux Tribe
- Northern Cheyenne Tribe
- Cheyenne and Arapaho Tribes, Oklahoma
- Santee Sioux Nation of Nebraska
- Ponca Tribe of Nebraska
- Otoe-Missouria Tribe
- Iowa Tribe of Kansas and Nebraska
- Omaha Tribe of Nebraska
- Ponca Tribe of Oklahoma
- Winnebago Tribe of Nebraska
- Oglala Sioux Tribe
- Meskwaki Nation
- Sac and Fox Nation of Oklahoma
- Sac and Fox Nation of Missouri in Kansas and Nebraska
- Cheyenne River Sioux Tribe of the Cheyenne River Reservation, South Dakota
- Yankton Sioux Tribe of South Dakota
- Lower Brule Sioux Tribe
- Pawnee Nation of Oklahoma
- Apache Tribe of Oklahoma
- Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation, Montana
- Standing Rock Sioux Tribe of North and South Dakota
- Spirit Lake Tribe, North Dakota
- Cherokee Nation
- Flandreau Santee Sioux Tribe of South Dakota
- Lower Sioux Indian Community in the State of Minnesota
- Prairie Island Indian Community in the State of Minnesota
- Upper Sioux Community, Minnesota
- Sisseton-Wahpeton Oyate of the Lake Traverse Reservation, South Dakota
- Northern Arapaho Tribe
- Shakopee Mdewakanton Sioux Community of Minnesota
- Crow Creek Sioux Tribe of the Crow Creek Reservation

After the distribution of the Section 106 initiation letters in July 2023, additional Tribal Nations and Consulting Parties were added to the distribution list for Section 106 materials. These entities were invited to consult via letters from the Service on various dates, indicated in the following list.

- U.S. Bureau of Land Management (April 2024)
- U.S. Forest Service (April 2024)
- Blaine County Board of Commissioners (May 2024)
- Garfield County Board of Commissioners (May 2024)
- Holt County Board of Supervisors (May 2024)
- Lincoln County Board of Commissioners (May 2024)
- Logan County Board of Supervisors (May 2024)
- Loup County Board of Commissioners (May 2024)
- Thomas County Board of Commissioners (May 2024)
- Wheeler County Board of Commissioners (May 2024)
- Amy and Lynn Ballagh (landowners) (February 2024)
- Three Affiliated Nations (Mandan, Hidatsa, and Arikara Nation) (January 2025)

Final Cultural Resource Inventory Report

As part of the Section 106 process, the Service developed the Final Cultural Resource Inventory Report, which includes the following (July 2024) (Attachment 2):

- Summarizes the archaeological and built environment resources documented and evaluated during previous cultural resource inventories conducted for the R-Project;
- Identifies cultural resources eligible for or listed in the NRHP in the APE for ground disturbance and physical construction, as well as within the audible and visual APEs; and
- Summarizes the administrative record of the Service's Section 106 consultation for the R-Project, including communication and correspondence with SHPO, ACHP, Tribal Nations, and Consulting Parties.

Select Section 106 Consultation Meetings

This section of the appendix summarizes the Section 106 consultation meetings hosted by the Service that were open to all Tribal Nations and Consulting Parties throughout development of the SEIS from August 2023 to August 2025. Some meetings, or portions of meetings, hosted by the Service included only the Tribal Nations. There were also meetings, or portions of meetings, set aside for Tribal Nations to meet separately, with no Service staff or any other staff attending. Some meetings were held virtually, some were in-person, and some were hybrid, with people attending both in-person and virtually.

In addition to the meetings described below, the Service conducted extensive consultation throughout the Section 106 process with individual Tribal Nations and Consulting Parties via phone

calls, virtual meetings, emails, and written correspondence. The Service tracks these consultation efforts separately as part of the project record.

Additional consultation meetings may occur as the Service implements the alternative procedures for compliance with Section 106 of NHPA in response to the National Energy Emergency.

August 2023

The Service hosted two Section 106 consultation meetings on August 17 and 18, 2023. The meetings were held virtually, and the meeting invitation was extended to those parties listed above in the section entitled *Section 106 Correspondence*.

The meeting on August 17, 2023, was open to all Section 106 consulting parties, project team members, and additional interested parties. The meeting's purpose was to discuss the proposed APE and solicit input on known historic properties and TCPs within that boundary. The primary concerns raised by meeting participants were related to the effects of the undertaking on O'Fallon's Bluff and the Mormon Trail Ruts from the revised transmission line alignment and the distance of the centerline to the Mormon Trail Ruts in particular. No new historic properties were identified by the participants during the call.

The meeting on August 18, 2023, was a closed meeting for tribal representatives, intended to create a platform where tribal representatives may feel comfortable sharing sensitive information, should they choose. Meeting attendees expressed the following concerns regarding the need to survey and inventory the entirety of the area of potential effects (APE) (physical and visual); a need to conduct TCP surveys; dissatisfaction with government-to-government consultation with tribal representatives during the pre-2019 EIS efforts; concern that all/enough Tribal Nations were contacted regarding the Section 106 consultation meeting; how tribal input will be addressed in this second round of Section 106 consultation; timelines for when tribal representatives could review the CRIR; how tribal representatives can review information from previous surveys conducted for this project; and how to improve communication through emails, follow-up phone calls, and in-person meetings. Participants noted the traditional and cultural importance of the Ogallala Aquifer, stating that water is used in ceremony, water is medicine, and water is life.

December 2023

The Service hosted a virtual Section 106 consultation meeting on December 8, 2023, to discuss the Draft Cultural Resources Inventory Report. The meeting was open to Tribal Nations and Consulting Parties. Meeting attendees expressed concerns regarding the field methodology and lack of opportunity for Tribal input and participation in the 2015-2019 cultural resources surveys and eligibility recommendations. Attendees also requested clarity regarding how Tribal Nations can be included as cooperating agencies; if prior agreements and comments are still valid; where the potential effects to wildlife, plants, sensitive species, and water resources will be addressed; and how the Service plans to mitigate adverse effects to historic properties. Participants indicated that the Nebraska SHPO cultural resources data may not include all cultural resources known to Tribal Nations. Participants also noted the cultural significance of rocks, plant communities, and landscapes and that confluences of rivers and streams are important places to Tribal Nations for trade, ceremonies, and meetings.

February 2024

The Service hosted two meetings with Tribal Nations and Consulting Parties in February: a virtual meeting for Tribal Nations and Consulting Parties on February 14, 2024, and an in-person meeting with Tribal Nations on February 28, 2024.

The Service's primary goal for the February 14, 2024, meeting was to discuss the Revised Draft Cultural Resources Inventory Report. At this meeting, Tribal Nations and Consulting Parties stated that Tribal Nations did not yet have the opportunity to conduct surveys and that the Section 106 process was still in Step 2, identification. Some Tribal Nations also stated that the entire APE, including the APE for Visual Effects, should be subject to Tribal survey, and that belowground and aboveground effects should be considered. One participant stated that the revised R-Project route would still adversely affect LN00-028 (O'Fallon's Bluff trail ruts) and that the route needed to be changed to a point 3 miles east of O'Fallon's Bluff. Participants discussed potential mitigation for effects on trail ruts. Tribal Nations and Consulting Parties requested copies of the current PA that was executed in 2019. Tribal Nations and the Service talked about the upcoming in-person Tribal meeting. At the request of some participants, the Service extended the comment period on the Revised Draft CRIR from 30 to 45 days.

On February 28, 2024, the Service hosted an in-person meeting with the Tribal Nations meeting at the Prairie Arts Center in North Platte, Nebraska. The Service's goals for this meeting were to discuss the current status of the Section 106 process, identification efforts, analysis of effects, and the PA, as well as additional resource topics, such as migratory birds and water resources. The primary goal of the meeting, however, was to listen to and acknowledge Tribal concerns regarding the R-Project's Section 106 process and to potentially come to an agreement on topics to move the Section 106 process forward, incorporating input from Tribal Nations. The primary topics discussed included the involvement of Tribal Nations over the project lifetime, Tribal survey methodology, alternative routes, impacts on the Sandhills (including land, water, and air resources), and the Service's authority for the issuance of the incidental take permit (ITP). The attendant Tribal Nations representatives stated that the February 28 meeting did not constitute a government-to-government consultation. They expressed concerns regarding Tribal Nation involvement throughout the project and stated that the project is in the identification stage of the Section 106 process. In response, the Service reiterated its commitment to include Tribal Nations in all aspects of the consultation process, expressed agreement on the need for surveys by TCSs, and reiterated they are requesting relevant information from Tribal Nations to incorporate into the Final SEIS. Additional discussion revolved around the Service's authority in the NEPA process.

June 2024

The Service began hosting recurring Section 106 meetings in June 2024. On June 26, 2024, the Service hosted the first of these meetings, which consisted of two parts, a meeting open to Tribal Nations and Consulting Parties and a meeting for Tribal Nations only. The Service's goals for the combined meeting were to provide an update on the current status of the Section 106 process, present proposed next steps in the process, and solicit feedback on the proposed next steps. The group discussed direct effects under the NHPA and the Service's phased identification approach under a proposed new PA. The Service presented multiple reasons for a phased identification approach, including schedule and financial constraints, while multiple Consulting Parties and Tribal Nations expressed opposition to this approach.

The Service's goals for the Tribal Nation meeting were to present a summary of the February 28 in-person Tribal meeting, address Tribal Nations' requests for surveys by TCSs, propose a phased identification approach to surveys by TCSs, and propose roles for the Service, NPPD, and Tribal Nations during surveys by TCSs. Discussions centered on surveys by TCSs and the proposed phased identification approach. Some attendees reiterated their opposition to this approach. The Service explained its coordination with the Department of the Interior and the determination that it would require a Tribal survey in the APE for Physical Effects. Other topics of conversation included the use of light detection and ranging or other alternative methods for identification efforts and the eligibility of Highway 83 as stated in the CRIR.

July 2024

On July 31, 2024, the Service hosted a two-part meeting with a portion open to Tribal Nations and Consulting Parties and a portion reserved for Tribal Nations. The Service's goals for the combined meeting was to introduce the proposed approach to the new PA, provide an update on the Section 106 schedule, and seek feedback on the information presented. The discussion included the limitations of the Service's authority regarding routing alternatives, input from the Tribal attendees about interest in surveys by TCSs and concerns with ongoing requests for input and participation, the extent of surveys that remain to be completed, and the status of the Service's consultation with Tribal Nations (both under Section 106 and through the government-to-government consultation process).

The Service's goals for the Tribal Nation meeting were to provide an update on the status of Tribal survey coordination, seek input on the Tribal survey coordination process, and seek any sensitive feedback from the Tribal Nations on the items discussed in the combined portion of the meeting. The discussion focused on the status of NPPD's selection of a contractor to assist with surveys by TCSs, Tribal Nations' opposition to the phased construction process, and the consideration of direct and indirect effects under Section 106.

August 2024

On August 28, 2024, the Service hosted a two-part meeting with a portion open to Tribal Nation and Consulting Parties and a portion reserved for Tribal Nations. The Service's goals for the combined meeting were to review recent Section 106 communications, revisit the annotated outline for the new PA, present the approach for PA development, and provide guidance on how to give feedback on the new PA. The discussion included the integration of related renewable energy projects into the new PA and the limitations of the Service's authority regarding routing alternatives. The Service also discussed next steps in developing the new PA in coordination with Tribal Nations and Consulting Parties.

The Service's goals for the Tribal Nation meeting were to provide an overview of the Tribal survey process and an update on the status of surveys by TCSs and next steps in the process. Discussion focused on Tribal Nations' input on the APE and the new PA and on participation in surveys by TCSs. The discussion also covered the contractor's role in developing Tribal participation plans and fieldwork logistics and the necessity of the Service's continued government-to-government consultation with Tribal Nations. One attendee brought up concerns regarding the number of ITPs issued by the Service.

September 2024

On September 25, 2024, the Service hosted a two-part meeting with a portion open to Tribal Nations and Consulting Parties and a portion reserved for Tribal Nations. The Service's goals for the combined meeting were to review recent Section 106-related communications, provide an update on the new PA, describe the review and feedback process for developing the new PA, present portions of the new PA for discussion, and present next steps. The discussion included a robust discussion of portions of the PA, including mitigation and avoidance of the Birdwood Creek site (25LN94/25LN113) and discussion regarding surveys by TCSs as part of the process. One participant stated that the new PA had been drafted without Tribal input. Other points of discussion included the definition of "discovery," suggestions that the new PA cite specific regulations, issues with the discussion covering too much ground too quickly, and discussions regarding data sharing under the new PA. Following discussion of the PA draft, one participant urged the Service to consider Tribal Nations as more than Consulting Parties, stated that the current PA format is inadequate considering the magnitude of the project, and suggested that the Service schedule an in-person meeting to develop the PA.

The Service's goals for the Tribal Nation meeting were to provide an update on the status of surveys by TCSs, present next steps, discuss the Service's permitting responsibilities, and provide a forum for open discussion of Tribal Nation concerns and comments. Discussion focused on a question from the previous month's Tribal Nation meeting regarding the number of ITPs approved by the Service. Discussion also covered the reason for preparing a Supplemental EIS. One Tribal Nation expressed interest in participating in surveys by TCSs. The group also discussed logistics and details concerning the Tribal survey effort.

October 2024

On October 23, 2024, the Service hosted a two-part meeting with a portion open to Tribal Nations and Consulting Parties and a portion reserved for Tribal Nations. The Service's goals for the combined meeting were to review recent Section 106-related communications, provide an update on requests for additional in-person meetings and a potential field visit to affected historic properties, review a draft amendment to sunset the existing PA, review the Draft Finding of Effect (FOE) Report for known historic properties, review draft language for Stipulation XVI of the new PA regarding monitoring and reporting of the agreement, and next steps in the Section 106 process. Discussion included the availability of the Draft FOE Report for review; a discussion regarding the Draft FOE Report not covering historic properties and sites of Tribal cultural and religious interest, which will be assessed when those are located during upcoming surveys; a discussion centered around Tribal survey coordination; and a discussion of logistics regarding the upcoming in-person meetings in North Platte.

The Service's goals for the Tribal-Nations-only portion of the meeting were to provide an update on the status of surveys by TCSs, to seek Tribal Nation input on draft language for the new PA regarding Tribal consultation protocols, next steps regarding Tribal surveys and consultation, and to host an open discussion regarding Tribal Nation concerns and comments.

Discussions centered on the in-person meeting in January, Seventh Sovereign (the firm contracted by NPPD to handle Tribal survey logistics), and Tribal survey logistics. The Tribal Nations expressed a lack of familiarity with Seventh Sovereign and lack of communication so far from the firm. The Service reiterated that Seventh Sovereign was onboarded to handle logistics related to surveys by

TCSs, but the Service was the lead agency for Section 106 and NEPA. There was a discussion regarding sites identified by surveys by TCSs being incorporated into reports to qualify for protection under Section 106; the Service responded that this was the intent. Discussion also centered around Tribal Nation concern regarding restricted information release to the SHPO because of Tribal sensitivity concerns, the Service stated that this was consistent with Service expectations.

November 2024

On November 21, 2024, the Service hosted a two-part meeting with a portion open to Tribal Nations and Consulting Parties and a portion reserved for Tribal Nations. The Service's goals for the combined meeting were to provide a recap of recent Section 106 communications, provide a summary of comments received on the Draft FOE Report, proved an update on the January 2025 in-person meetings and site visit, review draft language in the new PA for Stipulation V regarding initiation of construction activities, review the draft Post-Review Discovery Plan for the new PA, and present next steps in the Section 106 process. At this portion of the meeting, some Tribal Nations expressed continued disagreement with the phased approach to the Section 106 process. The problem in their view was that this was a segmented approach that opened the door to pushing the project forward one segment at a time, reducing options for avoidance. The Service mentioned language in the new PA intended to prevent limitations on avoidance options. Other Tribal Nations stated in essence that language in the PA was not a substitute for proper consultation. In discussion of the draft Post-Review Discovery Plan for the new PA, Tribal Nations observed they should be notified much earlier in the unanticipated discovery process and the Service agreed on this point, stating that the next draft would incorporate this change. Discussion also concerned whether Tribal Nations would be involved in the selection process for the cultural resource specialist identified in the new PA and interest in a hybrid option for the January in-person meetings.

The Service's goals for the Tribal Nation portion of the meeting consisted of discussing updates on Tribal survey initiation, introduction of Seventh Sovereign (the firm contracted by NPPD to assist with Tribal survey planning and logistics), seeking input on draft language for the new PA's Stipulation III regarding Tribal consultation protocols, discuss comments received on the Draft FOE Report, discuss next steps, and provide an open forum for Tribal Nation concerns and comments. During this portion of the meeting, Seventh Sovereign introduced themselves and described their role in the project. The Rosebud Sioux Tribe representative expressed doubts concerning Seventh Sovereign's neutrality as they were contracted through NPPD. Discussion then centered on the issue of phased identification. The Service stated that the phased identification approach had been written into the previous PA and that there was a separation between phased identification and phased construction. The Service stated that it would not approve construction if doing so would prevent appropriate Section 106 processes from occurring for that portion of the line. Tribal Nations reiterated opposition to the phased approach and expressed the view that all surveys by TCSs should be completed before construction began. They also stated that they disagreed that there should even be a PA and that the project should follow a standard Section 106 process. The discussion then moved to the draft text for PA Stipulation III: Tribal Consultation Protocols. The Service stated there was no sample language because they wanted to get Tribal Nation input. Tribal Nations did not voice input on the draft text for Stipulation III at the meeting.

January 2025

From January 14 to 16, 2025, the Service hosted hybrid Section 106 meetings at the Mid-Plains Community College North Platte Campus. January 14 consisted of a Tribal Nations only meeting; January 15 consisted of a meeting with Tribal Nations and Consulting Parties; and January 16 consisted of field visits to some of the historic properties associated with the proposed action.

The Service's objectives for the January 14 meeting included reviewing key points in Section 106 status and process, addressing concerns raised by numerous Tribal Nations, discussing Tribal Consultation Protocols, and discussing Tribal Participation Plans (TPPs). Discussion at this meeting focused on Tribal Nations' comments and concerns about the Service's approach to the Section 106 process (e.g., concerns with timing of the new PA development, concerns with the phased approach to identification of historic properties, and perspectives regarding what constitutes consultation); the status of TPPs and preparation for the Tribal survey effort; and on traditional ecological knowledge/indigenous knowledge. In addition to the Tribal Nations, the Service, and ICF, Robert Harper of Seventh Sovereign attended a portion of the meeting to discuss TPPs with the Tribal representatives.

The Service's primary objective for the January 15 meeting was to discuss the Preliminary Draft PA. Topics of discussion included the Draft Finding of Effect Report, the status and next steps of PA development, the timing of the Section 106 process, the Service's permit decision space, the status of TPPs and preparation for the Tribal survey effort, the potential for routing adjustments and micrositing as avoidance and minimization measures for potential effects on historic properties (including a presentation from NPPD on these topics), and concerns about effects on natural resources.

The January 16 field visits included stops at O'Fallon's Bluff via James Haugland's property, the Sandhill Ruts along Prairie Trace Road, and the Birdwood Creek archaeological site.

February 2025

On February 26, 2025, the Service hosted a two-part meeting with a portion open to Tribal Nations and Consulting Parties and a portion reserved for Tribal Nations. The Service's goals for the Consulting Party meeting were to explain the status of the PA, review input from the January hybrid meeting and comments received on the Preliminary Draft PA, explain the Service's approach and schedule for continuing PA development, and seek feedback from attendees on the Service's approach. Some attendees noted that they had already provided feedback on the new PA and stated that these concerns remain. Attendees also raised concerns about NPPD preparing to start work while the Service's project review is ongoing. The Service explained that it is working towards an August 2025 deadline for the NEPA process, which would be followed by execution of the new PA and issuance of the ITP. The Service noted that it is not unusual for some preparation work to happen in advance, and that the Service would notify its law enforcement team if it were suspected that unauthorized take of listed species had occurred. Discussion also included how the ongoing change in presidential administration may affect the project, with the Service explaining that as of this meeting, the project was proceeding as planned.

The Service's goals for the Tribal-Nations-only meeting were to discuss progress on the TPPs, address a request received from a Tribal representative for a meeting for the Tribal Nations to discuss the new PA without the Service present, and discuss any other topics raised by Tribal representatives. Discussion included the Draft TPP which the Service had recently received from

Seventh Sovereign; attendees requested review of this document and the Service noted that they would discuss this with NPPD. Attendees expressed concerns about Seventh Sovereign's approach to the project and noted that no communication had been received since the January 2025 in-person meetings hosted by the Service. The group also discussed how the new PA will approach avoidance, minimization, and mitigation of effects on historic properties.

June 2025

From June 3 to 5, 2025, the Service hosted a three-part meeting with a portion open to Tribal Nations and Consulting Parties and a portion reserved for Tribal Nations only.

On June 3, the Service's goals for the Consulting Party meeting were to gather input on the Draft PA. Attendees asked questions about the construction timeline, Final SEIS timeline, the overall Section 106 process, and the role of the Tribal Nations in the PA. NPPD explained that the TPPs were on hold. The group discussed the Finding of Effect (FOE) report and the Service reminded the group that it is not moving forward with the FOE report as currently drafted. One attendee expressed formal opposition to the use of the phased approach to Section 106 compliance. The Service explained that decisions on avoidance, minimization, and mitigation would follow identification in accordance with the PA, but in some cases, adverse effects may be unavoidable. The Service provided an overview of changes that were made to the Draft PA since the last version shared with Tribal Nations and Consulting Parties. Attendees expressed concern about publishing the Final SEIS without Tribal survey input. In response, the Service acknowledged the NEPA process timeline and noted how TCS survey concerns were being addressed. Clarifications and edits to specific language in the PA were discussed by the group.

On the second day of the Tribal Nations and Consulting Parties meeting (June 4), the Service hosted a morning and afternoon session. In the morning session, the Service summarized discussions from the previous day's meeting and explained that in light of recent executive orders and related secretarial orders, the Service reconsidered what is required to meet a reasonable and good faith effort under the National Historic Preservation Act (NHPA). The Service explained that they had made the decision to no longer require TCS surveys for the entire physical APE but, instead, would ask Tribal Nations to identify discrete areas within the APE for surveys. The group then broke to allow the Tribal Nations to meet separately from other attendees. The full group of Tribal Nations, Consulting Parties, and the Service came back together for the afternoon session. In the afternoon session, the Service clarified that NPPD has not applied for emergency project status; the Service's administrative position on TCS surveys changed based on recent executive and secretarial orders. The Service provided an overview of the phased process, and several representatives from Tribal Nations restated their opposition to a phased approach to identification and evaluation. Attendees expressed concern and confusion regarding identification and lack of consultation on segmenting the project for surveys. The group continued the discussion of the TPPs, TCS surveys, and clarification on language and phrasing included in the Draft PA.

On June 5, the Service held a meeting with Tribal Nations only. The Service's goals for the Tribal-Nations-only meeting were to discuss Tribal Nations' concerns with TPPs and the TCS surveys, gather input from the Tribal Nations on the Draft PA, and discuss any other topics raised by Tribal representatives. Attendees expressed frustration over the lack of agency direction on and resistance to Tribal surveys, dissatisfaction with Seventh Sovereign's lack of communication, and concern that the use of Seventh Sovereign as an intermediary was slowing down the process. The group discussed prioritization, budgeting, and identification logistics for the surveys and discussed

examples of successful TCS survey efforts from similar projects. Several attendees expressed concerns that signing the PA would feel like endorsing the project. The group discussed confusion around NPPD's definition of micrositing. The USFWS suggested that micrositing should be prioritized in the PA as an avoidance measure. Tribal representatives raised the need for clear plans in the case of discoveries of human remains, and expressed strong support for in situ preservation of human remains or culturally appropriate reinterment on federal lands as close to the original location as possible, if necessary. Attendees asked about the types of comments received on the SEIS and availability of comments to be viewed by the public. Tribal representatives reiterated opposition to the project due to concerns about the Ogallala aquifer and the lack of transparency from NPPD. Despite not supporting the PA, the Tribal Nations indicated they will continue to engage in the process to protect cultural resources.

August 2025

On August 14, 2025, the Service hosted a two-part meeting with a portion open to Tribal Nations and Consulting Parties and a portion reserved for Tribal Nations only. The Service's goals for the Consulting Party and Tribal Nations portion of the meeting were to provide a recap of the hybrid meetings held in June, review the NEPA and Section 106 schedules, provide an overview of key revisions to PA, and describe the updated approach to TCS Surveys. One attendee requested that the Service add them to the list of Tribal Nations opposed to the phased process to address historic properties. The Service summarized PA revisions made in the last version distributed to Tribal Nations and Consulting Parties and reviewed NPPD's additional comments on the PA. Attendees did not have any questions or comments. The group discussed the status of various parties' review of the PA. The Service reviewed next steps for the project.

The Service's goal for the Tribal Nations-only portion of the meeting was to provide an opportunity for Tribal representatives to discuss or raise any issues on the PA and the updated process for TCS surveys. The Service once confirmed that they received communication from certain attendees on areas of concern. One attendee asked several questions about the project timeline and energy emergency executive order. The Service clarified that there had not been a request for the project to be conducted under the energy emergency executive order. The Service clarified that the change in approach to TCS surveys was made in consideration of the intent of those EOs, which why the recent communication on TCS surveys referenced these EOs.

Attachment 1: Section 106 Correspondence

Letter from the Nebraska State Historic Preservation Officer (SHPO) to POWER Engineers in Response to the 2018 Survey Report, dated January 28, 2019

History NEBRASKA

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Ken Bedingfield, M.A., RPA
Senior Archaeologist
POWER Engineers, Inc.
3900 S. Wadsworth Blvd.
Lakewood, CO 80235

January 28, 2019

RE: HP# 1602-140-01; **Cultural Resource Survey Report# 19-0001**; Nebraska Public Power District (NPPD) R-Project - **2018 Cultural Resources Survey of the R-Project 345 kV Transmission Line**; Antelope, Blaine, Garfield, Holt, Lincoln, Logan, Loup, Rock, Thomas, Wheeler Counties

Dear Mr. Bedingfield:

Thank you for submitting the cultural resource survey report regarding the above referenced project for Nebraska State Historic Preservation Office (NeSHPO) review and comment under Section 106 of the National Historic Preservation Act of 1966, as amended in 2014 (Title 54 U.S.C. § 306108 [formerly 16 U.S.C. § 470f]), and its implementing regulations at 36 CFR § 800.

Nebraska Public Power District (NPPD) has proposed an undertaking to construct a 225-mile-long 345 kilovolt transmission line (R-Project) through areas that require an Incidental Take Permit for the federally endangered American burying beetle. The permit, requested from the U.S. Fish and Wildlife Service, requires consultation and coordination with the NeSHPO under Section 106 of the National Historic Preservation Act.

As part of Section 106 compliance, POWER Engineering Inc., on behalf of NPPD, conducted an intensive cultural resources inventory of an additional 645 acres along the 225-mile transmission line to identify historic properties that may be affected by the undertaking. The results of the 2018 survey identified 10 cultural resources (8 archeological sites and 2 isolated finds) that include: 3 historic artifact scatters (25LN94, 25LN105, RPCM-1), 1 prehistoric camp site (25LN1132), 2 farmstead sites (RCPM-2, RCPM 3), 1 former sod schoolhouse site (RCKB-12), 1 segment of Oregon-California National Historic Trail (RPKB-13), and 2 historic period isolated finds (RP-IF-KB5, RP-IF-KB6).

NO ADVERSE EFFECT

Based on the documentation provided, the NeSHPO *concurs* with the recommendations that sites **25LN94, 25LN105, RPCM-1, RPCM-2, RPCM-3** and isolated finds **RP-IF-KB5** and **RP-IFKB6** do not meet the evaluative criteria for listing on the Nation Register of Historic Places (NRHP), and the proposed undertaking will have *No Adverse Effect* on these resources.

NO ADVERSE EFFECT WITH CONDITIONS

25LN113 – *Birdwood Creek Prehistoric Site*
Based on the documentation provided, the NeSHPO *concurs* with the recommendation that the proposed undertaking will have *No Adverse Effect* on site 25LN113, and that the site does meet the evaluative criteria for potential listing on the NRHP under Criterion D.

Conditional Action
The NeSHPO also concurs with the recommendations presented in the report that: "the newly proposed structure location be subjected to archaeological testing and that monitoring of construction activity on the surrounding landform be conducted by a qualified archaeologist" (p.37). However, the NeSHPO requests that NPPD submit a report detailing the results of both the archeological survey of the new structure location and the construction monitoring activities.

It is requested that prior to initiating the survey of the new structure location, the NeSHPO receive a map of the new Cultural Survey Corridor for review. This map shall include: 1) the defined boundaries for sites 25LN94 and 25LN113 in relation to the new placement of the transmission line support structure, and 2) the location of any proposed maintenance/two-track roads, support structures, or additional ground disturbing work activities.

RPKB-12 - *Ballagh Schoolhouse*
Based on the documentation provided, the NeSHPO *concurs* with the recommendation that the proposed undertaking will have *No Adverse Effect* on site RPKB-12, and that the site does meet the evaluative criteria for potential listing on the NRHP under Criterion D.

Conditional Action
The NeSHPO also concurs that prior to construction the final location of the transmission line support structure will be subsurface tested for cultural resources.

In addition, it is required that no transmission line support structure, vehicle two-track, or any other ground disturbing activity take place within the established boundary of site RPKB-12 or within a buffer of 100-feet of said boundary. If ground disturbing actions are required within this boundary/buffer, NPPD will consult with the NeSHPO prior to construction to discuss avoidance, minimization, or mitigation strategies. Upon completion of this new testing, a report documenting the findings will be submitted to the NeSHPO for review.

ADVERSE EFFECT

RPKB-13 - *Oregon-California National Historic Trail*
Based on the documentation provided, the NeSHPO concurs with the recommendation that the proposed undertaking will have an *Adverse Effect* on the 14 segments of Oregon-California trial defined at site RPKB-13.

While the NeSHPO does agree that this site does meet the evaluative criteria for potential listing on the NRHP under Criterion A, it also argues that this site meets the requirement for listing under Criterion D as well. This is based on: 1) the likely presence of subsurface artifacts discarded from passing wagon trains, 2) the spatial integrity of discarded artifacts due to the absence of agriculture activities, and 3) the routine archeological study of how prehistoric and historic trails impact the lives of individuals, cultures, and societies who use them (e.g., Chaco Canyon [Friedman et al. 2017], Rome [Lawrence 1999], Appalachian Trail [Goldberg et al. 2008]).

Resolution of Adverse Effects

The NeSHPO concurs with the determination that the superposition of the R-Project transmission line on site RPKB-13 will create an adverse visual, auditory, and atmospheric effect that will be detrimental to the significance and integrity of the site's cultural resources. To alleviate these adverse effects, the NeSHPO makes the recommendation that this section of overlapping transmission line be relocated >5.0 miles east or west of its proposed location.

While the NeSHPO acknowledges the financial and scheduling inconvenience caused by this adjustment, it does not acknowledge the argument stated in this report that "avoidance is not currently considered an option" (p.72). Since NPPD has agreed to participate in the Section 106 process in good faith, avoidance should not be preemptively removed from Step 4 (Resolve Adverse Effect) of the Section 106 process due to perceived inconvenience.

With that said, the NeSHPO does appreciate the mitigation measures suggested in this report. It also looks forward to continuing the consultation process with NPPD and other appropriate parties (state, federal, public) to resolve the issues of adverse effect on these and any future cultural resources.

Be advised that this determination does not necessarily reflect the opinion of Native American Tribes that may have an interest in the area or resources, nor does it to pertain to Traditional Cultural Properties, if they exist in the area.

Should you have any questions, please do not hesitate to call this office at 402-471-2609 or by email at John.Rissetto@nebraska.gov.

Sincerely,

John Rissetto, Ph.D.
Preservation Archeologist

Jill Dolberg
Deputy SHPO

References Cited

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Letter from SHPO to POWER Engineers in Response to the 2019 Survey Report, dated January 9, 2020

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Ken Bedingfield, M.A., RPA
Senior Archaeologist
POWER Engineers, Inc.
3900 S. Wadsworth Blvd.
Lakewood, CO 80235

January 9, 2020

RE: HP# 1602-140-19; Survey Report# 20-0003; *NEBRASKA PUBLIC POWER DISTRICT, R-Project 2019 Cultural Resources Survey of the R-Project 345 kV* Transmission Line: Nebraska.

Dear Mr. Bedingfield:

Thank you for submitting the cultural resource survey report for the above referenced project for Nebraska State Historic Preservation Office (NeSHPO) review and comment under Section 106 of the National Historic Preservation Act of 1966, as amended in 2014 (Title 54 U.S.C. § 306108 [formerly 16 U.S.C. § 470f]), and its implementing regulations at 36 CFR§800.

This report, submitted by Power Engineers on behalf of Nebraska Public Power District, documents the results of a cultural resources survey that took place during 2019 and covered 230 acres of the remaining unevaluated acres associated with the R-Project transmission line project right-of-way.

This report thoroughly documents that: **1)** no new prehistoric or historic properties were identified in during the 2019 survey in the area of potential effect (APE), **2)** two previously documented resources that were revisited for the subsurface testing (25LN94, 25LN113) should be combined into a single multi-component site, **3)** site 25LN113 received 12 additional shovel tests located in and near the proposed lattice tower footings (all were negative for cultural materials), and **4)** based on the presence of intact, subsurface prehistoric cultural horizons and displaced historic artifacts, 25LN113 should maintain its eligibility recommendation for the National Register of Historic Places under Criterion D.

NeSHPO RECOMMENDATIONS

Based on the information provided, the NeSHPO concurs with the recommendations that:

1) that sites 25LN94 and 25LN113 should be unified as a single, multi-component (historic/prehistoric) site recorded as 25LN113
2) the boundary of 25LN113 can exclude the disturbance area associated with proposed lattice tower
3) that site 25LN113 should maintain its eligibility recommendation for the National Register of Historic Places under Criterion D, and
4) that the boundary of site 25LN113 will be clearly fenced during construction activities for the proposed lattice tower

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The NeSHPO looks forward to reviewing and commenting on the results of the remaining cultural resources survey reports that cover the final portions of currently unsurveyed APE.

Be advised that this opinion does not necessarily reflect that of any Native American Tribes that might have an interest in the area, nor does it to pertain to Traditional Cultural Properties, if they exist in the area.

If required, please submit this letter to the project's lead federal agency to fulfill the statutory obligation of Section 106 consultation with the Nebraska State Historic Preservation Office. Should you have any questions regarding this determination, please contact this office by phone at 402-471-2609 or by email at John.Rissetto@Nebraska.Gov.

Sincerely,

John Rissetto, Ph.D.
Preservation Archeologist

Letter from the Rosebud Sioux Tribe to the Secretary of the Department of the Interior Concerning the NEPA Process, NHPA Consultation, and the ITP, dated September 17, 2021

Tribal Historic Preservation
Cultural Resource Management Office
P.O. Box 809
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Telephone: (605) 747-4255
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Protecting the Land, Cultural, and Tradition for Heritage and for future Generation

Ione Quigley
Officer

Kathy Arcoren
Admin. Assistant

September 17, 2021

Deb Haaland
U.S. Secretary of the Interior
U.S. Department of the Interior
1849 C Street N.W.
Washington DC 20240

Dear Ms. Haaland

It was recently brought to our attention that the Nebraska Public Power District (NPPD) was planning to construct a new transmission line and substation within the historic territory of the Sicangu Lakota as a first step in developing wind farms across the Nebraska Sandhills. This is referred to as the R-Project Transmission Line. The location of this proposed project falls within the 1851 Fort Laramie Treaty area and within Article 11 of the 1868 Treaty area, within the area specifically inhabited by the Sicangu Lakota, now of the Rosebud Sioux Reservation. Multiple historic documents (Nicollet 1839, Warren 1855 &1856, Bettelyoun and Waggoner 1999), Tribal Winter Counts (Mallery 1893, Cohen 1939), and Tribal oral histories describe the Nebraska Sandhills as the hunting grounds of the Sicangu (aka Brule) Lakota and many cultural sites significant to the Sicangu Lakota are located in this area. Winter counts describe Sicangu battles, catching wild horses and hunting in the Sandhills. The Lakota language has specific names for certain areas of this country and for important cultural plants unique to the Sandhills. The proposed project will have an adverse effect on this cultural landscape and this was not taken into consideration in the review process.

An Environmental Impact Statement (EIS), titled *Final Environmental Impact Statement on Issuance of an Incidental Take Permit and Implementation of a Habitat Conservation Plan for the R-Project Transmission Line,* was completed without proper consultation with the Rosebud Sioux Tribe. Not only was the Rosebud Sioux Tribe not properly consulted, but we were not even included in the historic overview in the EIS. Our long history of use and occupation of the Sandhills was not even acknowledged. These omissions make it glaringly obvious that the writers of this document conducted sub-standard research. This EIS document is woefully inadequate in many ways and was undertaken in a way that neither follows the purpose nor the spirit of the National Historic Preservation Act or the National Environmental Policy Act (NEPA).

The purpose of an EIS under NEPA is to evaluate the effects a proposed project may have on the environment and historic sites and to determine if the location selected is suitable for the project. In this EIS, they describe the unique and fragile nature of the Nebraska Sandhills, how they are the largest area of native grass-stabilized dunes in the world and one of the largest intact native grasslands in North America and how they are prone to extreme erosion when the ground is disturbed. They describe how the project is located within the Central Flyway of cranes and other migratory birds, that make use of the unique interdunal lakes and wetlands in the Sandhills, and how these as well as eagles, hawks and other raptors are killed by these large transmission lines and wind turbines. They describe how sections of historic trails listed on the National Register of Historic Places will be negatively impacted by the proposed project. Then they declare that they are going to proceed with the proposed project anyway. They say that it is too late make changes to the proposed project locations to address these important environmental and cultural site issues. Making changes, based on the findings of an EIS, is the specific purpose of conducting an environmental review.

The National Historic Preservation Act (NHPA) requires the Federal Agency to take into account the effect of the proposed undertaking on any historic property including Traditional Cultural Properties. Traditional Cultural Properties (TCP) can only be identified under consultation with Tribes. The EIS states that a letter was sent to the President of the Rosebud Sioux Tribe in 2014 informing him that the Fish and Wildlife Service was planning to issue an incidental take permit to relocate an endangered species of burying beetle that will be affected by a transmission line project. This was very deceptive communication centering on the beetle take permit rather than the actual massive transmission line and wind farm project. No correspondence was ever sent to the Rosebud Sioux Tribe Historic Preservation Office (RST THPO) which was established in 2004. The cultural site survey methodology undertaken in this project, including tribal consultation, is completely inadequate and does not meet the requirements under the NHPA. Only 39% of the project area was surveyed and no TCP surveys were completed.

The EIS describes how the Elfgren archeological site (25BL110), representing over 10,000 years of repeated occupation with artifacts recovered that include Folsom, Archaic, Late Prehistoric, and Historic components, were exposed in a blowout just 550 feet away from the area of potential effect. They determined that because no artifacts were seen on the ground surface by their survey crew, the project would have no effect on pre-contact cultural resources in this area. Standard pedestrian surface surveys are not an appropriate methodology in this dynamic Sandhills landscape where the Kelso Site dated to 1160 years before present (BP) was buried under nine feet of sand, the Dismal River Ranch Site dated to 3000-4000 years BP was buried under 144 feet of sand, and the Warner Bridge Site dated to 3600 years BP was buried under three feet of sand. Pedestrian surface surveys are also not an adequate method to evaluate the impact this project may have on archeological resources considering that the construction of the transmission lines will involve digging down 25 to 45 feet for each pole and sites are known in the area to be deeply buried.

The Cultural Resource Survey conducted by POWER ENGINEERS, of Lakewood Colorado, in 2015, does not meet the NHPA requirements. The Rosebud THPO was not consulted and Traditional Cultural Properties were not even addressed in this cultural resource survey. The Rosebud Sioux Tribe Historic Preservation Office must be included in the evaluation of cultural and historic resources in this area and a TCP survey must be conducted to address areas of cultural concern to the Sicangu Lakota.

The Ogallala Aquifer underlies the entire project area and the effects of constructing a pole every 1,350 feet, which involves digging down into the sand 25 to 45 feet for each pole, and pouring concrete into each hole to support each massive tubular steel monopole, were not adequately considered in the EIS. To the Rosebud Sioux Tribe, water is a Traditional Cultural Property. Water is used in ceremony, water is medicine, water is life.

The Rosebud Sioux Tribe is requesting that the Incidental Take Permit, issued by the U.S. Fish and Wildlife Service, be revoked until the NEPA and NHPA process is completed properly.

Thank You,

Ione Quigley
Tribal Historic Preservation Officer

Jennifer Galindo
Archaeologist

Ben Young
Section 106 Compliance Officer

Tanner Haukaas
Recording Clerk

Peter Gibbs
Archivist/ Researcher

Lea Rattling Leaf
Archivist/Research Assistant

Letter from the Service to the Rosebud Sioux Tribe in Response to its September 17, 2021 Letter, dated December 13, 2021

United States Department of the Interior

FISH AND WILDLIFE SERVICE
134 Union Blvd
Lakewood, Colorado 80228

In Reply Refer to:
FWS/IR05/IR07

December 13, 2021

President Rodney Bordeaux
Rosebud Sioux Tribe
P.O. Box 430
11th Legion Avenue
Rosebud, South Dakota 57570

Dear President Bordeaux,

I'm writing in response to the letter dated September 17, 2021 to The U.S. Secretary of Interior, Deb Haaland from Ione Quigley, Tribal Historic Preservation Office, regarding the incidental take permit (ITP) issued for the R-Project Transmission Line (attached). On June 17, 2020, the Court issued a ruling (R-Project in Nebraska – Ruling in Case 1:19- cv -01945-WJM Oregon-California Trails Association et al v. Walsh et al) that vacated the ITP. The Nebraska Public Power District (NPPD) has asked us to begin coordination with them on next steps associated with developing a new ITP application and Habitat Conservation Plan for the proposed project. The U.S. Fish and Wildlife Service's (FWS) review of an ITP application requires the National Environmental Policy Act (NEPA) compliance, and Government-to-Government consultation. The FWS recognizes the Rosebud Sioux Tribe's status as a sovereign nation, and will work diligently to ensure timely communication of opportunities for the Rosebud Sioux Tribe's engagement in the process. Once we have a better understanding about NPPD's proposed path forward, we will reach out to you to better understand and incorporate tribal cultural and historic resource information into any future NEPA documents.

The FWS recognizes that the Rosebud Sioux Tribe has a deep spiritual, historical, and cultural connection to the project area and we would greatly appreciate any information and input that you would be willing to provide. We look forward to working with you and the Tribal Council on this project. If you need further information or would like to designate a point of contact for this project, please contact Mark Porath, the Nebraska Project Leader at mark_porath@fws.gov or (308) 216-2077, or Steve Small, the Assistant Regional Director for Ecological Services, at (303) 236-4210. In addition, you may contact our Regional Native American liaison, Melissa Castiano at (303) 236-9898 or Melissa_Castiano@fws.gov to facilitate input from you or your Tribal agencies.

Sincerely,

MATTHEW HOGAN Digitally signed by MATTHEW HOGAN
Date: 2021.12.13 13:36:37 -07'00'

Matthew Hogan
Acting Regional Director

INTERIOR REGION 5
MISSOURI BASIN
KANSAS, MONTANA*, NEBRASKA, NORTH DAKOTA, SOUTH DAKOTA
*PARTIAL

INTERIOR REGION 7
UPPER COLORADO RIVER BASIN
COLORADO, NEW MEXICO, UTAH, WYOMING

Letter from the Advisory Council on Historic Preservation (ACHP) to the Service, dated October 19, 2022

October 19, 2022

Mark Porath
Nebraska Project Leader/Field Supervisor
Ecological Services, Mountain-Prairie Region
United States Fish and Wildlife Service
9325 S. Alda Rd. STE B
Wood River, NE 68883

Ref: *R-Project Transmission Line*
Multiple Counties, Nebraska
ACHP Project Number: 018830

Dear Mr. Porath:

On August 29, 2022, the Advisory Council on Historic Preservation (ACHP) received your notification for the proposed development of a Supplemental Environmental Impact Statement for the referenced undertaking. Our comments were requested regarding the National Environmental Policy Act (NEPA) review. We have no comments pursuant to NEPA at this time.

In order to ensure compliance with Section 106 of the National Historic Preservation Act, the ACHP encourages the U.S. Fish and Wildlife Service (USFWS) to consider the Section 106 process at its earliest convenience. In June 2019, the USFWS, Nebraska State Historic Preservation Officer, Nebraska Public Power District, and the ACHP executed a Programmatic Agreement (PA) for the R-Project Transmission Line. In June 2020, the U.S. District Court for the District of Colorado issued a decision challenging the approval of the Incidental Take Permit for the referenced undertaking. In its ruling, the court vacated and remanded the permit back to USFWS. Based on this notification we understand how you are addressing the reevaluation under NEPA, however it is unclear how you intend to address Section 106. We request USFWS provide us with an update on how the undertaking has changed, if applicable or appropriate, and how you plan to address the executed PA with the new Section 106 consultation.

Should you have any questions or require additional assistance, please contact Ms. Alexis Clark at (202) 517-0208 or by e-mail at aclark@achp.gov and reference the ACHP Project Number above.

Sincerely,

Christopher Koeppel
Assistant Director
Office of Federal Agency Programs
Federal Property Management Section

Letter from the Service to the ACHP in Response to the Letter Received on October 19, 2022, dated December 22, 2022

United States Department of the Interior

FISH AND WILDLIFE SERVICE
9325 S. Alda Rd. STE B
Wood River, Nebraska 68883

In Reply Refer to:
R-Project Transmission Line (ACHP PN: 018830)

December 22, 2022

Mr. Christopher Koeppel
Assistant Director, Office of Federal Agency Programs
Advisory Council on Historic Preservation
401 F Street Northwest, Suite 308
Washington, DC 20001

Dear Mr. Koeppel,

This responds to your October 19, 2022, request for additional information from the U.S. Fish and Wildlife Service (Service) pertaining to Section 106 of the National Historic Preservation Act (NHPA) for the R-Project Transmission Line in Nebraska (known as the R-Project). Specifically, your request for information on the relationship between the Programmatic Agreement (PA) executed in 2019 and the current Section 106 consultation, resulting from the U.S. District Court for the District of Colorado remand of the incidental take permit (permit) for the R-Project in June 2020.

The R-Project proponent, Nebraska Public Power District, intends to resubmit a permit application. For the Service's permit decision, the Service needs to address the shortcomings addressed by the U.S. District Court. The Service does not intend to restart activities for the existing PA; rather, the Service intends to revisit the Section 106 process at its initial steps which include: 1) working through any necessary changes to the Area of Potential Effect; 2) considering additional historic properties which could include revisiting the effects analysis; and 3) sharing agency determinations with consulting parties. We plan to discuss this approach with the State Historic Preservation Officer and the Advisory Council on Historic Preservation in a January 17, 2023, meeting with agency representatives.

We look forward to meeting with agency representatives on January 17, 2023, in partial fulfillment of our responsibilities under NHPA. Should you have any questions about this project or have additional questions, please contact Jeff Runge by phone at 308-216-0384 or by e-mail jeff_runge@fws.gov.

Sincerely,

MARK PORATH Digitally signed by MARK PORATH Date: 2022.12.22 08:48:59 -06'00'

Mark Porath
Nebraska Project Leader/Field Supervisor
Ecological Services, Mountain-Prairie Region

cc: Alexis Clark; Historic Preservation Specialist; Advisory Council on Historic Preservation

Letters from the Service to ACHP, SHPO, Tribal Nations, and Consulting Parties Initiating the Section 106 Process, dated July 10, 2023

Sample Letter 1: Letter Sent to Tribal Nations

Sample Letter #1

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
9325 South Alda Road
Wood River, Nebraska 68883

IN REPLY REFER TO:
R-Project
Section 106

July 10, 2023

Honorable Janet Alkire, Chairperson
Standing Rock Sioux Tribe of North and South Dakota
PO Box D
Fort Yates, ND 58535

Subject: Initiation of the Section 106 process; Request for input on the Area of Potential Effects (APE); identification of historic properties and Traditional Cultural Properties in the APE; invitation to be a consulting party.

Dear Chairperson Alkire,

The Nebraska Public Power District (NPPD) is proposing to construct, maintain, and operate an approximately 226-mile-long, 345-kilovolt transmission line that crosses Blaine, Garfield, Holt, Lincoln, Logan, Loup, Thomas, and Wheeler counties, Nebraska (undertaking or R-Project). NPPD is resubmitting an incidental take permit (ITP) application to the U.S. Fish and Wildlife Service (the Service) for the take of the American burying beetle that would result from the R-Project. The issuance of the ITP by the Service is the federal involvement that triggers compliance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), 54 U.S.C. § 306108, and its implementing regulations, 36 CFR Part 800. As such, the R-Project is an undertaking as defined in 36 CFR 800.16(y), and the Service is the lead agency for compliance with Section 106 of the NHPA.

The Service has an open invitation to your tribe to consult with us on a government-to-government basis and invited your tribe to participate as a cooperating agency or to submit comments under the National Environmental Policy Act (NEPA). In addition to our open invitation, the Service is initiating Section 106 consultation and inviting parties to review and provide input on the revised delineation of the R-Project Area of Potential Effects (APE) pursuant to 36 CFR 800.4. This letter includes a summary of the background on this project, a project description, and a description of the proposed APE. Please see the attachments to this letter, which include Enclosure 1, a summary of the R-Project history; Enclosure 2, a location and vicinity map; and Enclosure 3, the proposed APE. In addition to reviewing the APE, the Service is inviting parties to provide input on the identification of historic properties and Traditional Cultural Properties in the APE.

Background

A general description of the R-project's history is included as Enclosure 1 of this letter and summarized here:

> Section 106 consultation for the R-Project was initiated in 2016 and resulted in the execution of the *Programmatic Agreement among the U.S. Fish and Wildlife Service – Mountain-Prairie Region, the Nebraska State Historic Preservation Officer, Nebraska Public Power District, and the Advisory Council on Historic Preservation regarding the Construction, Maintenance, and Operation of the R-Project 345-Kilovolt Transmission Line, Blaine, Garfield, Holt, Lincoln, Logan, Loup, Thomas, and Wheeler Counties, Nebraska*, on April 10, 2019.
>
> The Service also analyzed potential environmental impacts associated with the issuance of an ITP for the R-Project in a final environmental impact statement (FEIS) published in 2018 in accordance with the National Environmental Policy Act of 1969 (NEPA). Following the Service's issuance of an ITP for the R-Project in 2019, a lawsuit was filed to challenge the Service's decision. In June 2020, the U.S. District Court for the District of Colorado determined the Service made decision-making errors and vacated the ITP that was issued to NPPD (Civil Action No. 19-cv-1945-WJM).

NPPD is currently working with the Service to address the court ruling and resubmit an ITP application. As the action of issuing an ITP to NPPD is considered an undertaking (36 CFR 800. 16[y]), the Service is reinitiating the Section 106 process. As the Service discussed with NPPD, History Nebraska, and the Advisory Council on Historic Preservation on January 17, 2023, the goal of this current Section 106 process is to amend the existing Programmatic Agreement. Additionally, the Service must comply with NEPA for the potential action of issuing an ITP to NPPD. Therefore, the Service is developing a supplemental environmental impact statement (SEIS), which will address issues identified in the court ruling. The SEIS will ensure a thorough evaluation of the potential effects of the Service's proposed action on the human environment. As part of the SEIS, the Service is re-analyzing potential effects to historic properties and addressing alternatives to avoid, minimize, or mitigate potential adverse effects to historic properties.

NPPD's current purpose and need for the R-Project is generally the same as described in the 2018 FEIS:

- provide for significant reliability benefits to the existing western Nebraska area transmission system by increasing the west-east power transfer capability across the NPPD system;
- reduce significant congestion issues by providing an additional outlet path from Gerald Gentleman Station (GGS) Substation near Sutherland, Nebraska, and;
- provide transmission capacity to renewable energy resources (e.g., wind and solar projects) in an area of Nebraska with renewable energy resources.

The proposed route of the 226-mile-long R-Project consists of a 101-mile-long north/south segment which begins in Lincoln County at the GGS. From this station, the route extends north

following U.S. Highway 83 through Logan County to Thomas County where it connects to the Thedford Substation Expansion near Thedford, Nebraska. The route then turns east and extends 125 miles though Blaine, Loup, and Garfield counties, where it terminates at the newly constructed Holt County Substation in Holt County, Nebraska. See Enclosure 2 for a location and vicinity map of the R-project.

Area of Potential Effects

Based on the current Undertaking, the Service has redefined the APE and is requesting your review and input (Enclosure 3). The APE is the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties (36 CFR 800.16 (d)).

The Service defined the APE by taking into account the application of the terms "direct" and "indirect" effects under Section 106, which have changed since the 2019 programmatic agreement for the R-Project due to a court decision in 2019 (National Parks Conservation Assoc. v. Semonite, No. 18-5179 (D.C. Cir. 2019)). Direct effects to historic properties include physical as well as visual, audible, and atmospheric effects that would diminish the integrity of those historic properties. The Service has developed an APE for direct effects, which has been broken down into 3 categories: physical, audible, and visual:

- **APE for Physical Effects:** The APE for direct, physical effects is defined as 150 feet on either side of the proposed R-Project centerline, 50 feet on either side of access routes, and 50 feet around the perimeter of work areas (e.g., pulling and tensioning sites, fly yards/assembly areas, and construction yard/staging areas). Access routes and work areas are not yet defined for the Thedford to Holt County segment of the R-Project centerline. To accommodate this uncertainty, the APE for direct, physical effects in these areas extends 0.5 mile on either side of the proposed R-Project centerline.
- **APE for Audible Effects:** The APE for direct, audible effects is defined as 0.5 mile around the proposed R-Project centerline, access routes, and work areas.
- **APE for Visual Effects:** The APE for direct, visual effects is defined as 10 miles on either side of the proposed R-Project centerline.

Indirect effects to historic properties are those that are caused by an undertaking that may occur later in time or farther removed in distance but are reasonably foreseeable. At this time, the Service has not identified any indirect effects that would be caused by this undertaking; therefore, the APE defined in this letter does not address indirect effects. The Service is aware of potential reasonably foreseeable renewable energy projects that are related to the R-Project; however, these projects are outside of the discretion of the Service.

Conclusion

Your response to this letter, acknowledging your interest in participating in this undertaking as a Section 106 consulting party, providing input on the APE, and in identifying any historic properties, including Traditional Cultural Properties, that may exist within the APE is greatly appreciated. Any information you provide helps ensure the Service will consider all properties in the Section 106 and environmental review process.

All parties involved in the Section 106 process will have a reasonable opportunity to discuss their interest regarding historic properties and provide information regarding effects to historic properties throughout this process. The Service will be hosting meetings to discuss the identification of and effects to historic properties, with meeting times and types/places to be determined. In addition, the Service will be consulting on an amendment to the PA.

Please provide a response within 30 days of receipt of this letter. If you have any questions or need further information on the project, please contact Jeff Runge at (308)382-6468 or by e-mail at jeff_runge@fws.gov.

Sincerely,



Matthew Rabbe
Acting Nebraska Project Leader/Field Supervisor
Ecological Services, Mountain-Prairie Region

Enclosure 1: R-Project Background Summary
Enclosure 2: R-Project Route Location and Vicinity Map
Enclosure 3: R-Project Route APE

Enclosure 1 – R-Project Background Summary

October 2014

- The Service issues a Notice of Intent (NOI) in the Federal Register to inform the public of its intent to prepare an EIS for the R-Project HCP

September 2015

- The Service begins informal communication with Nebraska SHPO regarding Section 106 consultation for the NPPD R-Project HCP EIS

June 2016

- The Service formally initiates Section 106 consultation for the NPPD R-Project HCP EIS

April 2019

- The *Programmatic Agreement among the U.S. Fish and Wildlife Service – Mountain-Prairie Region, the Nebraska State Historic Preservation Officer, Nebraska Public Power District, and the Advisory Council on Historic Preservation regarding the Construction, Maintenance, and Operation of the R-Project 345-Kilovolt Transmission Line, Blaine, Garfield, Holt, Lincoln, Logan, Loup, Thomas, and Wheeler Counties, Nebraska*, is executed on April 10, 2019.

June 2019

- The Service issues ITP #TE72710C-0 for the R-Project and associated substations to NPPD.

July 2019

- A lawsuit was filed to challenge the Service's decision to issue an incidental take permit for American burying beetle to the NPPD for their proposed project to construct a 225-mile electrical transmission line through Nebraska, known as the "R-Project." More details about the project can be found at https://rproject.nppd.com/project-status.

June 2020

- The U.S. District Court for the District of Colorado issued a decision. You can find the decision under Civil Action No. 19-cv-1945-WJM, at the following link: https://casetext.com/case/oregon-california-trails-assn-v-walsh.
- The court determined that the Service made some errors in their decision-making process, including:
    - "…inadequately considered the effects of the R-Project on the O'Fallon's Bluff Segment of the Oregon and California Trail;
    - …unlawfully excluded potential wind turbine development in Antelope County, Nebraska from its analysis; and
    - …one portion of a 'programmatic agreement' entered into to address NHPA matters is arbitrary and capricious."
- As a result of this decision, the court set aside the incidental take permit that the Service issued to NPPD. This means the permit was vacated.
- As part of the court order, a supplemental environmental impact statement (SEIS) is being developed to address issues identified in the court ruling. The SEIS will ensure a

thorough evaluation of the effect of the Service's proposed action on the human environment.

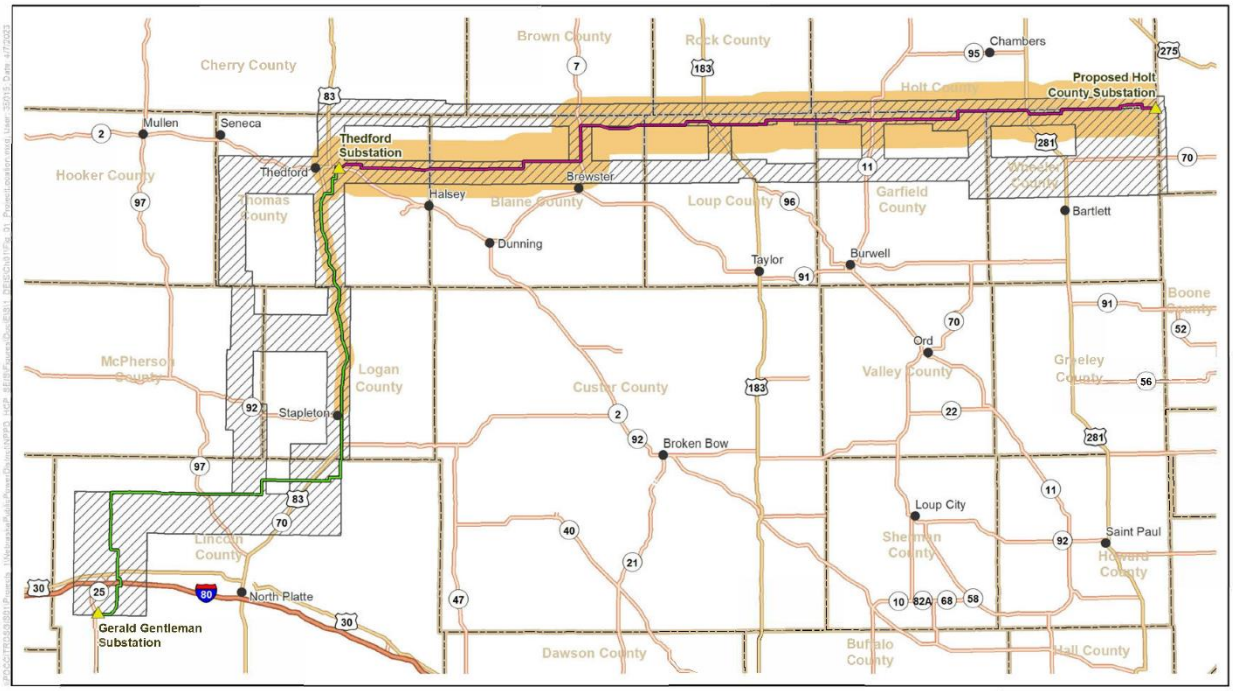
June 2020 – Spring 2022

- The Service conducted outreach to previously identified consulting parties as part of the Section 106 process. The Service notified consulting parties of the court's decision and noted that additional communication would follow after establishing a path forward.

Fall 2022 – Present

- November 18, 2022: The Service published a Notice of Intent (NOI) to prepare an SEIS for the R-Project.
- December 8, 2022: The Service held two virtual public scoping meetings.
- The Service reviewed and considered all scoping comments received and has begun preparing the SEIS, working with cooperating agencies and NPPD to resolve potential impacts from the project as well as the issues identified in the 2020 court decision through the SEIS process.
    - The SEIS will describe potential impacts on cultural resources;
    - The SEIS will consider a range of reasonable alternatives; and
    - The SEIS will include a record of consulting party correspondence and may address and/or analyze any comments from consulting parties as part of the Section 106 process.
- The project team is reaching out to potential consulting parties to solicit input from members of the public, tribes, and groups with historic/cultural interests. Although the Service is the lead Federal Agency for this process, you may be contacted by staff from ICF, an environmental planning and consulting firm, throughout this process.
- The Service is planning to hold virtual and/or in-person meetings with interested parties to discuss cultural resources in the APE, as well as potential effects and mitigation measures.

Enclosure 2 – R-Project Route Location/Vicinity Map



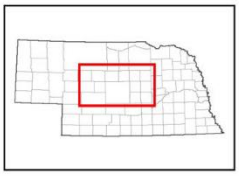
R-Project Centerlines
- Gerald Gentleman to Thedford
- Thedford to Holt County
- Substation
- Project Corridor
- Permit Area
- Interstate
- U.S.
- State
- County Boundary

Source: NPPD 2023.

N

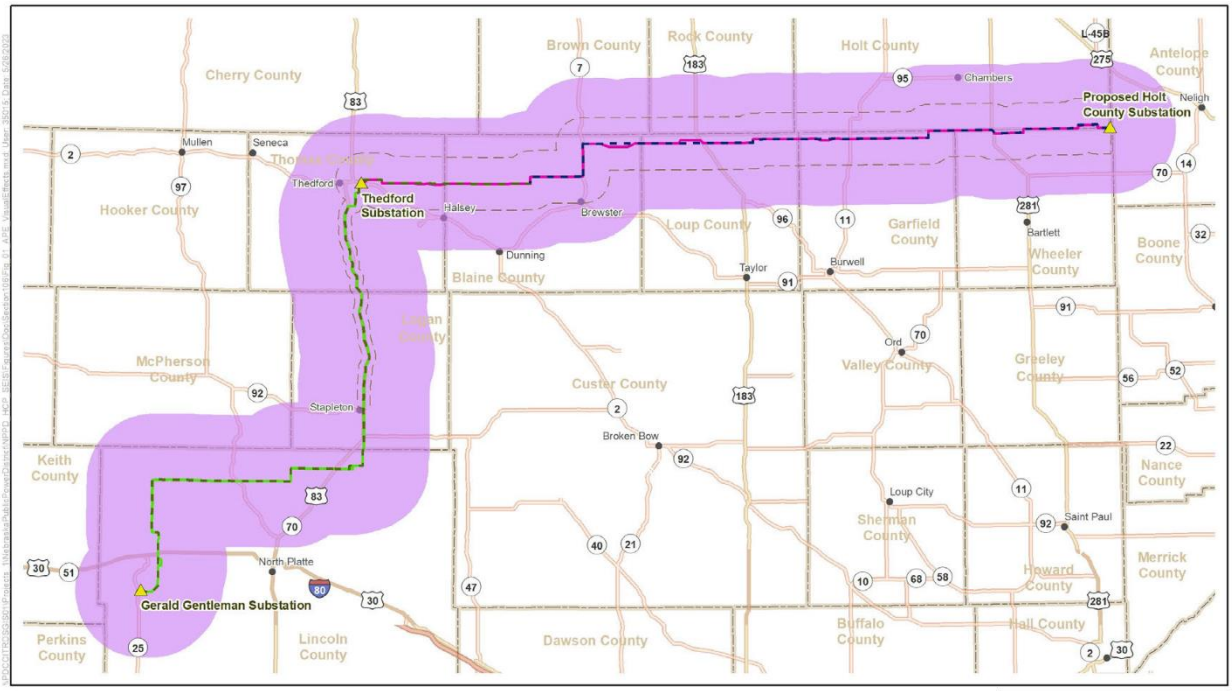
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R-Project Route Location and Vicinity Map

Enclosure 3 – R-Project Route APE



R-Project Centerline (2023)
- Gerald Gentleman to Thedford
- Thedford to Holt County

R-Project Centerline (2018)
- Gerald Gentleman to Thedford
- Thedford to Holt County

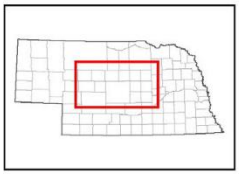
- Substation
- Permit Area
- APE for Visual Effects
- Interstate
- U.S.
- State
- County Boundary

Source: NPPD 2023.

N

0 10 20 Miles

1:1,200,000



APE for Visual Effects

Sample Letter 2: Letter Sent to Nebraska State Historic Preservation Officer

Sample Letter #2

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
9325 South Alda Road
Wood River, Nebraska 68883

IN REPLY REFER TO:
R-Project
Section 106

July 10, 2023

Betty Gillespie
Deputy State Historic Preservation Officer
Historic Nebraska
1500 R Street
Lincoln, NE 68508

Subject: Initiation of the Section 106 process; Request for concurrence on the Area of Potential Effects

Dear Ms. Gillespie,

The Nebraska Public Power District (NPPD) is proposing to construct, maintain, and operate an approximately 226-mile-long, 345-kilovolt transmission line that crosses Blaine, Garfield, Holt, Lincoln, Logan, Loup, Thomas, and Wheeler counties, Nebraska (undertaking or R-Project). NPPD is resubmitting an incidental take permit (ITP) application to the U.S. Fish and Wildlife Service (the Service) for the take of the American burying beetle that would result from the R-Project. The issuance of the ITP by the Service is the federal involvement that triggers compliance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), 54 U.S.C. § 306108, and its implementing regulations, 36 CFR Part 800. As such, the R-Project is an undertaking as defined in 36 CFR 800.16(y), and the Service is the lead agency for compliance with Section 106 of the NHPA.

The Service is initiating Section 106 consultation with History Nebraska and requests that your office provide review and concurrence on the revised delineation of the R-Project Area of Potential Effects (APE) pursuant to 36 CFR 800.4. This letter includes a summary of the background on this project, a project description, and a description of the proposed APE. Please see the attachments to this letter, which include Enclosure 1, a summary of the R-Project history; Enclosure 2, a location and vicinity map; and Enclosure 3, the proposed APE. In addition to History Nebraska, the Service is inviting parties to provide input on the identification of historic properties and Traditional Cultural Properties in the APE.

Background

A general description of the R-project's history is included as Enclosure 1 of this letter and summarized here:

Section 106 consultation for the R-Project was initiated in 2016 and resulted in the execution of the *Programmatic Agreement among the U.S. Fish and Wildlife Service – Mountain-Prairie Region, the Nebraska State Historic Preservation Officer, Nebraska Public Power District, and the Advisory Council on Historic Preservation regarding the Construction, Maintenance, and Operation of the R-Project 345-Kilovolt Transmission Line, Blaine, Garfield, Holt, Lincoln, Logan, Loup, Thomas, and Wheeler Counties, Nebraska*, on April 10, 2019.

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NPPD's current purpose and need for the R-Project is generally the same as described in the 2018 FEIS:

- Provide for significant reliability benefits to the existing western Nebraska area transmission system by increasing the west-east power transfer capability across the NPPD system;
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Area of Potential Effects
Based on the current Undertaking, the Service has redefined the APE and is requesting your concurrence (Enclosure 3).

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Indirect effects to historic properties are those that are caused by an undertaking that may occur later in time or farther removed in distance but are reasonably foreseeable. At this time, the Service has not identified any indirect effects that would be caused by this undertaking; therefore, the APE defined in this letter does not address indirect effects. The Service is aware of potential reasonably foreseeable renewable energy projects that are related to the R-Project; however, these projects are outside of the discretion of the Service. The Service requests further discussion on these projects through the Section 106 consultation.

Conclusion

Pursuant to 36 CFR § 800.4(a), the Service is seeking your concurrence on the APE determination. All parties involved in the Section 106 process will have a reasonable opportunity to discuss their interest regarding historic properties and provide information regarding effects to historic properties throughout this process. The Service will be hosting meetings to discuss the identification of and effects to historic properties, with meeting times and types/places to be determined. In addition, the Service will be consulting on an amendment to the PA.

Please provide a response within 30 days of receipt of this letter. If you have any questions or need further information on the project, please contact Jeff Runge at (308)382-6468 or by e-mail at jeff_runge@fws.gov.

Sincerely,

Matthew Rabbe
Acting Nebraska Project Leader/Field Supervisor
Ecological Services, Mountain-Prairie Region

Enclosure 1: R-Project Background Summary
Enclosure 2: R-Project Route Location and Vicinity Map
Enclosure 3: R-Project Route APE

Enclosure 1 – R-Project Background Summary

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thorough evaluation of the effect of the Service's proposed action on the human environment.

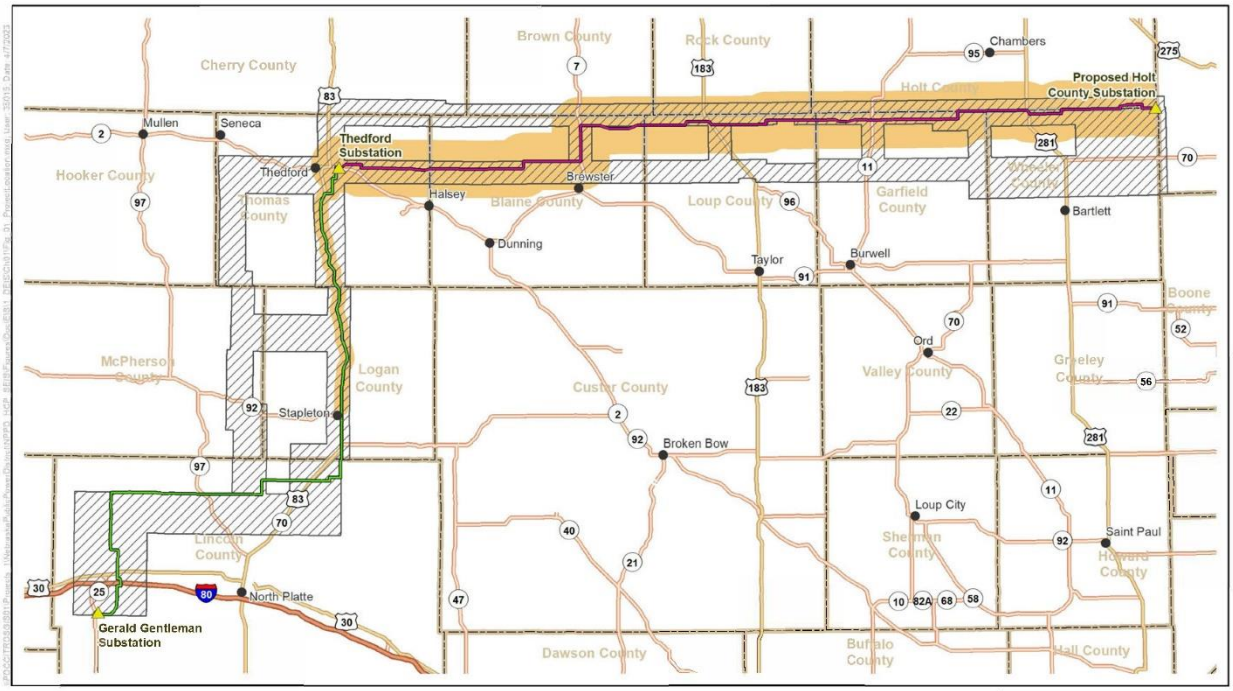
June 2020 – Spring 2022

- The Service conducted outreach to previously identified consulting parties as part of the Section 106 process. The Service notified consulting parties of the court's decision and noted that additional communication would follow after establishing a path forward.

Fall 2022 – Present

- November 18, 2022: The Service published a Notice of Intent (NOI) to prepare an SEIS for the R-Project.
- December 8, 2022: The Service held two virtual public scoping meetings.
- The Service reviewed and considered all scoping comments received and has begun preparing the SEIS, working with cooperating agencies and NPPD to resolve potential impacts from the project as well as the issues identified in the 2020 court decision through the SEIS process.
    - The SEIS will describe potential impacts on cultural resources;
    - The SEIS will consider a range of reasonable alternatives; and
    - The SEIS will include a record of consulting party correspondence and may address and/or analyze any comments from consulting parties as part of the Section 106 process.
- The project team is reaching out to potential consulting parties to solicit input from members of the public, tribes, and groups with historic/cultural interests. Although the Service is the lead Federal Agency for this process, you may be contacted by staff from ICF, an environmental planning and consulting firm, throughout this process.
- The Service is planning to hold virtual and/or in-person meetings with interested parties to discuss cultural resources in the APE, as well as potential effects and mitigation measures.

Enclosure 2 – R-Project Route Location/Vicinity Map



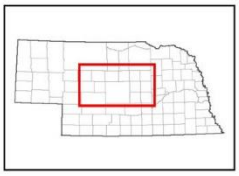
R-Project Centerlines
- Gerald Gentleman to Thedford
- Thedford to Holt County
- Substation
- Project Corridor
- Permit Area
- Interstate
- U.S.
- State
- County Boundary

Source: NPPD 2023.

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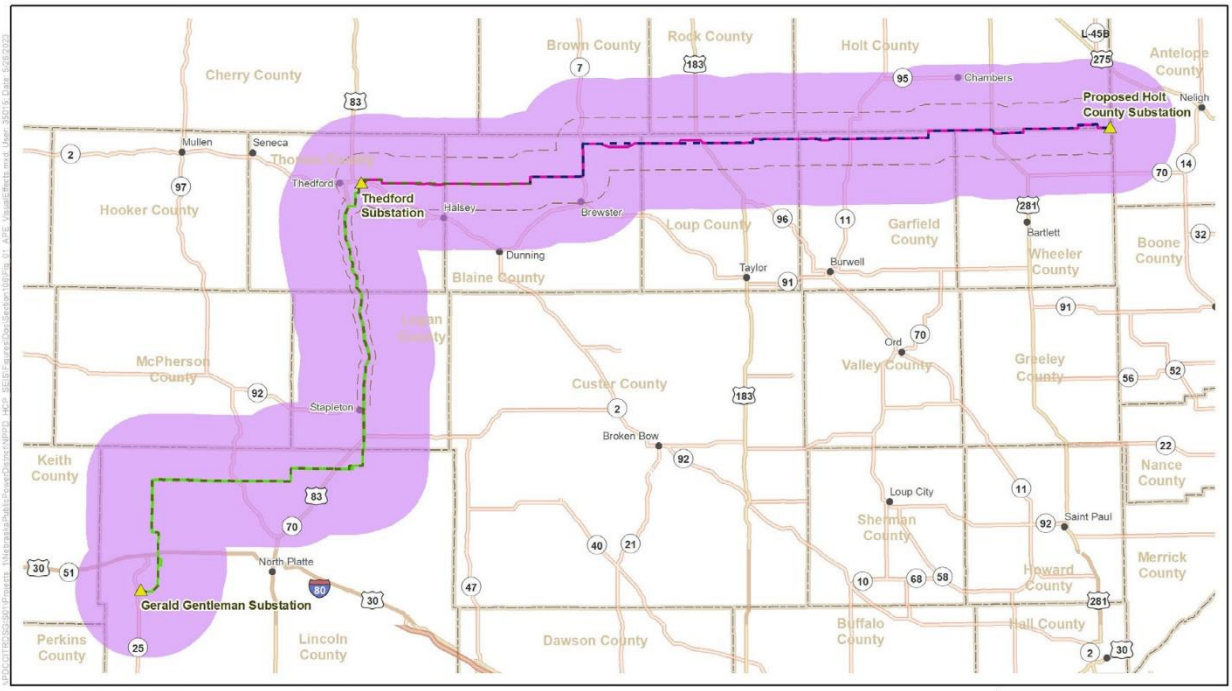
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R-Project Route Location and Vicinity Map

Enclosure 3 – R-Project Route APE



R-Project Centerline (2023)
- Gerald Gentleman to Thedford
- Thedford to Holt County

R-Project Centerline (2018)
- Gerald Gentleman to Thedford
- Thedford to Holt County

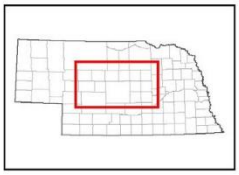
- Substation
- Permit Area
- APE for Visual Effects
- Interstate
- U.S.
- State
- County Boundary

Source: NPPD 2023.

N

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APE for Visual Effects

Sample Letter 3: Letter Sent to Consulting Parties

Sample Letter #3

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
9325 South Alda Road
Wood River, Nebraska 68883

IN REPLY REFER
TO: R-Project
Section 106

July 10, 2023

John Briggs
Oregon-California Trails Association
P.O. Box 1019
Independence, MO 64051

Subject: Initiation of the Section 106 process; Request for input on the Area of Potential Effects (APE); identification of historic properties and Traditional Cultural Properties in the APE; invitation to be a consulting party.

Dear Mr. Briggs,

The Nebraska Public Power District (NPPD) is proposing to construct, maintain, and operate an approximately 226-mile-long, 345-kilovolt transmission line that crosses Blaine, Garfield, Holt, Lincoln, Logan, Loup, Thomas, and Wheeler counties, Nebraska (undertaking or R-Project). NPPD is resubmitting an incidental take permit (ITP) application to the U.S. Fish and Wildlife Service (the Service) for the take of the American burying beetle that would result from the R-Project. The issuance of the ITP by the Service is the federal involvement that triggers compliance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), 54 U.S.C. § 306108, and its implementing regulations, 36 CFR Part 800. As such, the R-Project is an undertaking as defined in 36 CFR 800.16(y), and the Service is the lead agency for compliance with Section 106 of the NHPA.

The Service is initiating Section 106 consultation and inviting parties to review and provide input on the revised delineation of the R-Project Area of Potential Effects (APE) pursuant to 36 CFR 800.4. This letter includes a summary of the background on this project, a project description, and a description of the proposed APE. Please see the attachments to this letter, which include Enclosure 1, a summary of the R-Project history; Enclosure 2, a location and vicinity map; and Enclosure 3, the proposed APE. In addition to reviewing the APE, the Service is inviting parties to provide input on the identification of historic properties and Traditional Cultural Properties in the APE.

Background

A general description of the R-project's history is included as Enclosure 1 of this letter and summarized here:

Section 106 consultation for the R-Project was initiated in 2016 and resulted in the execution of the *Programmatic Agreement among the U.S. Fish and Wildlife Service – Mountain-Prairie Region, the Nebraska State Historic Preservation Officer, Nebraska Public Power District, and the Advisory Council on Historic Preservation regarding the Construction, Maintenance, and Operation of the R-Project 345-Kilovolt Transmission Line, Blaine, Garfield, Holt, Lincoln, Logan, Loup, Thomas, and Wheeler Counties, Nebraska*, on April 10, 2019.

The Service also analyzed potential environmental impacts associated with the issuance of an ITP for the R-Project in a final environmental impact statement (FEIS) published in 2018 in accordance with the National Environmental Policy Act of 1969 (NEPA). Following the Service's issuance of an ITP for the R-Project in 2019, a lawsuit was filed to challenge the Service's decision. In June 2020, the U.S. District Court for the District of Colorado determined the Service made decision-making errors and vacated the ITP that was issued to NPPD (Civil Action No. 19-cv-1945-WJM).

NPPD is currently working with the Service to address the court ruling and resubmit an ITP application. As the action of issuing an ITP to NPPD is considered an undertaking (36 CFR 800. 16[y]), the Service is reinitiating the Section 106 process. As the Service discussed with NPPD, History Nebraska, and the Advisory Council on Historic Preservation on January 17, 2023, the goal of this current Section 106 process is to amend the existing Programmatic Agreement. Additionally, the Service must comply with NEPA for the potential action of issuing an ITP to NPPD. Therefore, the Service is developing a supplemental environmental impact statement (SEIS), which will address issues identified in the court ruling. The SEIS will ensure a thorough evaluation of the potential effects of the Service's proposed action on the human environment. As part of the SEIS, the Service is re-analyzing potential effects to historic properties and addressing alternatives to avoid, minimize, or mitigate potential adverse effects to historic properties.

NPPD's current purpose and need for the R-Project is generally the same as described in the 2018 FEIS:

- provide for significant reliability benefits to the existing western Nebraska area transmission system by increasing the west-east power transfer capability across the NPPD system;
- reduce significant congestion issues by providing an additional outlet path from Gerald Gentleman Station (GGS) Substation near Sutherland, Nebraska, and;
- provide transmission capacity to renewable energy resources (e.g., wind and solar projects) in an area of Nebraska with renewable energy resources.

The proposed route of the 226-mile-long R-Project consists of a 101-mile-long north/south segment which begins in Lincoln County at the GGS. From this station, the route extends north following U.S. Highway 83 through Logan County to Thomas County where it connects to the Thedford Substation Expansion near Thedford, Nebraska. The route then turns east and extends 125 miles though Blaine, Loup, and Garfield counties, where it terminates at the newly constructed Holt County Substation in Holt County, Nebraska. See Enclosure 2 for a location and vicinity map of the R-project.

Area of Potential Effects

Based on the current Undertaking, the Service has redefined the APE and is requesting your review and input (Enclosure 3). The APE is the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties (36 CFR 800.16 (d)).

The Service defined the APE by taking into account the application of the terms "direct" and "indirect" effects under Section 106, which have changed since the 2019 programmatic agreement for the R-Project due to a court decision in 2019 (National Parks Conservation Assoc. v. Semonite, No. 18-5179 (D.C. Cir. 2019)). Direct effects to historic properties include physical as well as visual, audible, and atmospheric effects that would diminish the integrity of those historic properties. The Service has developed an APE for direct effects, which has been broken down into 3 categories: physical, audible, and visual:

- **APE for Physical Effects:** The APE for direct, physical effects is defined as 150 feet on either side of the proposed R-Project centerline, 50 feet on either side of access routes, and 50 feet around the perimeter of work areas (e.g., pulling and tensioning sites, fly yards/assembly areas, and construction yard/staging areas). Access routes and work areas are not yet defined for the Thedford to Holt County segment of the R-Project centerline. To accommodate this uncertainty, the APE for direct, physical effects in these areas extends 0.5 mile on either side of the proposed R-Project centerline.
- **APE for Audible Effects:** The APE for direct, audible effects is defined as 0.5 mile around the proposed R-Project centerline, access routes, and work areas.
- **APE for Visual Effects:** The APE for direct, visual effects is defined as 10 miles on either side of the proposed R-Project centerline.

Indirect effects to historic properties are those that are caused by an undertaking that may occur later in time or farther removed in distance but are reasonably foreseeable. At this time, the Service has not identified any indirect effects that would be caused by this undertaking; therefore, the APE defined in this letter does not address indirect effects. The Service is aware of potential reasonably foreseeable renewable energy projects that are related to the R-Project; however, these projects are outside of the discretion of the Service.

Conclusion

Your response to this letter, acknowledging your interest in participating in this undertaking as a Section 106 consulting party, providing input on the APE, and in identifying any historic properties, including Traditional Cultural Properties, that may exist within the APE is greatly appreciated. Any information you provide helps ensure the Service will consider all properties in the Section 106 and environmental review process.

All parties involved in the Section 106 process will have a reasonable opportunity to discuss their interest regarding historic properties and provide information regarding effects to historic properties throughout this process. The Service will be hosting meetings to discuss the

identification of and effects to historic properties, with meeting times and types/places to be determined. In addition, the Service will be consulting on an amendment to the PA.

Please provide a response within 30 days of receipt of this letter. If you have any questions or need further information on the project, please contact Jeff Runge at (308)382-6468 or by e-mail at jeff_runge@fws.gov.

Sincerely,

Matthew Rabbe
Acting Nebraska Project Leader/Field Supervisor
Ecological Services, Mountain-Prairie Region

Enclosure 1: R-Project Background Summary
Enclosure 2: R-Project Route Location and Vicinity Map
Enclosure 3: R-Project Route APE

Enclosure 1 – R-Project Background Summary

October 2014

- The Service issues a Notice of Intent (NOI) in the Federal Register to inform the public of its intent to prepare an EIS for the R-Project HCP

September 2015

- The Service begins informal communication with Nebraska SHPO regarding Section 106 consultation for the NPPD R-Project HCP EIS

June 2016

- The Service formally initiates Section 106 consultation for the NPPD R-Project HCP EIS

April 2019

- The *Programmatic Agreement among the U.S. Fish and Wildlife Service – Mountain-Prairie Region, the Nebraska State Historic Preservation Officer, Nebraska Public Power District, and the Advisory Council on Historic Preservation regarding the Construction, Maintenance, and Operation of the R-Project 345-Kilovolt Transmission Line, Blaine, Garfield, Holt, Lincoln, Logan, Loup, Thomas, and Wheeler Counties, Nebraska*, is executed on April 10, 2019.

June 2019

- The Service issues ITP #TE72710C-0 for the R-Project and associated substations to NPPD.

July 2019

- A lawsuit was filed to challenge the Service's decision to issue an incidental take permit for American burying beetle to the NPPD for their proposed project to construct a 225-mile electrical transmission line through Nebraska, known as the "R-Project." More details about the project can be found at https://rproject.nppd.com/project-status.

June 2020

- The U.S. District Court for the District of Colorado issued a decision. You can find the decision under Civil Action No. 19-cv-1945-WJM, at the following link: https://casetext.com/case/oregon-california-trails-assn-v-walsh.
- The court determined that the Service made some errors in their decision-making process, including:
    - "…inadequately considered the effects of the R-Project on the O'Fallon's Bluff Segment of the Oregon and California Trail;
    - …unlawfully excluded potential wind turbine development in Antelope County, Nebraska from its analysis; and
    - …one portion of a 'programmatic agreement' entered into to address NHPA matters is arbitrary and capricious."
- As a result of this decision, the court set aside the incidental take permit that the Service issued to NPPD. This means the permit was vacated.
- As part of the court order, a supplemental environmental impact statement (SEIS) is being developed to address issues identified in the court ruling. The SEIS will ensure a

thorough evaluation of the effect of the Service's proposed action on the human environment.

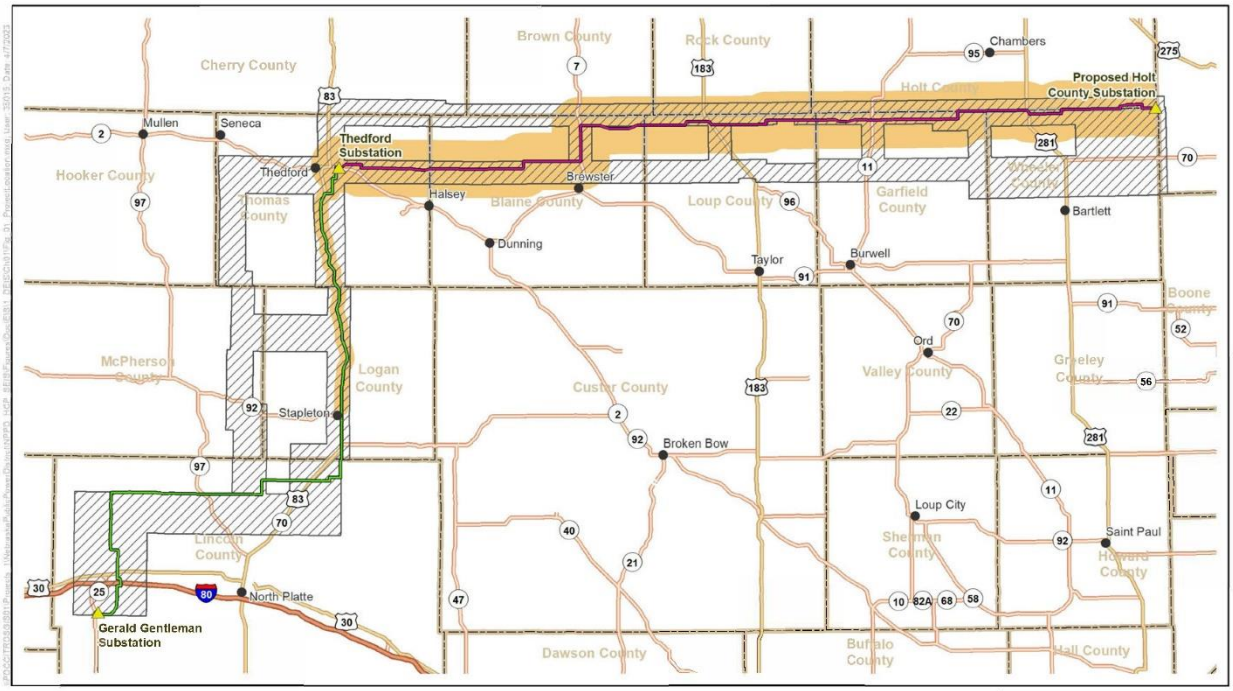
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Enclosure 2 – R-Project Route Location/Vicinity Map



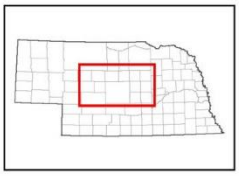
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Source: NPPD 2023.

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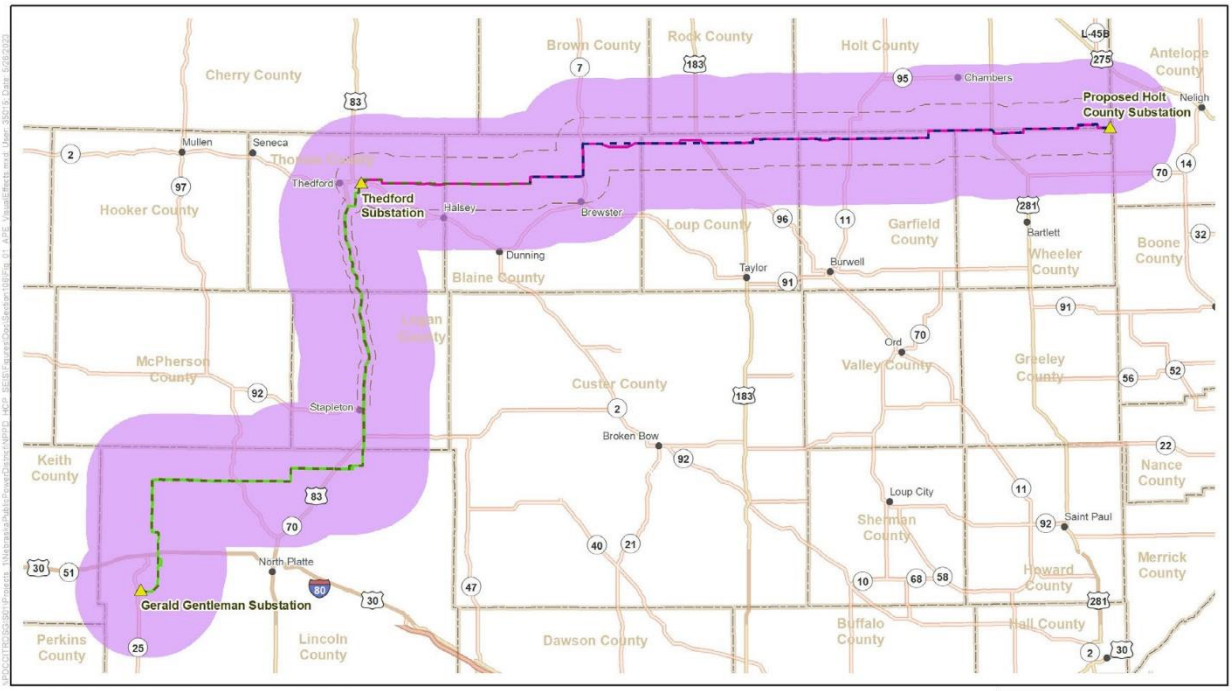
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R-Project Route Location and Vicinity Map

Enclosure 3 – R-Project Route APE



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R-Project Centerline (2018)
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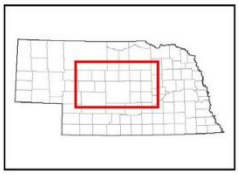
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- Permit Area
- APE for Visual Effects
- Interstate
- U.S.
- State
- County Boundary

Source: NPPD 2023.

N

0 10 20 Miles

1:1,200,000



APE for Visual Effects

Letter from SHPO to the Service Indicating Concurrence on the Proposed Area of Potential Effect, dated July 21, 2023

History NEBRASKA

Preserving the past. Building the future.

July 21, 2023

Matthew Rabbe
U.S. Fish and Wildlife Service
VIA EMAIL

RE: HP# 1602-140-01; R-Project Transmission Area of Potential Effects, Blaine, Garfield, Holt, Lincoln, Logan, Loup, Thomas, and Wheeler Counties, Nebraska

Mr. Rabbe,

Thank you for submitting the redefined Area of Potential Effects (APE) for the above referenced project for our review and comment. Our comment on this project and its potential to affect historic properties is required by Section 106 of the National Historic Preservation Act of 1966, as amended, and implementing regulations 36 CFR Part 800.

The Nebraska State Historic Preservation Office concurs with the APE for direct effects determination for the above referenced project.

Please retain this correspondence and your documented finding in order to show compliance with Section 106 of the National Historic Preservation Act, as amended. If you have any questions, please contact me at john.swigart@nebraska.gov or 402-560-0574.

Sincerely,

John Swigart
Preservation Archeologist

1500 R Street
Lincoln, NE 68508-1651
P: 402.471.3270
P: 800.833.6747
F: 402.471.3100
history.nebraska.gov

Letter from the Service to Tribal Nations Regarding Initiation of the Tribal Survey Process, dated June 12, 2024

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
9325 South Alda Road
Wood River, Nebraska 68883

IN REPLY REFER TO:
R-Project Section 106
Tribal Consultation

June 12, 2024

[redacted]

Subject: Nebraska Public Power District R-Project Transmission Line, response to requests for Tribal Cultural Specialist surveys for the R-Project

Dear [redacted]:

We, the U.S. Fish and Wildlife Service (Service), thank you for your continued coordination with us regarding Nebraska Public Power District's (NPPD) application for a federal Incidental Take Permit (ITP) to authorize the take of the federally threatened American burying beetle under the Endangered Species Act for the proposed construction, operation, and maintenance of a 226-mile-long, 345-kilovolt transmission line and associated infrastructure in Nebraska (the R-Project). The issuance of an ITP by the Service is the federal action that triggers compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA, 54 U.S.C. § 306108), and its implementing regulations, 36 CFR Part 800. As such, the R-Project is an undertaking as defined in 36 CFR 800.16(y), and the Service is the lead agency for compliance with Section 106 of the NHPA.

Several Tribal Nations expressed concerns about the Section 106 process during virtual meetings hosted by the Service on August 18, 2023, and December 8, 2023, and based on these requests, the Service invited the Tribal Nations to participate in an in-person Tribal meeting with Matt Hogan, Regional Director of the Service's Mountain-Prairie Region. The in-person meeting was held on February 28, 2024, in North Platte, Nebraska. A summary from this meeting is included as Enclosure 1. This letter conveys the Service's response to requests for Tribal Cultural Specialist (TCS) surveys for the R-Project made by Tribal Nations at these meetings.

A primary concern expressed by the Tribal Nations was the need for cultural resource inventories by TCSs that focus on properties of traditional religious and cultural importance within the Areas of Potential Effects (APEs). Several Tribal Nations requested intensive pedestrian surveys, conducted by TCSs using 10-meter transects, within the physical APE (i.e., areas directly impacted via ground disturbance) and the 20-mile-wide visual APE along the entire transmission line route. On-site TCS monitors during R-Project construction were also requested.

At the in-person meeting, the Service supported the request for intensive pedestrian surveys within the physical APE and supported on-site monitoring during construction. However, the Service cannot require NPPD to conduct surveys in the full visual APE, given that much of this area is private property, and the Service and NPPD cannot require these private landowners to grant access for surveys. Rather, the Service supports the use of alternative methods such as LiDAR analysis or GIS site probability models for identifying historic properties in the full visual APE as a reasonable and good faith effort under Section 106 of the NHPA.

According to the Department of the Interior Manual on Procedures for Consultation with Indian Tribes (512 DM 5), consensus should be sought between the Service and Tribal Nations concerning impacts to sacred/cultural resources. Where consensus cannot be reached, the head of the Bureau/Office (i.e., the Service) will review the consultation information and consensus-seeking documentation and determine how to proceed. Given the significance of cultural resources that could be impacted, following the in-person meeting on February 28, 2024, the Service requested that Department of the Interior (Department) officials review the request to survey the physical and visual APE along the entre transmission line route. In reviewing the information presented, the Department similarly supports intensive pedestrian surveys by TCSs within the physical APE and on-site construction monitors. The Department similarly concluded that intensive pedestrian surveys within the visual APE go beyond what is considered a reasonable, good faith effort under NHPA. The Department also supports the application of alternative methods for property identification within the visual APE, such as LiDAR analysis or GIS site probability models.

Prior to the upcoming Section 106 meeting on June 26, 2024 (10:00 a.m. to 12:00 p.m. Central Time), the Service will distribute an agenda to all Tribes and Consulting Parties. The agenda will include discussion of the proposed intensive pedestrian surveys within the physical APE, on-site construction monitors, and alternative methods for identifying historic properties in the visual APE. Additionally, we continue to invite you to consult with us on a government-to-government basis, under Executive Order 13175; Secretarial Order 3206; and Section 106 of NHPA. We invite continued input and participation in Section 106 of the NHPA and the National Environmental Policy Act. Should you have questions, please contact Jeff Runge within our office at jeff_runge@fws.gov or (308) 216-0384.

Sincerely,

Mark Porath
Nebraska Project Leader/Field Supervisor
Ecological Services, Mountain-Prairie Region

Enclosure: R-Project - In-Person Tribal Meeting Summary (February 28, 2024)

Meeting Summary

U.S. FISH AND WILDLIFE SERVICE **Tribal Coordination Meeting**
Nebraska Public Power District R-Project
Habitat Conservation Plan

Date: February 28, 2024

Topics: R-Project Transmission Line In-Person Tribal Coordination Meeting

Location: Prairie Arts Center, 416 N Jeffers St., North Platte, Nebraska

Time: 9:00am – 3:30pm Central

Attendees

Name	Agency/Group	Title
Dianne Derosiers	Sisseton-Wahpeton Oyate of the Lake Traverse Reservation, South Dakota	Tribal Historic Preservation Officer
Wayne Cloud	Sisseton-Wahpeton Oyate of the Lake Traverse Reservation, South Dakota	Section 106 Reviewer
Brent Starr	Sisseton-Wahpeton Oyate of the Lake Traverse Reservation, South Dakota	Tribal Cultural Specialist
Steve Vance	Cheyenne River Sioux Tribe of the Cheyenne River Reservation, South Dakota	Tribal Historic Preservation Officer
Matt Reed	Pawnee Nation of Oklahoma	Tribal Historic Preservation Officer
Tyrel Iron Eyes	Standing Rock Sioux Tribe of North and South Dakota	Tribal Archaeologist
Ione Quigley	Rosebud Sioux Tribe of the Rosebud Indian Reservation, South Dakota	Tribal Historic Preservation Officer
Benjamin Young	Rosebud Sioux Tribe of the Rosebud Indian Reservation, South Dakota	Section 106 Reviewer
Matt Hogan	U.S. Fish and Wildlife Service (Service)	Region 6 Regional Director
Marjorie Nelson	U.S. Fish and Wildlife Service	Region 6 Assistant Regional Director
Mark Porath	U.S. Fish and Wildlife Service	Nebraska Ecological Services Supervisor
Angela Burgess	U.S. Fish and Wildlife Service	Habitat Conservation Plan Regional Coordinator
Jen Kolise	U.S. Fish and Wildlife Service	Regional Historic Preservation Officer, Region 6
Jeff Runge	U.S. Fish and Wildlife Service	Fish and Wildlife Biologist, Project Coordinator
Stephanie Hebert	U.S. Fish and Wildlife Service	Region 6 Native American Liaison
Jennifer Piggott	ICF	Facilitator
Lucas Bare	ICF	Project Manager
Sarah Banguilan	ICF	Cultural Resources Lead
Lydia Dadd	ICF	Deputy Project Manager

Meeting Summary

U.S. FISH AND WILDLIFE SERVICE **Tribal Coordination Meeting**
Nebraska Public Power District R-Project
Habitat Conservation Plan

Summary

Note: *This summary is based on notes taken by ICF during the meeting.*

On February 28, 2024, the U.S. Fish and Wildlife Service (the Service) met with Tribal Nations involved in the Section 106 process for the R-Project Transmission Line In-Person Tribal Coordination Meeting at the Prairie Arts Center in North Platte, Nebraska. The Service provided an agenda with topics (see Attachment 1) of discussion and opened the meeting up to the Tribal Nations to provide input on the topics. Throughout the meeting, the primary topics discussed included survey methodology, tribal involvement over the lifetime of the R-Project, alternative routes, impacts on the Sandhills landscape, and a discussion on the Service's authority for the issuance of incidental take permit (ITP). The following sections provide summaries of the discussions on each topic, based on notes taken by ICF during the meeting.

Project History and Tribal Involvement: Tribal attendees discussed the following topics related to tribal involvement:

- The February 28th meeting does not constitute a government-to-government consultation.
- Concern regarding the lack of Tribal involvement throughout the life of the project. Tribal attendees expressed that Tribal Nations have been continually omitted from the Section 106 and National Environmental Policy Act (NEPA) processes.
- Tribal members should have been involved much earlier in the project to meaningfully participate in the identification of resources and development of mitigation. Tribal attendees expressed that they consider this to be the identification stage of the Section 106 process.
- Concerns about the validity of the Draft SEIS, as it was released prior to conducting sufficient Tribal engagement and is missing important information.
- Communications with the Tribal Nations have been disseminated inconsistently throughout the project.

The Service reiterated their commitment to including Tribal Nations in all aspects of the consultation process. The Service also acknowledged that efforts to identify historic properties to date have been inadequate since these efforts lacked involvement from Tribal Nations. The Service reiterated that they are requesting relevant information from the Tribal Nations and that such information, if provided, can be incorporated into the Final SEIS, along with other input received during the public comment period.

Survey Methodology: Tribal attendees reiterated the request for intensive pedestrian surveys at 10-meter transect intervals to be completed along the entirety of the physical, auditory, and visual Areas of Potential Effects (APE) under Section 106 of the National Historic Preservation Act. Specifically, they requested:

- A boots-on-the-ground approach where teams made up of individuals approved by the Tribal Nations would be compensated to conduct intensive pedestrian surveys at 10-meter transect intervals of the entirety of the APE. The team discussed that this would

likely occur over multiple survey seasons, given the extent of the area that would require surveys.
- Clearly documented scope of work and methods laid out prior to beginning surveys. This would include guidance for collecting found items, communication between the Tribal Nations and the Service, and providing spatial information to the Tribal Nations.
- The information identified through the surveys should be incorporated into the Supplemental Environmental Impact Statement (SEIS), except for sensitive information.
- A request was made for spatial information on the location of the infrastructure and proposed construction.

The Tribal attendees felt that agreeing on how to conduct the survey work was the key to moving forward onto the next step of the consultation process. Multiple attendees indicated that they would be ready to begin surveys as soon as this agreement is made.

The Service agreed that there is a need for intensive pedestrian surveys to be completed by Tribal Cultural Specialists, who are approved by the Tribal Nations, within the physical APE and stated that they are prepared to require these surveys as a condition of the ITP. The Service was also supportive of having construction monitors present to identify any previously unknown effects on historic properties.

Alternative Routes: Tribal attendees discussed the following topics related to alternative R-Project routes:

- The need for more alternative routes to be considered at this point in the process.
- Alternative routes, if considered, could increase risk of impacting natural and cultural resources of certain Tribal Nations including but not limited to the Pawnee Nation.

The Service explained that the project proponent, Nebraska Public Power District (NPPD), considered and eliminated alternative routes during their initial routing process, but ultimately came to the Service with their permit request for their proposed route. The Service also explained that alternative routes were considered in the 2019 FEIS, but that it was determined that those routes would not be reasonable, per the requirements of NEPA. The Draft SEIS evaluates the effects of an alternative that avoids and minimizes impacts of the proposed action and describes alternatives that were considered but dismissed from detailed analysis due to not being reasonable alternatives.

Impacts on the Sandhills Ecosystem: Tribal attendees discussed the following topics related to impacts to the Sandhills landscape:

- Concern regarding long-lasting, damaging effects of construction and installation of the R-Project on the landscape, particularly given the fragility of the Sandhills ecosystem and the cultural importance of this landscape.
- The negative impacts that the project could have on land, water, and air resources, all of which need to be taken into consideration from the traditional importance they have to the tribes.

Meeting Summary

U.S. FISH AND WILDLIFE SERVICE **Tribal Coordination Meeting**
Nebraska Public Power District R-Project
Habitat Conservation Plan

The Service explained how the Habitat Conservation Plan (HCP) is required to address the impacts of the R-Project on threatened and endangered species. The Service also explained that the NEPA process will not be concluded until all regulations and requirements are followed and complied with. Through the NEPA process, we consider the effects of the project on natural resources in the Sandhills including land, water, and air.

The Service's Authority: Tribal attendees requested that the Service take multiple actions on the R-Project, including:

- Requiring a reroute under certain circumstances, including the scenario in which resources are identified during intensive pedestrian surveys.
- Requiring intensive pedestrian surveys in the entire physical, auditory, and visual APEs.
- Require the project to follow an alternative route, as opposed to NPPD's proposed route.

In response to these concerns, the Service explained the following:

- The Service does not have routing authority under NEPA (i.e., they cannot require NPPD to change their proposed route).
- NPPD only has landowner access for the designated right of way, and the boundaries of the right of way is determined by NPPD, as the project proponent. The Service can only mandate actions within NPPD's ROW which corresponds with their rights of entry in this area. The Service is unable to require NPPD to conduct surveys in the full visual APE, given that much of this area is private property, and the Service cannot require these private landowners to grant access for surveys. The Service is evaluating other methods that can be used to meet the reasonable and good faith effort for identifying historic properties in the full visual APE under Section 106 of the National Historic Preservation Act.
- Although the Service has a broad mission statement, their authority is determined by Federal statute and regulations. Section 10 of the Endangered Species Act (ESA) limits what they can require from an applicant for a voluntary permit, such as an ITP. The Service's role in this process is to review NPPD's application and supporting materials (e.g., HCP, migratory bird conservation plan) and determine if permit issuance criteria are met, in which case the Service "shall issue" the permit.

Meeting Summary

U.S. FISH AND WILDLIFE SERVICE **Tribal Coordination Meeting**
Nebraska Public Power District R-Project
Habitat Conservation Plan

Attachment 1. Agenda

February 28, 2024 (Wednesday)
9:00 a.m. to 2:00 p.m. CST
Prairie Arts Center
416 North Jeffers Street, North Platte, Nebraska

1. Opening Blessing
2. Welcoming Remarks by Matt Hogan, U.S. Fish and Wildlife Regional Director
3. Introductions
4. Discussion Topics
    a. Section 106 Process
        i. Efforts to Identify Historic Properties
        ii. Analysis of effects
        iii. Amendment of Section 106 programmatic agreement
    b. Additional Resource Topics
        i. Migratory Birds
        i. Water Resources
        ii. Other
8. Lunch: 12:00 (may occur before or after the above discussion topics)
9. Wrap-Up
10. Next Steps
11. Closing Blessing

Note: Availability for Tribal deliberations and break-out sessions throughout the meeting

Letter from the Service to Tribal Nations Regarding NPPD's Selection of a Contractor to Lead Development of the Tribal Participation Plans, dated September 27, 2024

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
9325 South Alda Road
Wood River, Nebraska 68883

IN REPLY REFER TO:
R-Project
Section 106

September 27, 2024

[redacted]

Subject: Update on the Tribal Cultural Survey Process and Tribal Participation Plan Development for the R-Project; NPPD's selection of a consultant to support coordinating the Tribal Cultural Surveys and development of the Tribal Participation Plan.

Dear [redacted]:

The Nebraska Public Power District (NPPD) is proposing to construct, maintain, and operate the R-Project, a 226-mile-long, 345-kilovolt transmission line that crosses Blaine, Garfield, Holt, Lincoln, Logan, Loup, Thomas, and Wheeler counties, Nebraska. NPPD has resubmitted an incidental take permit (ITP) application to the U.S. Fish and Wildlife Service (the Service) for the take of the American burying beetle that would result from the R-Project. The issuance of the ITP by the Service is the federal involvement that triggers compliance with Section 106 of the National Historic Preservation Act of 1966 (NHPA; 54 U.S.C. § 306108), and its implementing regulations, 36 CFR Part 800. As such, the R-Project is an undertaking as defined in 36 CFR 800.16(y), and the Service is the lead agency for compliance with Section 106 of the NHPA.

Several Tribal Nations expressed concerns about the Section 106 process during virtual meetings hosted by the Service on August 18, 2023, and December 8, 2023, and during an in-person meeting on February 28, 2024, in North Platte, Nebraska. A primary concern expressed by the Tribal Nations was the need for surveys to be conducted by Tribal Cultural Specialists (TCSs) within the physical and visual Areas of Potential Effect (APEs) to identify properties of traditional religious and cultural importance.

On June 12, 2024, the Service sent a letter to the Tribal Nations explaining that Department of the Interior (Department) officials reviewed the request from Tribal Nations to survey the physical and visual APE along the entre transmission line route. The June 12, 2024, letter is appended to this letter as Enclosure 1. As stated in the June 12, 2024, letter, the Department supports intensive pedestrian surveys to be conducted by TCSs within the physical APE and the presence of onsite TCS monitors during construction of the R-Project.

As discussed in recent Section 106 meetings between the Service and Tribal Nations, the Service directed NPPD to hire a consultant that will support the organization and facilitation with the Tribal Nations to develop and implement the Tribal Participation Plan. NPPD has retained the firm Seventh Sovereign,

based in Missoula, Montana, and Seattle, Washington, to support this process.[1] Seventh Sovereign works with Tribal Nations throughout the U.S. The Seventh Sovereign team will be led by Robert Harper and Brigita Larson. This team will be contacting you soon to initiate development of the Tribal Participation Plan. Seventh Sovereign's primary role will be to facilitate the development of a Tribal Participation Plan and coordinate logistics of the TCS surveys. Seventh Sovereign is being tasked with organization and facilitation, not decision-making. The Service will retain the lead role in the Section 106 process and will be involved in the development and finalization of the Tribal Participation Plan. The Service intends to include the Tribal Participation Plan as an appendix to the Section 106 Programmatic Agreement.

The Service fully recognizes its legal and regulatory responsibilities as the lead Federal agency and will continue to remain involved in the Section 106 consultation process in accordance with 36 CFR 800. Additionally, the Service continues to remain legally responsible for all findings and determinations. At any point during the process, if Tribal Nations have questions or concerns regarding communications with Seventh Sovereign, please reach out to Jeff Runge with the Service (jeff_runge@fws.gov; 308-216-0384).

Respectfully,

Mark Porath
Nebraska Project Leader/Field Supervisor
Ecological Services, Mountain-Prairie Region

Enclosure 1: June 12, 2024, Letter from the U.S. Fish and Wildlife Service to Tribal Nations responding to requests for Tribal Cultural Specialist surveys for the R-Project

[1] For additional information on Seventh Sovereign, please see the firm's website: https://www.seventhsovereign.com/.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
9325 South Alda Road
Wood River, Nebraska 68883

IN REPLY REFER TO:
R-Project Section 106
Tribal Consultation

June 12, 2024

[redacted]

Subject: Nebraska Public Power District R-Project Transmission Line, response to requests for Tribal Cultural Specialist surveys for the R-Project

Dear [redacted]:

We, the U.S. Fish and Wildlife Service (Service), thank you for your continued coordination with us regarding Nebraska Public Power District's (NPPD) application for a federal Incidental Take Permit (ITP) to authorize the take of the federally threatened American burying beetle under the Endangered Species Act for the proposed construction, operation, and maintenance of a 226-mile-long, 345-kilovolt transmission line and associated infrastructure in Nebraska (the R-Project). The issuance of an ITP by the Service is the federal action that triggers compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA, 54 U.S.C. § 306108), and its implementing regulations, 36 CFR Part 800. As such, the R-Project is an undertaking as defined in 36 CFR 800.16(y), and the Service is the lead agency for compliance with Section 106 of the NHPA.

Several Tribal Nations expressed concerns about the Section 106 process during virtual meetings hosted by the Service on August 18, 2023, and December 8, 2023, and based on these requests, the Service invited the Tribal Nations to participate in an in-person Tribal meeting with Matt Hogan, Regional Director of the Service's Mountain-Prairie Region. The in-person meeting was held on February 28, 2024, in North Platte, Nebraska. A summary from this meeting is included as Enclosure 1. This letter conveys the Service's response to requests for Tribal Cultural Specialist (TCS) surveys for the R-Project made by Tribal Nations at these meetings.

A primary concern expressed by the Tribal Nations was the need for cultural resource inventories by TCSs that focus on properties of traditional religious and cultural importance within the Areas of Potential Effects (APEs). Several Tribal Nations requested intensive pedestrian surveys, conducted by TCSs using 10-meter transects, within the physical APE (i.e., areas directly impacted via ground disturbance) and the 20-mile-wide visual APE along the entire transmission line route. On-site TCS monitors during R-Project construction were also requested.

At the in-person meeting, the Service supported the request for intensive pedestrian surveys within the physical APE and supported on-site monitoring during construction. However, the Service cannot require NPPD to conduct surveys in the full visual APE, given that much of this area is private property, and the Service and NPPD cannot require these private landowners to grant access for surveys. Rather, the Service supports the use of alternative methods such as LiDAR analysis or GIS site probability models for identifying historic properties in the full visual APE as a reasonable and good faith effort under Section 106 of the NHPA.

According to the Department of the Interior Manual on Procedures for Consultation with Indian Tribes (512 DM 5), consensus should be sought between the Service and Tribal Nations concerning impacts to sacred/cultural resources. Where consensus cannot be reached, the head of the Bureau/Office (i.e., the Service) will review the consultation information and consensus-seeking documentation and determine how to proceed. Given the significance of cultural resources that could be impacted, following the in-person meeting on February 28, 2024, the Service requested that Department of the Interior (Department) officials review the request to survey the physical and visual APE along the entre transmission line route. In reviewing the information presented, the Department similarly supports intensive pedestrian surveys by TCSs within the physical APE and on-site construction monitors. The Department similarly concluded that intensive pedestrian surveys within the visual APE go beyond what is considered a reasonable, good faith effort under NHPA. The Department also supports the application of alternative methods for property identification within the visual APE, such as LiDAR analysis or GIS site probability models.

Prior to the upcoming Section 106 meeting on June 26, 2024 (10:00 a.m. to 12:00 p.m. Central Time), the Service will distribute an agenda to all Tribes and Consulting Parties. The agenda will include discussion of the proposed intensive pedestrian surveys within the physical APE, on-site construction monitors, and alternative methods for identifying historic properties in the visual APE. Additionally, we continue to invite you to consult with us on a government-to-government basis, under Executive Order 13175; Secretarial Order 3206; and Section 106 of NHPA. We invite continued input and participation in Section 106 of the NHPA and the National Environmental Policy Act. Should you have questions, please contact Jeff Runge within our office at jeff_runge@fws.gov or (308) 216-0384.

Sincerely,

Mark Porath

Mark Porath
Nebraska Project Leader/Field Supervisor
Ecological Services, Mountain-Prairie Region

Enclosure: R-Project - In-Person Tribal Meeting Summary (February 28, 2024)

Meeting Summary

U.S. FISH AND WILDLIFE SERVICE **Tribal Coordination Meeting**
Nebraska Public Power District R-Project
Habitat Conservation Plan

Date: February 28, 2024

Topics: R-Project Transmission Line In-Person Tribal Coordination Meeting

Location: Prairie Arts Center, 416 N Jeffers St., North Platte, Nebraska

Time: 9:00am – 3:30pm Central

Attendees

Name	Agency/Group	Title
Dianne Derosiers	Sisseton-Wahpeton Oyate of the Lake Traverse Reservation, South Dakota	Tribal Historic Preservation Officer
Wayne Cloud	Sisseton-Wahpeton Oyate of the Lake Traverse Reservation, South Dakota	Section 106 Reviewer
Brent Starr	Sisseton-Wahpeton Oyate of the Lake Traverse Reservation, South Dakota	Tribal Cultural Specialist
Steve Vance	Cheyenne River Sioux Tribe of the Cheyenne River Reservation, South Dakota	Tribal Historic Preservation Officer
Matt Reed	Pawnee Nation of Oklahoma	Tribal Historic Preservation Officer
Tyrel Iron Eyes	Standing Rock Sioux Tribe of North and South Dakota	Tribal Archaeologist
Ione Quigley	Rosebud Sioux Tribe of the Rosebud Indian Reservation, South Dakota	Tribal Historic Preservation Officer
Benjamin Young	Rosebud Sioux Tribe of the Rosebud Indian Reservation, South Dakota	Section 106 Reviewer
Matt Hogan	U.S. Fish and Wildlife Service (Service)	Region 6 Regional Director
Marjorie Nelson	U.S. Fish and Wildlife Service	Region 6 Assistant Regional Director
Mark Porath	U.S. Fish and Wildlife Service	Nebraska Ecological Services Supervisor
Angela Burgess	U.S. Fish and Wildlife Service	Habitat Conservation Plan Regional Coordinator
Jen Kolise	U.S. Fish and Wildlife Service	Regional Historic Preservation Officer, Region 6
Jeff Runge	U.S. Fish and Wildlife Service	Fish and Wildlife Biologist, Project Coordinator
Stephanie Hebert	U.S. Fish and Wildlife Service	Region 6 Native American Liaison
Jennifer Piggott	ICF	Facilitator
Lucas Bare	ICF	Project Manager
Sarah Banguilan	ICF	Cultural Resources Lead
Lydia Dadd	ICF	Deputy Project Manager

Meeting Summary

U.S. FISH AND WILDLIFE SERVICE
Nebraska Public Power District R-Project
Habitat Conservation Plan

Tribal Coordination Meeting

Summary

Note: *This summary is based on notes taken by ICF during the meeting.*

On February 28, 2024, the U.S. Fish and Wildlife Service (the Service) met with Tribal Nations involved in the Section 106 process for the R-Project Transmission Line In-Person Tribal Coordination Meeting at the Prairie Arts Center in North Platte, Nebraska. The Service provided an agenda with topics (see Attachment 1) of discussion and opened the meeting up to the Tribal Nations to provide input on the topics. Throughout the meeting, the primary topics discussed included survey methodology, tribal involvement over the lifetime of the R-Project, alternative routes, impacts on the Sandhills landscape, and a discussion on the Service's authority for the issuance of incidental take permit (ITP). The following sections provide summaries of the discussions on each topic, based on notes taken by ICF during the meeting.

Project History and Tribal Involvement: Tribal attendees discussed the following topics related to tribal involvement:

- The February 28th meeting does not constitute a government-to-government consultation.
- Concern regarding the lack of Tribal involvement throughout the life of the project. Tribal attendees expressed that Tribal Nations have been continually omitted from the Section 106 and National Environmental Policy Act (NEPA) processes.
- Tribal members should have been involved much earlier in the project to meaningfully participate in the identification of resources and development of mitigation. Tribal attendees expressed that they consider this to be the identification stage of the Section 106 process.
- Concerns about the validity of the Draft SEIS, as it was released prior to conducting sufficient Tribal engagement and is missing important information.
- Communications with the Tribal Nations have been disseminated inconsistently throughout the project.

The Service reiterated their commitment to including Tribal Nations in all aspects of the consultation process. The Service also acknowledged that efforts to identify historic properties to date have been inadequate since these efforts lacked involvement from Tribal Nations. The Service reiterated that they are requesting relevant information from the Tribal Nations and that such information, if provided, can be incorporated into the Final SEIS, along with other input received during the public comment period.

Survey Methodology: Tribal attendees reiterated the request for intensive pedestrian surveys at 10-meter transect intervals to be completed along the entirety of the physical, auditory, and visual Areas of Potential Effects (APE) under Section 106 of the National Historic Preservation Act. Specifically, they requested:

- A boots-on-the-ground approach where teams made up of individuals approved by the Tribal Nations would be compensated to conduct intensive pedestrian surveys at 10-meter transect intervals of the entirety of the APE. The team discussed that this would

likely occur over multiple survey seasons, given the extent of the area that would require surveys.
- Clearly documented scope of work and methods laid out prior to beginning surveys. This would include guidance for collecting found items, communication between the Tribal Nations and the Service, and providing spatial information to the Tribal Nations.
- The information identified through the surveys should be incorporated into the Supplemental Environmental Impact Statement (SEIS), except for sensitive information.
- A request was made for spatial information on the location of the infrastructure and proposed construction.

The Tribal attendees felt that agreeing on how to conduct the survey work was the key to moving forward onto the next step of the consultation process. Multiple attendees indicated that they would be ready to begin surveys as soon as this agreement is made.

The Service agreed that there is a need for intensive pedestrian surveys to be completed by Tribal Cultural Specialists, who are approved by the Tribal Nations, within the physical APE and stated that they are prepared to require these surveys as a condition of the ITP. The Service was also supportive of having construction monitors present to identify any previously unknown effects on historic properties.

Alternative Routes: Tribal attendees discussed the following topics related to alternative R-Project routes:

- The need for more alternative routes to be considered at this point in the process.
- Alternative routes, if considered, could increase risk of impacting natural and cultural resources of certain Tribal Nations including but not limited to the Pawnee Nation.

The Service explained that the project proponent, Nebraska Public Power District (NPPD), considered and eliminated alternative routes during their initial routing process, but ultimately came to the Service with their permit request for their proposed route. The Service also explained that alternative routes were considered in the 2019 FEIS, but that it was determined that those routes would not be reasonable, per the requirements of NEPA. The Draft SEIS evaluates the effects of an alternative that avoids and minimizes impacts of the proposed action and describes alternatives that were considered but dismissed from detailed analysis due to not being reasonable alternatives.

Impacts on the Sandhills Ecosystem: Tribal attendees discussed the following topics related to impacts to the Sandhills landscape:

- Concern regarding long-lasting, damaging effects of construction and installation of the R-Project on the landscape, particularly given the fragility of the Sandhills ecosystem and the cultural importance of this landscape.
- The negative impacts that the project could have on land, water, and air resources, all of which need to be taken into consideration from the traditional importance they have to the tribes.

Meeting Summary

U.S. FISH AND WILDLIFE SERVICE — Tribal Coordination Meeting
Nebraska Public Power District R-Project
Habitat Conservation Plan

The Service explained how the Habitat Conservation Plan (HCP) is required to address the impacts of the R-Project on threatened and endangered species. The Service also explained that the NEPA process will not be concluded until all regulations and requirements are followed and complied with. Through the NEPA process, we consider the effects of the project on natural resources in the Sandhills including land, water, and air.

The Service's Authority: Tribal attendees requested that the Service take multiple actions on the R-Project, including:

- Requiring a reroute under certain circumstances, including the scenario in which resources are identified during intensive pedestrian surveys.
- Requiring intensive pedestrian surveys in the entire physical, auditory, and visual APEs.
- Require the project to follow an alternative route, as opposed to NPPD's proposed route.

In response to these concerns, the Service explained the following:

- The Service does not have routing authority under NEPA (i.e., they cannot require NPPD to change their proposed route).
- NPPD only has landowner access for the designated right of way, and the boundaries of the right of way is determined by NPPD, as the project proponent. The Service can only mandate actions within NPPD's ROW which corresponds with their rights of entry in this area. The Service is unable to require NPPD to conduct surveys in the full visual APE, given that much of this area is private property, and the Service cannot require these private landowners to grant access for surveys. The Service is evaluating other methods that can be used to meet the reasonable and good faith effort for identifying historic properties in the full visual APE under Section 106 of the National Historic Preservation Act.
- Although the Service has a broad mission statement, their authority is determined by Federal statute and regulations. Section 10 of the Endangered Species Act (ESA) limits what they can require from an applicant for a voluntary permit, such as an ITP. The Service's role in this process is to review NPPD's application and supporting materials (e.g., HCP, migratory bird conservation plan) and determine if permit issuance criteria are met, in which case the Service "shall issue" the permit.

Meeting Summary

U.S. FISH AND WILDLIFE SERVICE — Tribal Coordination Meeting
Nebraska Public Power District R-Project
Habitat Conservation Plan

Attachment 1. Agenda

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9:00 a.m. to 2:00 p.m. CST
Prairie Arts Center
416 North Jeffers Street, North Platte, Nebraska

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3. Introductions
4. Discussion Topics
    a. Section 106 Process
        i. Efforts to Identify Historic Properties
        ii. Analysis of effects
        iii. Amendment of Section 106 programmatic agreement
    b. Additional Resource Topics
        i. Migratory Birds
        i. Water Resources
        ii. Other
8. Lunch: 12:00 (may occur before or after the above discussion topics)
9. Wrap-Up
10. Next Steps
11. Closing Blessing

Note: Availability for Tribal deliberations and break-out sessions throughout the meeting

Letter from the Service to ACHP, SHPO, Tribal Nations, and Consulting Parties Regarding Project Communication Protocols, dated September 27, 2024

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
9325 South Alda Road
Wood River, Nebraska 68883

IN REPLY REFER TO:
R-Project
Section 106

September 27, 2024

Subject: Update on the U.S. Fish and Wildlife Service's Section 106 communications for the R-Project.

Dear Consulting Party:

The Nebraska Public Power District (NPPD) is proposing to construct, maintain, and operate the R-Project, a 226-mile-long, 345-kilovolt transmission line that crosses Blaine, Garfield, Holt, Lincoln, Logan, Loup, Thomas, and Wheeler counties, Nebraska. NPPD has resubmitted an incidental take permit (ITP) application to the U.S. Fish and Wildlife Service (the Service) for the take of the American burying beetle that would result from the R-Project. The issuance of the ITP by the Service is the federal involvement that triggers compliance with Section 106 of the National Historic Preservation Act of 1966 (NHPA; 54 U.S.C. § 306108), and its implementing regulations, 36 CFR Part 800. As such, the R-Project is an undertaking as defined in 36 CFR 800.16(y), and the Service is the lead agency for compliance with Section 106 of the NHPA.

To continue consistent, efficient communication on the Section 106 process, the Service is directing ICF, a third-party consultant that supports the Service on its work related to the R-Project, to begin handling certain Section 106 communications on behalf of the Service. The purpose of ICF's communications is the dissemination of meeting information and clarifying meeting logistics. Examples of such communications include:

- Distribution of meeting invitations for Section 106 meetings
- Distribution of meeting materials
- Distribution of meeting notes and follow-up materials
- Distribution of Section 106 reports and documentation prepared by the Service for your review
- Email and phone reminders of upcoming review deadlines for Section 106 reports and documents
- Phone calls to provide follow-up from Section 106 meetings
- Phone calls providing reminders of upcoming Section 106 meetings

At the direction of the Service, when ICF staff conduct phone calls or initiate emails, ICF staff will notify the Service if there are substantive concerns received from you and the Service will follow up with the appropriate response. ICF will be available to answer logistical questions about meetings, meeting materials, document review schedules, and other Section 106 items, but will defer answers on substantive Section 106 questions to the Service.

The Service would like to emphasize that ICF will carry out ***specific, limited tasks*** in support of the Service's Section 106 consultation with Tribal Nations and other consulting parties. The Service will continue to lead the Section 106 consultation process in accordance with its legal and regulatory responsibilities as lead agency. Any substantive comments or questions should be directed to Jeff Runge

with the Service (jeff_runge@fws.gov; 308-216-0384). Additionally, please contact Jeff with questions or concerns about this updated plan for Section 106 communication for the R-Project.

Respectfully,

Mark Porath
Nebraska Project Leader/Field Supervisor
Ecological Services, Mountain-Prairie Region

Letter from the Rosebud Sioux Tribe to the Service Concerning the Draft Finding of Effect Report, dated November 6, 2024

Tribal Historic Preservation
Cultural Resource Management Office
P.O. Box 750
Rosebud, South Dakota 57570
Telephone: (605) 747-4255

Protecting the Land, Culture, and Tradition for Heritage and for Future Generations

Ione Quigley
Officer

November 6, 2024

This *2024 Draft Finding of Effect Report for the R-Project Transmission Line* is **premature**, **inaccurate**, **misleading** and **deceptive in its contents**. The Rosebud Sioux Tribe requests that this draft document be discarded and a new, accurate, complete and comprehensive Finding of Effect document be produced at the completion of the cultural sites inventory (both archaeological and tradition cultural properties surveys) and that it includes all direct effects from this proposed project in one document. This project is still in Step 2 (Inventory) of the Section 106 process of the National Historic Preservation Act (NHPA). With this document you are attempting to jump to Step 3 (Assessing Effects). This has been a repeated pattern with this project. We addressed this issue in writing on March 1, 2024, in response to the US Fish and Wildlife Service (USFWS) producing a Supplemental Environmental Impact Statement (SEIS) and putting it out for review before the Tribe's had an opportunity to complete their Cultural Site Surveys (March 1, 2024 Letter attached as Appendix A). This point has been reiterated repeatedly by the consulting Tribe's since the very first meeting with the USFWS on this project. Meeting note excerpts from February 13, 2024:

- Ben Young (Rosebud Sioux Tribal Historic Preservation Office Section 106 Compliance Officer) stated maybe ACHP can weigh in. Still in the identification process for 106. How can we move on to the next step in the NEPA process when this is still going on?
- Tyrel Iron Eyes (Tribal Archaeologist for the Standing Rock Sioux Tribal Historic Preservation Office) noted Section 106 is a 4-step process. We're talking about mitigation when Tribes haven't even had a chance to identify properties.
- Alexis Clark (Advisory Council on Historic Preservation) pointed out the need to be clear about what step of the process we're on; although we can refer forward to the PA as the intended conclusion, there is still value in following the steps in order.
- Tyrel Iron Eyes (Tribal Archaeologist for the Standing Rock Sioux Tribal Historic Preservation Office) (via chat): Any conversations regarding monitoring or mitigation at this point in the process is foolish and disingenuous because as Ben has stated, we haven't had any Tribal participation in surveys; every time mitigation gets brought up in this conversation it feels like an attempt to move us along as though we've already reached the mitigation discussion and everything beforehand is already done and set in stone.
- Ione Quigley (Rosebud Sioux Tribal Historic Preservation Officer) fully agrees with this comment.

This is not good faith consultation. During these meetings, the Tribes were reassured that the USFWS acknowledge and agree they are still in Step 2 of this process, then this Finding of Effect (FOE) document is posted directly contradicting what was being said in consultation meetings. This is the USFWS bulldozing ahead with this project regardless of what is said in the repetitive meetings with Tribes (2021 letter attached Appendix B). This demonstrates that the USFWS is just going through the motions to check off the consultation "boxes" with no substantive consideration of the Tribe's concerns.

This document is **premature.** The first page of this report states that "This FOE report addresses the third step in the Section 106 process and assesses effects to known historic properties resulting from implementation of the proposed R-Project." This statement and report are in direct conflict with what the Tribes discussed during the consultation meetings as evidenced by the meeting excerpts included above. A Finding of Effect Report should not be attempted until the cultural site inventory for the entire project has been completed. This piecemeal evaluation of select sites is not conducive to an all-encompassing integrative analysis to evaluate the full direct, indirect, and cumulative effects of this project on archaeological, historic and cultural sites. This segmenting practice runs contrary to the goals and purposes of the National Environmental Policy Act (NEPA).

This document is **inaccurate** in its determination that this undertaking will result in adverse effects to only four of the 543 significant sites (those listed on the National Register of Historic Places or Eligible for listing) already recorded within the area of potential effect. The Rosebud Sioux Tribe disagrees with almost every recommendation proposed in this report, and we could present data detailing each instance to substantiate our concerns, but here we will just point out a few of the most blatant inaccurate and archaeologically unethical determinations proposed in this report.

1) The Rosebud Sioux Tribe strongly disagrees with the determination that site 25LN94/25LN113, the Birdwood Creek Site, a buried, stratified, intact pre-contact site, would suffer No Adverse Effect by the Nebraska Public Power District (NPPD) building a tower three meters (10 feet) away. There is no way that the actual boundaries of this buried site can be determined to within three meters by the very limited testing completed here. The construction of a tower within and beside this site would result in an extreme Adverse Effect. Additionally, this draft report states that the "transmission lines would cross directly above the site and a lattice tower would be erected adjacent to the site. The site would no longer retain integrity of setting and feeling. Because the site is eligible under Criterion D, these aspects of integrity, although adding to the overall integrity of the site, are not paramount for this historic property to convey its significance" (4-8). The Rosebud Sioux Tribe values the information that this site will yield to prehistory (under Criterion D) but strongly disagrees with the evaluation that diminishing the setting, feeling, and overall integrity of this site does not also constitute an Adverse Effect.

2) The Rosebud Sioux Tribe strongly disagrees with the determination of No Adverse Effect to the Old Highway 83 corridor (Site TM-00-087 in Thomas County and site LO00-028 in Logan County). In February of 2024 our office submitted a supplemental report on this site to the Nebraska State Historic Preservation Office (NE SHPO) specifically to challenge the evaluation and recommendations proposed by Bedingfield and Webb in 2015. This supplemental report, and the NE SHPO concurrence with our recommendations that these two segments of this Old Highway are eligible for listing on the National Register of Historic Places, are attached to this letter as Appendix C.

As we demonstrated in this report, This R-Project Transmission Line, if approved, would have a devastating Direct Adverse Effect on this historic property that can only be mitigated by rerouting the location of this transmission line at least 10 miles away. To suggest that a line of massive steel transmission towers, 150-190 feet tall, strung along this historic corridor of U.S. Highway 83 "would be consistent with existing infrastructure within the transportation corridor and is not anticipated to detract from the integrity of the site's setting, feeling, or association (USFWS 2018:3-311)" is absurd and it is shocking that any professional archaeologist would make such a suggestion.

3) The Rosebud Sioux Tribe agrees with the determination of Adverse Effects to the historic trails (The O'Fallon's Bluff Oregon-California National Historic Trail site LN00-

028, The Oregon-California National Historic Trail site LN00-028, and the Mormon Pioneer National Historic Trail/ Sand Hill Ruts) but strongly disagrees that moving the transmission line ½ mile east would mitigate the Adverse Effects to these historic sites. The line would need to be moved at least 10 miles away to mitigate the Adverse Effects. The Rosebud Sioux Tribe agrees with the comments made by Linda Tacey, of the Sutherland History Center, during the February 13, 2024 meeting with the USFWS, that "there is no possible mitigation for the effects on the Oregon, Mormon, and Birdwood Trails. These are pristine areas that have not been changed in more than 175 years. Birdwood Trail has artifacts that are more than 10,000 years old. There is no way to mitigate for the proposed impacts on these trails."

All of the Old Trails, including Old Highway 83, were likely old Tribal Trails before immigrants began using them, as pointed out by Steve Vance, the Tribal Historic Preservation Officer for the Cheyenne River Sioux Tribe, in a meeting with the USFWS on December 8, 2023. If this project is built as proposed, all of these historic trails will be irreparably damaged with the historic character of the landscape and the integrity of feeling destroyed forever.

The NEPA process must be objective with professional evaluations based on professional standards that are substantiated by the opinions of fellow professionals of that field (NPS). In this case, the evaluations and recommendations of the archaeologists of POWER Engineers, hired by the NPPD, represent a clear conflict of interest. This conflict of interest is very evident in the recommendations put forward in this Finding of Effect Report. This report appears to be an effort by NPPD, and their contractors, to jump through the hoops of the NHPA in an attempt to justify the decisions that they have already made about this project, and the location where they are determined to put it, regardless of what the data actually reveal about the actual impact this project will have on historic and cultural sites. This Draft Finding of Effect Report is filled with contradictory and inaccurate information that never should have been attempted until all of the cultural site inventories are completed and properly evaluated by an archaeologist who is not on NPPD's payroll.

This Finding of Effect document is **misleading and deceptive in its contents.** The opening statement of this report says: "This report only assesses effects to historic properties identified and evaluated during cultural resource inventories conducted by POWER Engineers between 2015 and 2024," but then proceeds to evaluate and list additional historic properties that do not fall within these criteria, followed by the random inclusion of meeting notes from Tribal consultations where these Finding of Effects were not even discussed.

Such contradictory statements and practices are designed to overwhelm and confuse those who read it. Why are consultation minutes included in a Finding of Effect report when these evaluations were produced with No input from the consulting Tribes? None of the input provided by the Tribes during these meetings were utilized in any way in these evaluations.

Other misleading and contradictory statements in this report include (on page 1-3): "The R-Project will not adversely affect historic properties beyond 0.5 miles from the proposed transmission line route." This is a blatantly false statement as it is repeatedly stated in the reports (including other sections of this one) that the area of potential affect for this project's direct visual effects is 10 miles on either side of the transmission line.

Another misleading and deceptive practice used in this report is to present the direct physical, visual, and audible effects separately even after the 2019 court ruling (*National Parks Conservation Association v. Semonite*) clarified the use of the term "direct," in Section 110 of the National Historic Preservation Act, to include physical, visual, and audible inclusively as direct effects. On June 10, 2019, the

Advisory Council on Historic Preservation put out a statement to inform agencies on the new court rules and further clarified that "if the effect comes from the undertaking at the same time and place with no intervening cause, it is considered "direct" regardless of its specific type (e.g., whether it is visual, physical, auditory, etc.)" Separating out these direct effects and presenting them as if direct physical effects are more important than visual or audible effects is contrary to this new rule and deceptive in the evaluation of the real-life effects this proposed project will have on cultural properties.

This 2019 court decision also clarified the definition of "indirect effects" as effects "that are later in time or farther removed in distance but are still reasonably foreseeable." This Finding of Effect Report acknowledges the requirement to evaluate the indirect effects of this R-Project but then they state that the "Section 106 review of these projects cannot currently be completed. However, because of the nature of these projects, which involves ground disturbance through construction of wind or solar facilities and installation of additional transmission lines, as well as impacts on viewsheds through installation of massed concentrations of energy generation facilities, it is reasonable to assume these planned alternative energy projects would result in both physical and visual effects to aboveground and subsurface historic properties" (1-18).

If the Section 106 evaluation of the indirect effects that this major project will have on cultural resources cannot currently be completed, then moving ahead with plans for this project would be a violation of the NHPA. A Federal Agency cannot just decide that it would be too much work, or they don't know how to do it, so they are going to disregard the law and move ahead with the project anyways. This report briefly identifies five counties on a map where proposed wind or solar projects are likely to be built as a result of this R-Project, but only the one in Holt County is anywhere near the R-Project. If this were truly the case, then there would be no need for the R-Project to be built across this undeveloped, pristine, section of the Nebraska Sand Hills. This is deceptive and contrary to the purpose of the NHPA and NEPA. To properly evaluate this project, the entirety of the direct and indirect effects must be evaluated together to fully understand the true effects of the project as a whole.

Ione Quigley
Tribal Historic Preservation Officer

Jennifer Galindo
Tribal Archaeologist

Benjamin Young
Tribal Section 106 Compliance Officer

Appendix A: Letter Submitted to the Department of the Interior, US Fish and Wildlife Service, by the Rosebud Sioux Tribe Historic Preservation Office on March 1, 2024, in Response to the 2024 R-Project Supplemental Environmental Impact Statement (SEIS)

Tribal Historic Preservation
Cultural Resource Management Office
P.O. Box 750
Rosebud, South Dakota 57570
Telephone: (605) 747-4255

Protecting the Land, Culture, and Tradition for Heritage and for Future Generations

Ione Quigley
Officer

March 1, 2024

This 2024 R-Project Supplemental Environmental Impact Statement (SEIS) is an invalid document as the Tribes have not yet had an opportunity to conduct their cultural site surveys. This is a violation of Section 106 of the National Historic Preservation Act (NHPA).

The Advisory Council on Historic Preservation summarizes the Section 106 process of the NHPA as a four-step review process:

1) Initiating Section 106
2) Identifying Historic Properties
3) Assessing Effects
4) Achieving a Resolution

In this 2024 SEIS, the U.S. Fish and Wildlife Service is only in Step 2, Identifying Historic Properties, until the Tribes have completed their surveys. With this SEIS document, the U.S. Fish and Wildlife Service is attempting to jump from Step 2 to Step 4.

Even before the Tribal Nations have had an opportunity to identify their sites, there are already 543 recorded historic and archaeological sites, that are either eligible or potentially eligible for listing on the National Register of Historic Places, that will suffer direct adverse effects as a result of this proposed R-Project. Mitigation is not an option for many of these historic and archaeological sites. The adverse effects would be so extreme that they would destroy the historic setting of these sites forever. **543 Significant Sites!** That is not acceptable. This proposed R-Project is not important enough to warrant that level of destruction.

I would like to remind U.S. Fish and Wildlife Service employees of the purpose of your office. The official Mission Statement for your agency states that:

> **"The mission of the U.S. Fish and Wildlife Service is to work with others to conserve, protect, and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people."**

As part of this mission you are charged with enforcing Federal Wildlife Laws and protecting endangered species (like the American burying beetle and the whooping crane). You are paid with tax dollars to do this work on the public's behalf. The public depends on you to make the best decisions to protect the fish, wildlife, plants, and their habitats.

We have been told that several professionals, both Nebraska U.S. Fish and Wildlife Service Biologists as well as Nebraska State Historic Preservation professionals, have lost (or left) their jobs rather than violate their professional ethics under political or governmental pressure from this project. It appears that these educated professionals, with the highest standards, sacrificed their jobs because they felt so

strongly that they could not, in good conscience, go along with this environmentally destructive project in this unique and fragile ecosystem.

Just as the public depends on the U.S. Fish and Wildlife Service employees to protect wildlife and their habitats, so to do they depend on the State, Federal, and Tribal Archaeologists, State Historic Preservation Officers (SHPO's), Tribal Historic Preservation Officers (THPO's), and the Advisory Council for Historic Preservation (ACHP) to protect significant historic and cultural properties. For professional archaeologists, we have a set of ethics and standards that we abide by and there is a process to hold Registered Professional Archaeologists accountable for violations of these standards. This is not a new issue as Section 106 compliance work can potentially be compromised in large energy projects. All employees are required by duty to remember professional ethics, regardless of the political pressure that may be incurred from these massive energy development companies. These companies care about getting projects completed in their preferred locations, without regard for the devastating, permanent, environmental and cultural site impacts this project will have. Once this destruction is done – it can never be undone. It is the responsibility of the governmental professionals, particularly the biologists and archaeologists in this case, to care about the effects this proposed project will have on the historic and cultural sites, fish, wildlife, and wildlife habitats. The public, and future generations, depend on their employees to care.

This is the purpose of our National Environmental Policy Act (NEPA) laws. The purpose of an Environmental Impact Statement (EIS) is to evaluate the suitability of a proposed project to a particular location. In the case of this R-Project, everything in the EIS describes why this unique area in the fragile Nebraska Sand Hills, within the migration corridor of the endangered whooping crane and one of the last refuges for the endangered American burying beetle, over a pristine section of the Ogallala Aquifer, with at least 543 significant historic sites needing protection, is the wrong location for this project. Endless public meetings over the last 10 years, with all of the public concern and objection to this project repeated over and over, falls on deaf ears. The agencies are just going through the process without actually taking any of the public's concern into account. Over 10 years in and the Tribes are only now beginning to be included in the consultations.

This R-Project calls for at least 884 holes, each dug 25 to 45 feet deep within the Ogallala Aquifer, to be filled with contaminating cement. According to the Rosebud Sioux Tribe Hydrologist, Syed Huq, "each pole will be a conduit for contaminants to move from the surface down towards the Ogallala Aquifer. Freshly cast concrete exposed to water can release hydroxyl ions and cause pollution, also hydroxide leaching is possible." All of this concrete can also affect groundwater flow. He says that this project "has the potential to adversely impact the Ogallala Aquifer in Nebraska and the hydrologically connected Ogallala Aquifer underneath the Rosebud Reservation."

It appears that the only thing that could potentially stop this environmental disaster is the court system. If Federal Agencies did their jobs correctly, and really used the NEPA process to make the best decisions, then developments would be placed in appropriate locations and critical undisturbed environments, historic sites, water, and wildlife could be protected as the law intended.

This all leads to the fact that this pristine section of the Nebraska Sand Hills is not the right location for this project and if the U.S. Fish and Wildlife Service employees really examine all of the facts already gathered and submitted for this project, they will determine that the **No Action** alternative is the only acceptable alternative and they will not issue the Take Permit for the endangered American Burying Beetle. Any other alternative would cause an unacceptable level of irreparable damage to the historic sites, endangered species, migratory birds, and the extremely fragile ecosystem of this unique Nebraska Sand Hills environment.

Jennifer Galindo, Rosebud Sioux Tribe Archaeologist

Appendix B: Letter Submitted to the Secretary of the Department of the Interior, by the Rosebud Sioux Tribe Historic Preservation Office on September 17, 2021, Regarding the US Fish and Wildlife Service Final Environmental Impact Statement (FEIS) for the R-Project Transmission Line

Tribal Historic Preservation
Cultural Resource Management Office
P.O. Box 809
Rosebud, South Dakota
Telephone: (605) 747-4255
Fax: (605) 747-4211
Email: rst.thpo@rst-nsn.gov

Protecting the Land,
Cultural, and Tradition
for Heritage and for
future Generation

Ione Quigley
Officer

Kathy Arcoren
Admin. Assistant

September 17, 2021

Deb Haaland
U.S. Secretary of the Interior
U.S. Department of the Interior
1849 C Street N.W.
Washington DC 20240

Dear Ms. Haaland

It was recently brought to our attention that the Nebraska Public Power District (NPPD) was planning to construct a new transmission line and substation within the historic territory of the Sicangu Lakota as a first step in developing wind farms across the Nebraska Sandhills. This is referred to as the R-Project Transmission Line. The location of this proposed project falls within the 1851 Fort Laramie Treaty area and within Article 11 of the 1868 Treaty area, within the area specifically inhabited by the Sicangu Lakota, now of the Rosebud Sioux Reservation. Multiple historic documents (Nicollet 1839, Warren 1855 &1856, Bettelyoun and Waggoner 1999), Tribal Winter Counts (Mallery 1893, Cohen 1939), and Tribal oral histories describe the Nebraska Sandhills as the hunting grounds of the Sicangu (aka Brule) Lakota and many cultural sites significant to the Sicangu Lakota are located in this area. Winter counts describe Sicangu battles, catching wild horses and hunting in the Sandhills. The Lakota language has specific names for certain areas of this country and for important cultural plants unique to the Sandhills. The proposed project will have an adverse effect on this cultural landscape and this was not taken into consideration in the review process.

An Environmental Impact Statement (EIS), titled *Final Environmental Impact Statement on Issuance of an Incidental Take Permit and Implementation of a Habitat Conservation Plan for the R-Project Transmission Line,* was completed without proper consultation with the Rosebud Sioux Tribe. Not only was the Rosebud Sioux Tribe not properly consulted, but we were not even included in the historic overview in the EIS. Our long history of use and occupation of the Sandhills was not even acknowledged. These omissions make it glaringly obvious that the writers of this document conducted sub-standard research. This EIS document is woefully inadequate in many ways and was undertaken in a way that neither follows the purpose nor the spirit of the National Historic Preservation Act or the National Environmental Policy Act (NEPA).

The purpose of an EIS under NEPA is to evaluate the effects a proposed project may have on the environment and historic sites and to determine if the location selected is suitable for the project. In this EIS, they describe the unique and fragile nature of the Nebraska Sandhills, how they are the largest area of native grass-stabilized dunes in the world and one of the largest intact native grasslands in North America and how they are prone to extreme erosion when the ground is disturbed. They describe how the project is located within the Central Flyway of cranes and other migratory birds, that make use of the unique interdunal lakes and wetlands in the Sandhills, and how these as well as eagles, hawks and other raptors are killed by these large transmission lines and wind turbines. They describe how sections of historic trails listed on the National Register of Historic Places will be negatively impacted by the proposed project. Then they declare that they are going to proceed with the proposed project anyway. They say that it is too late make changes to the proposed project locations to address these important environmental and cultural site issues. Making changes, based on the findings of an EIS, is the specific purpose of conducting an environmental review.

The National Historic Preservation Act (NHPA) requires the Federal Agency to take into account the effect of the proposed undertaking on any historic property including Traditional Cultural Properties. Traditional Cultural Properties (TCP) can only be identified under consultation with Tribes. The EIS states that a letter was sent to the President of the Rosebud Sioux Tribe in 2014 informing him that the Fish and Wildlife Service was planning to issue an incidental take permit to relocate an endangered species of burying beetle that will be affected by a transmission line project. This was very deceptive communication centering on the beetle take permit rather than the actual massive transmission line and wind farm project. No correspondence was ever sent to the Rosebud Sioux Tribe Historic Preservation Office (RST THPO) which was established in 2004. The cultural site survey methodology undertaken in this project, including tribal consultation, is completely inadequate and does not meet the requirements under the NHPA. Only 39% of the project area was surveyed and no TCP surveys were completed.

The EIS describes how the Elfgren archeological site (25BL110), representing over 10,000 years of repeated occupation with artifacts recovered that include Folsom, Archaic, Late Prehistoric, and Historic components, were exposed in a blowout just 550 feet away from the area of potential effect. They determined that because no artifacts were seen on the ground surface by their survey crew, the project would have no effect on pre-contact cultural resources in this area. Standard pedestrian surface surveys are not an appropriate methodology in this dynamic Sandhills landscape where the Kelso Site dated to 1160 years before present (BP) was buried under nine feet of sand, the Dismal River Ranch Site dated to 3000-4000 years BP was buried under 144 feet of sand, and the Warner Bridge Site dated to 3600 years BP was buried under three feet of sand. Pedestrian surface surveys are also not an adequate method to evaluate the impact this project may have on archeological resources considering that the construction of the transmission lines will involve digging down 25 to 45 feet for each pole and sites are known in the area to be deeply buried.

The Cultural Resource Survey conducted by POWER ENGINEERS, of Lakewood Colorado, in 2015, does not meet the NHPA requirements. The Rosebud THPO was not consulted and Traditional Cultural Properties were not even addressed in this cultural resource survey. The Rosebud Sioux Tribe Historic Preservation Office must be included in the evaluation of cultural and historic resources in this area and a TCP survey must be conducted to address areas of cultural concern to the Sicangu Lakota.

The Ogallala Aquifer underlies the entire project area and the effects of constructing a pole every 1,350 feet, which involves digging down into the sand 25 to 45 feet for each pole, and pouring concrete into each hole to support each massive tubular steel monopole, were not adequately considered in the EIS. To the Rosebud Sioux Tribe, water is a Traditional Cultural Property. Water is used in ceremony, water is medicine, water is life.

The Rosebud Sioux Tribe is requesting that the Incidental Take Permit, issued by the U.S. Fish and Wildlife Service, be revoked until the NEPA and NHPA process is completed properly.

Thank You,

Ione Quigley
Tribal Historic Preservation Officer

Jennifer Galindo
Archaeologist

Ben Young
Section 106 Compliance Officer

Tanner Haukaas
Recording Clerk

Peter Gibbs
Archivist/ Researcher

Lea Rattling Leaf
Archivist/Research Assistant

Appendix C: Supplemental Report Submitted to the Nebraska State Historic Preservation Office, Reevaluating the Previously Recorded "Old Highway 18" Historic Site, by the Rosebud Sioux Tribe Historic Preservation Office and the Nebraska SHPO Concurrence with Our Recommendation that this Historic Transportation Corridor is Eligible for Listing on the National Register of Historic Places

Protecting the Land, Culture, and Tradition for Heritage and for future Generations

Tribal Historic Preservation
Cultural Resource Management Office
P.O. Box 750
Rosebud, South Dakota
Telephone: (605) 747-4255

Ione Quigley
Officer

February 22, 2024

Betty Gillespie
Interim Deputy SHPO
Section 106 Review & Compliance Coordinator
1500 R Street
Lincoln, NE, 68508

Dear Betty,

Please find attached a report with supplemental information on the history, description, and evaluation of a historic property recorded in 2015 as the "Old Highway 83" historic road structure. We are submitting this information to your office in hopes that your staff, with expertise in historic structures, will assist us in producing a nomination for this property to be considered for listing on the National Register of Historic Places.

We look forward to working with you to protect and preserve this historic property and its historic setting.

Thank you,

Jennifer Galindo

Jennifer Galindo
Archaeologist

Ben Young
Section 106 Compliance Officer

Darwin Walking Eagle
GIS/Records Manager

Peter Gibbs
Archivist/ Researcher

Lea Rattling Leaf
Administrative Assistant

Note: *The survey report referenced in the letter dated February 22, 2024, has been redacted due to sensitive information.*

History NEBRASKA

Preserving the past. Building the future.

March 19, 2024

Jennifer Galindo
Tribal Historic Preservation Cultural Management Office
PO Box 750
Rosebud, SD 57570
VIA EMAIL

RE: Old U.S. Highway 83 (Abandoned, Thomas County Segment), Thomas County, NE;
NeHRI#: TM00-087

Dear Jennifer,

Thank you for submitting information regarding the Old U.S. Highway 83 (Abandoned, Thomas County Segment). We enjoy the opportunity to review National Register preliminary evaluation forms as there is always something new to discover about Nebraska communities. We know that preparing the form can be a time-consuming project and appreciate the time and effort that you put into the its preparation.

The professional staff at the Nebraska State Historic Preservation Office (SHPO) has carefully reviewed your submission and, **in our opinion, the Old U.S. Highway 83 (Abandoned, Thomas County Segment) is a candidate for listing in the National Register of Historic Places.** Our office administers the National Register program in Nebraska for the National Park Service. Therefore, properties must meet stringent federal criteria for historic significance and integrity to be considered eligible for listing.

We consider the **Old U.S. Highway 83 (Abandoned, Thomas County Segment)** to be eligible under Criterion A, for its association with Transportation, and under Criterion C, for its association with Engineering

The next step in the National Register process is the preparation of a National Register nomination form. A volunteer or a hired consultant may prepare this form. Please let me know if you would like a list of consultants, and I will send one to you. However, a consultant is not required; anyone may complete a National Register nomination form.

After nominations are prepared, the State Historic Preservation Board reviews them. The Board meets three times each year: in January, May, and September. Deadlines for each meeting begin about 100 days in advance.

The preparation and writing of a National Register nomination is a time-consuming and labor-intensive effort. To make sure it is researched and written to withstand the review of both our Board and the review of the National Park Service (NPS), I strongly encourage preparers to give themselves plenty of time to prepare the nomination.

Once a completed nomination is presented to the Board, they will make a recommendation to the NPS regarding the property's National Register eligibility. If the Board recommends the property, the nomination is forwarded to the NPS for final approval. The NPS then has 45 days to either list the property on the National Register, explain why the nomination is insufficient, or determine that the property is ineligible for listing.

1500 R Street
Lincoln, NE 68508-1651
P: 402.471.3270
history.nebraska.gov

Please know that our office is here to assist you during the entire nomination process, including by reviewing multiple drafts and providing technical assistance. Our office is also committed to visiting every property that is being nominated for the National Register. During these visits, we will take photographs of the resource that will meet the NPS specifications for nominations. I can also help with the preparation of the necessary maps for the nomination, if requested.

I can either email you a copy of the nomination form or you may download a copy at https://www.nps.gov/subjects/nationalregister/national-register-forms.htm. If you need further assistance, *National Register Bulletin 16A* offers the most complete guidance for completing the form. It and other National Register Bulletins are available at https://www.nps.gov/subjects/nationalregister/publications.htm.

Thank you once again for your interest in the Old U.S. Highway 83 (Abandoned, Thomas County Segment). Please feel free to contact me with any questions.

Sincerely,



Michael M. Belding III
National Register Coordinator
Nebraska State Historic Preservation Office
(402) 613-1591 | michael.belding@nebraska.gov

History NEBRASKA

Preserving the past. Building the future.

March 19, 2024

Jennifer Galindo
Tribal Historic Preservation Cultural Management Office
PO Box 750
Rosebud, SD 57570
VIA EMAIL

RE: Old U.S. Highway 83 (Abandoned, Logan County Segment), Logan County, NE; NeHRI#: LO00-028

Dear Jennifer,

Thank you for submitting information regarding the Old U.S. Highway 83 (Abandoned, Logan County Segment). We enjoy the opportunity to review National Register preliminary evaluation forms as there is always something new to discover about Nebraska communities. We know that preparing the form can be a time-consuming project and appreciate the time and effort that you put into the its preparation.

The professional staff at the Nebraska State Historic Preservation Office (SHPO) has carefully reviewed your submission and, **in our opinion, the Old U.S. Highway 83 (Abandoned, Logan County Segment) is a candidate for listing in the National Register of Historic Places.** Our office administers the National Register program in Nebraska for the National Park Service. Therefore, properties must meet stringent federal criteria for historic significance and integrity to be considered eligible for listing.

We consider the **Old U.S. Highway 83 (Abandoned, Logan County Segment)** to be eligible under Criterion A, for its association with Transportation, and under Criterion C, for its association with Engineering

The next step in the National Register process is the preparation of a National Register nomination form. A volunteer or a hired consultant may prepare this form. Please let me know if you would like a list of consultants, and I will send one to you. However, a consultant is not required; anyone may complete a National Register nomination form.

After nominations are prepared, the State Historic Preservation Board reviews them. The Board meets three times each year: in January, May, and September. Deadlines for each meeting begin about 100 days in advance.

The preparation and writing of a National Register nomination is a time-consuming and labor-intensive effort. To make sure it is researched and written to withstand the review of both our Board and the review of the National Park Service (NPS), I strongly encourage preparers to give themselves plenty of time to prepare the nomination.

Once a completed nomination is presented to the Board, they will make a recommendation to the NPS regarding the property's National Register eligibility. If the Board recommends the property, the nomination is forwarded to the NPS for final approval. The NPS then has 45 days to either list the property on the National Register, explain why the nomination is insufficient, or determine that the property is ineligible for listing.

1500 R Street
Lincoln, NE 68508-1651
P: 402.471.3270
history.nebraska.gov

Please know that our office is here to assist you during the entire nomination process, including by reviewing multiple drafts and providing technical assistance. Our office is also committed to visiting every property that is being nominated for the National Register. During these visits, we will take photographs of the resource that will meet the NPS specifications for nominations. I can also help with the preparation of the necessary maps for the nomination, if requested.

I can either email you a copy of the nomination form or you may download a copy at https://www.nps.gov/subjects/nationalregister/national-register-forms.htm. If you need further assistance, *National Register Bulletin 16A* offers the most complete guidance for completing the form. It and other National Register Bulletins are available at https://www.nps.gov/subjects/nationalregister/publications.htm.

Thank you once again for your interest in the Old U.S. Highway 83 (Abandoned, Logan County Segment). Please feel free to contact me with any questions.

Sincerely,



Michael M. Belding III
National Register Coordinator
Nebraska State Historic Preservation Office
(402) 613-1591 | michael.belding@nebraska.gov

Letter from the Rosebud Sioux Tribe to the Service Concerning the Programmatic Agreement, dated November 15, 2024

Tribal Historic Preservation
Cultural Resource Management Office
P.O. Box 750
Rosebud, South Dakota 57570
Telephone: (605) 747-4255

Protecting the Land,
Culture, and Tradition
for Heritage and for
Future Generations

Ione Quigley
Officer

November 15, 2024

Rosebud Sioux Tribe Response to the Proposed Draft for the R-Project Programmatic Agreement

The Rosebud Sioux Tribe feels very strongly that a Programmatic Agreement is not appropriate for this project and we request that the Nebraska State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP) support us in our opinion that following the Standard National Historic Preservation Act (NHPA) Section 106 Process is the correct action in this case.

As stated in nearly every consultation meeting on this project, the Rosebud Sioux Tribe is strongly opposed to a phased identification approach for cultural resources on this project. It is critical that the full effects that this proposed project would have on all cultural resources must be fully determined and evaluated by the Tribes prior to any issuance of an Incidental Take Permit by the US Fish and Wildlife Service.

The part of this proposed project that crosses the pristine northern section of the Ogallala Aquifer is part of a Traditional Cultural Landscape with archaeological sites spanning 10,000 years and unique plants and animals that still thrive in this last, relatively undisturbed, remnant of this fragile ecosystem. This is too important to try to fast-track.

As we have repeatedly pointed out during consultation meetings, we consider the winged ones, the four-legged ones, the ones that swim, the ones that crawl, the plant life, and their ecosystems as cultural resources (Ione Quigley during consultation meetings 12-8-2023 and 2-13-2024). Additionally, when evaluating the affect a project will have on these cultural resources, we do not just consider the surface, but also the effect it will have on what is above and below. Specifically, in this case, the Ogallala Aquifer directly below and the migrating birds above.

Respectfully,

Ione Quigley

Jennifer Galindo
Archaeologist

Ben Young
Section 106 Compliance Officer

Darwin Walking Eagle
Records Manager

Lea Rattling Leaf
Administrative Assistant

Letter from the Service to the Rosebud Sioux Nation in Response to Letters received on November 6 and 15, 2024, dated January 9, 2025

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
9325 South Alda Road
Wood River, Nebraska 68883

IN REPLY REFER TO:
R-Project
Section 106

January 9, 2025

Ione Quigley, Tribal Historic Preservation Officer
Rosebud Sioux Tribe
[redacted]

Subject: Response to Rosebud Sioux Tribe letters dated November 6, 2024, and November 15, 2024, regarding comments on the Draft Finding of Effect (FOE) Report for the R-Project and the proposed R-Project Programmatic Agreement (PA).

Dear Ms. Quigley:

We, the U.S. Fish and Wildlife Service (Service), thank you for your comments on the draft Finding of Effect (FOE) Report and Programmatic Agreement (PA) and your continued coordination on the Nebraska Public Power District's (NPPD) R-Project. NPPD has submitted to the Service an application for a federal Incidental Take Permit under Section 10 of the U.S. Endangered Species Act for incidental take of the federally threatened American burying beetle from the proposed construction, operation, and maintenance of the R-Project. The Service is the lead agency responsible for compliance with the National Environmental Policy Act of 1969, as amended (42 U.S.C. § 4321 *et seq.*) and Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 306108).

Enclosure 1 of this letter responds to your November 6, 2024, letter on the Draft FOE Report distributed by the Service for review on October 11, 2024, which contains comments on the Service's approach to the Section 106 process, the types of effects analyzed in the Draft Finding of Effect Report, the consideration of indirect effects, and the finding of effects determinations for specific historic properties. Enclosure 1 of this letter also responds to your November 15, 2024, letter regarding the new PA currently in development with Tribal Nations and consulting parties, which contains comments on the overall approach to the PA and phased identification.

The Service looks forward to upcoming discussion on these issues at the in-person meetings from January 14 to 16, 2025, in North Platte, Nebraska. The purpose of these meetings will be to further discuss pertinent Section 106 concerns with the Tribal Nations and other consulting parties.

Please note that the reports referenced throughout Enclosure 1 are available on the project SharePoint site: https://icfonline.sharepoint.com/sites/EP/104516.0.001/RProject%20Section%20106%20Tribes/Forms/AllItems.aspx.

If you have additional comments or questions on this letter or other Section 106 materials, please contact Kassie Karssen at (308) 216-2130 or by e-mail at kassandra_karssen@fws.gov.

Sincerely,

Mark Porath
Nebraska Project Leader/Field Supervisor
Ecological Services, Mountain-Prairie Region

Enclosure 1: Responses to the November 6, 2024, and November 15, 2024, Rosebud Sioux Tribe Letters

1 Response to the November 6, 2024, Letter from the Rosebud Sioux Tribe to the Service

1.1 Section 106 Process Concerns

1.1.1 Sequence and Pace of the Section 106 Process; FOE Report is Premature

Your letter states that with publishing the Draft Finding of Effect (FOE) Report, the Service is "attempting to jump to Step 3 [of the Section 106 process] (Assessing Effects)" before it completes Step 2 (Inventory). The letter also states that the FOE report is premature and should be "produced at the completion of the cultural sites inventory (both archaeological and traditional cultural properties surveys)".

In response to these concerns, the Service would like to first provide some context on the Section 106 process for this project, as it dates to 2014. Between 2014 and 2019, the Service conducted Section 106 consultation with the Advisory Council on Historic Preservation (ACHP), Nebraska State Historic Preservation Officer (SHPO), National Park Service (NPS), 20 Tribal Nations, and other consulting parties. The Section 106 process occurring from 2014-2019 culminated in the execution of the *Programmatic Agreement among the U.S. Fish and Wildlife Service – Mountain-Prairie Region, the Nebraska State Historic Preservation Officer, Nebraska Public Power District, and the Advisory Council on Historic Preservation regarding the Construction, Maintenance, and Operation of the R-Project 345 Kilovolt Transmission Line, Blaine, Garfield, Holt, Lincoln, Logan, Loup, Thomas, and Wheeler Counties, Nebraska* (2019 PA) on April 10, 2019, in accordance with 36 CFR 800.14(b)(1)(ii). This 2019 PA was associated with the Service's issuance of an incidental take permit (ITP) to NPPD for the R-Project.

In July 2019, petitioners filed a lawsuit that challenged the Service's decision on the R-Project under the Endangered Species Act (ESA), National Environmental Policy Act (NEPA), and National Historic Preservation Act (NHPA) (*Oregon-California Trails Association v. Walsh*, Case No. 1:19-CV-01945-WJM, U.S. District Court Colorado). Although the Court found in favor of the Service on several counts, it did identify certain discrete errors in the Service's decision-making process, and thus, ruled to vacate and remand the ITP to the Service on June 17, 2020. Under Section 106 of the NHPA, the Court stated that there was insufficient consideration of routing alternatives related to historic properties and insufficient consultation related to reasonably foreseeable wind energy projects. Additionally, the Court stated that the definitions for direct and indirect effects were inaccurate and needed to be updated to reflect the 2019 Court Ruling in *National Parks Conservation Association v Semonite*, D.C. Circuit Court. Although the R-Project court decision identified discrete errors in the Section 106 consultation, the 2019 PA is still valid and has not been terminated.

The 2019 PA:

- Acknowledged that adverse effects would occur to O'Fallon's Bluff and a second segment of the combined Oregon and California National Historic Trails (RPKB-2 and RPKB-13), a segment of the Mormon Pioneer National Historic Trail (RPKB-3), a segment of the Pony Express National Historic Trail, St. John's Lutheran Church (BL00-008), Sutherland State Aid Bridge (LN00-032), and a historic ranch in Logan County(LO00-001) (Whereas Clause #7);
- Deferred final identification and evaluation of historic properties (Stipulation I) since NPPD has not acquired the rights-of-way for the entire route (Whereas Clause #16);
- Determined that identified historic properties located beyond 0.5 mile of the R-Project were not assessed for effects since the R-Project will have no direct effects on those properties (Whereas Clause #18);
- Established process for phased construction (Stipulation II.A);
- Established measures for avoidance and minimization of adverse effects to historic properties, when possible (Stipulation II.B); and
- Included determinations of eligibility and findings of effects for known cultural resources in Appendices C through E.

Since the court decision, NPPD has modified its proposed route, shifting the route 0.5-mile to the east of the recorded boundary of the O'Fallon's Bluff site to minimize adverse effects to this historic property. In July 2023, the Service re-initiated consultation in accordance with Section 106 of the NHPA. Since re-initiating consultation, the Service has undertaken the following:

- Reviewed the 2014-2019 Section 106 documentation;
- On an ongoing basis, updated the contact list of Tribal Nations and other Consulting Parties;
- Conducted regular Section 106 consultation with Tribal Nations and Consulting Parties by ensuring all parties receive regular correspondence (e.g., emails, phone calls) about decision points in the process; receive new reports and revised reports for review; and are invited to monthly virtual meetings and in-person meetings to receive information from the Service and allow for discussion of the issues;
- Defined the area of potential effects (APE) and received concurrence from the SHPO;
- Prepared a Cultural Resources Inventory Report (CRIR) that was submitted to all Tribal Nations and Consulting Parties for review on November 17, 2023, revised and submitted again to consulting parties for review on February 5, 2024, and finalized in July 2024, incorporating comments from Tribal Nations and Consulting Parties. The CRIR provides a project description and overview, summarizes 2014-2019 consultation efforts, summarizes efforts to identify and evaluate historic properties from 2012 to present, documents known cultural resources within the APE for physical effects, and identifies additional Section 106 tasks to be completed; and
- Prepared the Draft FOE Report to summarize findings regarding effects on historic properties identified through the 2014-2019 surveys.

Additionally, the Service is making a reasonable and good faith effort to identify historic properties, to include properties of traditional religious and cultural importance and traditional cultural places, as described below.

The Service recognizes that the 2014 to 2019 efforts, and subsequent reports prepared using data from those efforts, do not reflect the special expertise and traditional knowledge of Tribal Nations, as previous surveys did not include Tribal Cultural Specialists (TCS). The Service acknowledges that there are outstanding efforts related to identifying, evaluating, assessing, and resolving adverse effects to historic properties and places of traditional religious and cultural importance to Tribal Nations. In response to

concerns from you and other Tribal Nations on the lack of inclusion in the identification efforts, the Service has stated that surveys by TCSs must be completed in the APE for direct, physical effects. We understand that you and other Tribal Nations requested that these surveys be conducted within the APE for visual effects. However, as stated in the letter dated June 12, 2024, the decision from the Secretary of the Interior's Office is that pedestrian surveys of the APE for direct, visual effects go beyond what is considered a reasonable, good faith effort under NHPA.

To address the court decision, project modifications (i.e., shifting the route by 0.5 mile), and the identified need for TCS surveys of the physical APE, the Service has proposed to amend the 2019 PA to sunset upon execution of a new PA, which is currently in development in consultation with Tribal Nations and consulting parties. A PA is a process document that enables the signatories to agree on the process and obligations remaining under Section 106 following the execution of the PA. Importantly, a PA does not mark an endpoint in the Section 106 process. Rather, it outlines how the responsible parties will conduct outstanding efforts for identification, assessment of effects, resolution of adverse effects, and post-review discoveries, and how the ACHP, SHPO, Tribal Nations, and other consulting parties will be consulted and informed throughout the process.

As requested by the Tribal Nations and Consulting Parties, the Service has provided portions of the PA for review incrementally, soliciting written comments and facilitating discussions at virtual monthly meetings. As a baseline, the Service first provided the 2019 PA for review with the Service's suggested edits and comments on how the text of that agreement needs to be modified and requested input from consulting parties. Next, we provided consulting parties with portions of the PA to review, which contained proposed revisions to the Whereas clauses and required stipulations that contain standardized language. The Service continued to provide the consulting parties portions of the PA for review incrementally. The Service recognizes that providing the PA segments non-sequentially has caused confusion. As the next step, the Service is preparing a full Preliminary Draft PA with all portions compiled in a single file. The Preliminary Draft PA will contain some revisions based on Tribal Nation and consulting party review. The Service will provide the Preliminary Draft PA to Tribal Nations and consulting parties ahead of the January in-person meetings. The Service plans to provide Tribal Nations and consulting parties with multiple future drafts of the PA that address comments received on previous drafts.

Regarding the sequencing of the Section 106 process, the Service has acknowledged that there are outstanding efforts for Step 2 of the Section 106 Process (Identification of Historic Properties). However, within Step 2, the Section 106 regulations provide for a phased process to conduct identification and evaluation efforts (36 CFR 800.4[b][2]) and allow for deferring final identification and evaluation of historic properties if it is specifically provided for in a PA (see 36 CFR 800.4[b][2] and 36 CFR 800.14[b]). Within Step 3 of the Section 106 process (Assessment of Adverse Effects), the Section 106 regulations provide for a phased process in applying the criteria of adverse effect (36 CFR 800.5[a][3]). As mentioned above, the 2019 PA also provided for a phased approach to identification and evaluation.

Survey efforts by TCSs to identify historic properties and places of religious and cultural significance can begin prior to execution of the PA, although surveys of approximately 7 percent of the survey area would need to be deferred prior to NPPD gaining access, which would occur after the PA is executed. As stated in a letter dated September 27, 2024, from the Service to Tribal Nations and discussed during the September 25, 2024 Tribal-only portion of the consulting party meeting, NPPD has retained a consulting firm, Seventh Sovereign, to assist with the development and implementation of the Tribal Participation Plans (TPPs), which will guide the tribal survey process for the R-Project. The TPPs, which will be developed in close coordination with Tribal Nations, will address logistical issues such as payment

between NPPD and TCSs, scheduling surveys, communication procedures, and protocols on sensitive or confidential information (such as how documentation of resources of tribal cultural and religious significance would be conveyed to the Service).

The Draft FOE Report was prepared to assess effects on known historic properties that had been previously assessed during the 2014-2019 consultation, recognizing that, among other outstanding identification and evaluation efforts, a substantial survey effort to identify properties of traditional religious and cultural importance and traditional cultural places is still outstanding. The Executive Summary of the Draft FOE Report states:

> ***This report only assesses effects to historic properties identified and evaluated during cultural resource inventories conducted… between 2015 and 2024*** [emphasis in the original document]. It does not address the R-Project's effects to cultural resources that are: (a) previously identified in the project's [APE] but not yet evaluated for the National Register of Historic Places (NRHP); (b) aboveground resources determined eligible for the NRHP in surveys conducted more than 30 years ago that have not been recently revisited to confirm they retain integrity; and (c) cultural resources that may be identified and evaluated during future survey and evaluation efforts, to be stipulated in a new R-Project [PA], currently being developed in consultation with Tribal Nations and consulting parties. Identification, evaluation, assessment of effects – and, if necessary, avoidance, minimization, and mitigation – for unknown historic properties will be conducted in accordance with the new PA (ICF 2024:i).

The Service will use a phased approach in applying the criteria of adverse effect in accordance with 36 CFR 800.5 (a)(3), which states that "Where alternatives under consideration consist of corridors or large land areas, or where access to properties is restricted, the agency official may use a phased process in applying the criteria of adverse effect consistent with phased identification and evaluation efforts…" Although still under development, the PA will contain stipulations for a phased finding of effect process. This finding of effect process, as outlined in the PA, should take place sufficiently in advance of construction to ensure feasibility of avoidance and minimization measures, should those be necessary. Pursuant to this approach, the Service considers the Draft FOE Report a preliminary assessment of effects and will continue to assess effects to historic properties and properties of traditional religious and cultural importance upon their identification and evaluation by upcoming TCS surveys in advance of project construction.

1.1.2 The Service's Consideration of Tribal Nations' Concerns

Your letter stated that the Service is "just going through the motions to check off consultation 'boxes' with no substantive consideration of the Tribe's concerns."

As the Service reinitiated the Section 106 and Tribal consultations for the R-Project in 2023, we recognized the need to revise how we engaged with Tribal Nations. During the Section 106 consultation from 2014-2019, only 20 Tribal Nations were included. There is no record of regular meetings in this period. The Service sent three letters to each of 20 Tribal Nations: a letter regarding the Notice of Intent to develop an EIS and initiate Section 106 consultation in 2014, a letter detailing the final project route and inviting Tribal Nations to contribute to the Draft EIS in 2016, and a final outreach letter in 2018. For this current Section 106 consultation, the Service has reached out to 32 Tribal Nations and has been consistent in our communications with these Tribal Nations. Our communication methods include emails, phone

calls, and post mail. The Service is hosting monthly Tribal Nation only virtual meetings, as well as in-person meetings.

In response to concerns from you and other Tribal Nations on the lack of inclusion in the identification efforts, the Service is requiring TCS surveys be conducted for the physical APE. Surveys can begin prior to execution of the PA, guided by TPPs, which will be developed in close coordination with Tribal Nations.[1]

The PA, which is currently being developed in coordination with Tribal Nations, will stipulate how the Section 106 process – identification, assessment of effects, and avoidance, minimization, or mitigation of adverse effects – will be conducted for cultural resources identified during TCS surveys and other cultural resource surveys requiring completion. The decision by a consulting party not to participate in the development of a PA does not prevent its execution. We sincerely hope you will consider participating in the development of this PA in its entirety, and particularly in the development of processes and protocols for the Tribal survey effort. Regardless of your choice to participate in the development of the PA, the Service will ensure that Tribal Nations' interests and input are considered and addressed in the PA.

1.1.3 Conflict of Interest in POWER Engineers Survey Reports

The letter stated that "…the evaluations and recommendations of the archaeologists of POWER Engineers, hired by the NPPD, represent a clear conflict of interest." It is the Service's view that POWER Engineers conducted adequate survey of the approximately 93% of the APE for physical effects to which NPPD currently has access. If there were indeed deficiencies in the POWER Engineer reports, they were subject to what amounts to independent peer review from both the Service and the Nebraska SHPO, as well as more recent reviews by THPOs. The Service and the SHPO in fact ***disagreed*** with many of POWER Engineer's original recommendations. These original recommendations ***are not being followed*** in the Service's Section 106 documentation. It must also be noted that the Service is open to additional contributions from other consulting parties regarding the POWER Engineer survey report recommendations. See Section 1.2, below, for additional information.

1.2 Concerns about Specific Sites

In reference to the Draft FOE Report, your letter noted that the Tribe "disagrees with almost every recommendation proposed in this report" and pointed out specific concerns about the following sites:

- Birdwood Creek (Site 25LN94/25LN113)
- Old Highway 83 (Site TM-00-087 in Thomas County and site LO00-028 in Logan County)
- Oregon-California National Historic Trail (O'Fallon's Bluff; LN00-028) and Mormon Pioneer National Historic Trail (Sand Hill Ruts; Site RPKB-3)

Comments on the Birdwood Creek site stated that although the transmission line tower was microsited 3 meters to the east of the boundary of the site, "[t]here is no way that the actual boundaries of this buried site can be determined to within three meters by the very limited testing completed here." The Rosebud Sioux Tribes disagrees with the Draft FOE Report's finding that although setting and feeling would be affected, "these aspects of integrity are not paramount for this historic property to convey its significance" (Draft FOE page 4-8). Upon reviewing these comments and the original reports the Draft FOE Report was based on, the Service agrees with Tribal Nations that the R-Project *will result in an adverse effect to*

[1] Approximately 7 percent of the surveys would need to be deferred until after the PA is executed and NPPD gains access.

Birdwood Creek. Future Section 106 materials prepared for the R-Project will reflect this position (e.g., the PA and future drafts of the FOE Report).

Your letter had similar comments on the Old Highway 83 site, referencing additional documentation provided by the Tribe to the SHPO about the highway and stating that the R-Project would have a "devastating Direct Adverse Effect on this historic property that can only be mitigated by rerouting the location of this transmission line at least 10 miles away." Upon reviewing the additional documentation provided by your office, the Service agrees that this segment of the Old Highway 83 contributes to the significance of the overall historic highway, and as such, the R-Project *will result in an adverse effect to the Old Highway 83 site*. Future Section 106 materials prepared for the R-Project will reflect this position (e.g., the PA and future drafts of the FOE Report). The Service thanks the Rosebud Sioux Tribe for sending the Service the report originally submitted to the Nebraska SHPO on February 22, 2024, regarding National Register eligibility of RPKB-1.

Regarding the Oregon-California National Historic Trail (O'Fallon's Bluff) and Mormon Pioneer National Historic Trail (Sand Hill Ruts), your letter suggested that full avoidance of effects would necessitate the line to be moved 10 miles from these historic properties. The letter specifically states that the Tribe "disagrees that moving the transmission line ½ mile east would mitigate the Adverse Effects to these historic sites."[2] The letter also notes that these trails were likely used by Tribes before they were used by immigrants (Euro-American settlers), and that the project would irreparably damage these trails, "with the historic character of the landscape and the integrity of feeling destroyed forever". Regarding the position that moving the transmission line ½ mile to the east does not mitigate adverse effects on the NHT segments, please note that the Service identifies adverse effects to these properties; the route adjustment is considered a minimization measure, rather than an avoidance or mitigation measure. Chapter 4 of the Draft FOE Report describes the Service's assessment of effects on these properties. Regarding the statements suggesting that full avoidance would necessitate moving the line 10 miles from the historic properties, the Service's discretion over routing of the R-Project is limited.[3] Ultimately, the Service's decision is whether to issue an ITP based on the applicant's (NPPD's) proposed project and HCP. ITPs are voluntary permits sought by applicants who seek incidental take of ESA-listed species for otherwise lawful activities. NPPD, as the applicant for the R-Project, is responsible for preparation of an HCP and submittal of an ITP application to the Service. The Service's role is to review NPPD's application against the ITP issuance criteria (50 CFR 22.307(c)). Per Section 10(a)(1)(B) and (2)(B) of the ESA, the Service "shall issue" the permit if the permit application, including the Revised HCP, meets all the ITP issuance criteria, which includes other Section 10 and general permit requirements of the Service's regulations. Although the Service must evaluate alternatives in the NEPA process and may recommend NPPD consider route modifications and avoidance or minimization efforts during the planning process, it does not have authority to require NPPD to alter the proposed route or select a different one if the permit application meets all the permit issuance criteria.

Section 106 directs lead agencies to evaluate alternatives to the undertaking that could avoid or minimize adverse effects to historic properties (36 CFR 800). Often, lead agencies use the NEPA alternatives development process to fulfill this requirement to consider alternatives for the Section 106 process. This

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[2] It should be noted that NPPD only modified the R-Project's proposed route to move the line 0.5 mile from O'Fallon's Bluff; there was no reroute associated with the other historic trails.

[3] As stated in Section 2.2 of the Draft Supplemental Environmental Impact Statement (SEIS), to supplement the FEIS and provide more transparency and detail about NPPD's route selection, the Service requested that NPPD summarize the process for selecting the final route. See Draft SEIS Appendix C, Nebraska Public Power District Summary of the Power Review Board and Transmission Line Routing Process.

is the case for the R-Project. As described in Draft Supplemental Environmental Impact Statement (SEIS) Section 2.7, the Service considered several alternatives developed specifically to avoid and minimize adverse effects to known historic properties. These alternatives were dismissed from detailed consideration for the reasons described in Draft SEIS Section 2.7. Therefore, the Service is unable to avoid adverse effects to Site LO00-028 (Highway 83 corridor), Site LN00-028 (O'Fallon's Bluff Oregon-California National Historic Trail), and the Mormon Pioneer National Historic Trail/Sand Hill Ruts. However, in consultation with Tribal Nations and other consulting parties, and through the development of the PA, the Service intends to address adverse effects to these historic properties through minimization or mitigation.

1.3 Methods for FOE Effects Analysis

1.3.1 Report Contents are Misleading

The letter states that the Draft FOE Report contains misleading and contradictory information, such as lists of properties for which effects are not assessed and meeting notes from Tribal Consultations where the Draft FOE Report was not discussed.

The Service acknowledges that the Draft FOE Report contains information about properties for which effects have not been assessed yet. As stated in the report, the Draft FOE Report made findings of effect based solely on results from the 2015-2019 POWER Engineers reports. For properties that require more information to assess effects, including input from TCS surveys, the Service intends to include stipulations in the PA that describe how the effects to those properties will be assessed in consultation with Tribal Nations and consulting parties. Those findings of effect will be reviewed and consulted on by all Tribal Nations and consulting parties before the Service requests concurrence on the findings. For any findings of adverse effects, the PA will be followed regarding how to determine appropriate avoidance, minimization, or mitigation measures to address the effects.

1.3.2 Visual Effects

The letter states that it is false to state that the R-Project will not adversely affect historic properties beyond 0.5 mile from the R-Project transmission line, as "it is repeatedly stated in the reports (including other sections of this one) that the area of potential affect for this project's direct visual effects is 10 miles on either side of the transmission line".

In correspondence dated October 5, 2018 from the Nebraska SHPO to POWER Engineers, the SHPO stated, "…the NeSHPO concurs with the determination that the proposed project will have no direct or indirect effects on standing structures or archaeological sites located > 0.5 miles from the project area." This statement was reflected in a whereas clause in the 2019 PA.

The Service acknowledged in the Draft FOE Report that this finding may not reflect the views of consulting Tribal Nations, as also stated in the SHPO letter, "…that this determination does not necessarily reflect the opinion of Native American Tribes that may have an interest in the area or resources, nor does it pertain to Traditional Cultural Properties, if they exist in the area" (p. 1-3).

The Service proposes to modify this no adverse effect finding with the following caveats:

- This would only apply to historic-era, non-indigenous sites, buildings, structures, objects, and districts; and

- This would not include properties and places of religious and cultural significance to Tribal Nations.

The Service also agrees that archaeological sites are *not* less likely to incur visual effects than other historic property types and will be working with Tribal Nations and consulting parties to ensure effects are recognized appropriately.

1.3.3 Separation of Effects

Your letter expressed objection to the Service's approach to assessing effects in the APE, which consisted of analyses of separate effects categories for physical, audible, and visual effects. In your view, this approach presented physical effects as more important than visual and audible effects, contravening the 2019 case *National Parks Conservation Association v. Semonite* that clarified "if the effect comes from the undertaking at the same time and place with no intervening cause, it is considered 'direct' regardless of its specific type (e.g., whether it is visual, physical, auditory, etc.)."

The Service agrees that physical, visual, and audible effects are direct effects in accordance with *National Parks Conservation Association v. Semonite*, and they are treated as such in the CRIR, FOE, and the Draft SEIS. The Service, however, has not arbitrarily asserted physical effects to be more important than other effects. Instead, in accordance with its approach to the APE—with which the Nebraska SHPO concurred on July 21, 2023, and as detailed in the Draft SEIS and CRIR and discussed at consulting party meetings in August 2023, February 2024, and June 2024 – the Service analyzed the APE as three overlapping areas of potential direct physical, visual, and audible effects.

Physical, audible, and visual effects can diminish integrity of historic properties in different ways, at different intensities, and at different ranges from the project centerline. For instance, physical effects for the R-Project (e.g., physical damage or destruction of historic properties) would be limited to within 150 feet of each side of the transmission line (in other words, a 300-foot corridor).

Audible effects would not lead to physical damage or destruction of a historic property but would extend over a larger range from the transmission centerline (0.5 mile on either side of the transmission line) and could affect the integrity of setting, feeling, and association.

Finally, visual effects have a high potential to affect historic properties' integrity of setting and, feeling and could occur up to 10 miles from the transmission line.

Furthermore, the physical, audible, and visual APEs overlap, with historic properties in the APE for physical effects also incurring audible and visual effects. Audible and visual effects would be of greater intensity here, as the area of physical effect is in closer proximity to the transmission line.

Recognizing these different types of direct effects (physical, audible, and visual) and the different ways they can affect or adversely affect historic properties does not obscure the assessment of effects under Section 106. Differentiating the types of effects and intensity of those effects helps the Service understand the type and level of mitigation that may be required if avoidance and minimization of adverse effects is not possible. The Service believes this approach is consistent with the court's finding in *National Parks Conservation Association v. Semonite*.

1.3.4 Direct Versus Indirect Effects

Your letter states that "if the Section 106 evaluation of the indirect effects that this major project will have on cultural resources cannot currently be completed, then moving ahead with plans for this project would

be a violation of the NHPA." To address part of the 2020 court remand, the Service, both in the Draft SEIS and the Draft FOE Report, considered indirect effects of renewable energy projects that would either connect directly to the R-Project or that are contingent upon its construction (Draft SEIS Section 3.1). The Draft FOE Report stated that because "details required to determine an APE… are either completely or partially unknown… a Section 106 review of these projects cannot currently be completed." Nevertheless, the Service acknowledged in the Draft FOE report that because of the nature of these projects it would be "reasonable to assume [the projects] would result in both physical and visual effects to aboveground and subsurface historic properties."

The Service agrees with the Rosebud Sioux Tribe that the Draft FOE Report is incorrect when it states that Section 106 review of these projects cannot be completed; therefore, the Draft FOE Report will be revised to state that the R-Project would likely incur adverse effects to aboveground and subsurface properties. The Draft FOE Report will also be revised to expand on which actions would cause what type of effects, including the potential for auditory and atmospheric effects resulting from related renewable energy projects.

As stated in the Section 106 regulations (36 CFR 800.4(b)(1)), in determining the level of effort required for the identification of historic properties, federal agencies shall consider, among other factors, the degree of Federal involvement. The Service does not have the authority to compel companies developing renewable energy projects to release proprietary information. Therefore, Section 106 review of indirect effects from the related renewable energy projects is currently limited to publicly available information, which means there is not enough information available to determine APEs. For these reasons, the Service cannot identify historic properties that would be affected by these projects, identify specific indirect effects to historic properties, or specify avoidance, minimization, or mitigation measures. Therefore, the Service's Section 106 assessment of effects to the related renewable energy projects is imprecise, reflecting the information available and the degree of Federal involvement in these projects at this stage, summarized in this statement from the draft FOE: "[I]t is reasonable to assume these planned alternative energy projects would result in both physical and visual effects to aboveground and subsurface historic properties."

As noted in the Draft FOE Report, any of these projects requiring federal action in the future would trigger separate NEPA and Section 106 processes and ensure more detailed identification, evaluation, and resolution processes for any effects to historic properties.

2 Response to the November 15, 2024, Letter from the Rosebud Sioux Tribe to the Service

2.1 Disagreement with Programmatic Agreement Approach

Your letter states that the Rosebud Sioux Tribe "feels very strongly that a Programmatic Agreement [PA] is not appropriate for this project" and requested the SHPO and ACHP support that opinion.

See the responses in Section 1.1.1 and Section 1.1.2, which provide background on the PA developed under the previous consultations (in 2019) and the PA development process taking place now. As stated above, a PA is a process document that enables the signatories to agree on the process and obligations remaining under Section 106 following the execution of the PA. Importantly, a PA does not mark an endpoint in the Section 106 process. Rather, it outlines how the responsible parties will conduct

outstanding efforts for identification, assessment of effects, resolution of adverse effects, and post-review discoveries, and how the ACHP, SHPO, Tribal Nations, and other consulting parties will be consulted and informed throughout the process.

2.2 Disagreement with Phased Identification Approach

The letter states that the Rosebud Sioux Tribe is "strongly opposed to a phased identification approach for cultural resources on this project. It is critical that the full effects that this proposed project would have on all cultural resources must be fully determined and evaluated by Tribes prior to any issuance of an Incidental Take Permit by the US Fish and Wildlife Service."

See response above under Section 1.1.1, which provides an explanation of the phased identification process and the regulatory context for it. See multiple responses above for an explanation of how the results of the Tribal surveys will be considered in the development of findings of effects and development of avoidance, minimization, and mitigation measures for adverse effects. For example, under Section 1.3.1, it is stated that the Service intends to include stipulations in the PA that describe how the effects to properties and places identified during TCS surveys will be assessed in consultation with Tribal Nations and consulting parties. Those findings of effect will be reviewed and consulted on by all consulting parties and Tribal Nations before the Service requests concurrence on the finding. For any findings of adverse effects, the PA will be followed regarding how to determine appropriate avoidance, minimization, or mitigation measures.

2.3 Traditional Cultural Landscapes and Cultural Resources

Your letter states that the "pristine northern section of the Ogallala Aquifer is part of a **Traditional Cultural Landscape** with archaeological sites…" The letter also states that you consider **cultural resources** to include "the winged ones, the four-legged ones, the ones that swim, the ones that crawl, the plant life, and their ecosystems" and that "when evaluating the affect a project will have on these cultural resources, we do not just consider the surface, but also the effect it will have on what is above and below. Specifically, in this case, the Ogallala Aquifer directly below and the migrating birds above."

The Service acknowledges that Tribal Nations possess special expertise in assessing the eligibility of historic properties and properties of traditional religious and cultural importance to them and that traditional knowledge is an integral part of that special expertise. For the purposes of Section 106, this traditional knowledge is used for identifying, evaluating, assessing, and resolving adverse effects to historic properties and places of religious and cultural significance to Tribal Nations. The Service acknowledges that there are outstanding efforts related to identifying, evaluating, assessing, and resolving adverse effects to historic properties, to include traditional cultural landscapes and properties of traditional religious and cultural importance to Tribal Nations. Animals or species of animals do not fall within one of the types of historic properties or places that are eligible for listing in the NRHP; however, they may contribute to a traditional cultural place that is eligible. Plant materials, for example, may be character-defining features that constitute significant aspects of a particular traditional cultural place. Please also see the response in Section 1.1.1, which provides the approach to completing Tribal Cultural Surveys and TPPs. Additionally, the Draft SEIS analyzes effects of the proposed action and alternatives on the human environment, which includes water resources (e.g., Ogallala Aquifer), wildlife, and special status species (e.g., migratory birds).

Letter from the Service to SHPO Requesting Concurrence on the 2020/2023 Survey Report, dated February 18, 2025

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
9325 South Alda Road
Wood River, Nebraska 68883

IN REPLY REFER TO:
R-Project
Section 106

February 18, 2025

Michael Sothan
Deputy State Historic Preservation Officer
Nebraska State Historical Society
1500 R Street
Lincoln, NE 68508

Subject: HP# 1602-140-01; Nebraska Public Power District R-Project
Transmittal of Draft Report, "2020 and 2023 Cultural Resources Surveys of the R-Project 345-kilovolt Transmission Line, Blaine, Garfield, Holt, Lincoln, Logan, Loup, Rock, Thomas, and Wheeler Counties"

Dear Mr. Sothan:

Please find enclosed the draft report entitled, "2020 and 2023 Cultural Resources Surveys of the R-Project 345-kilovolt Transmission Line, Blaine, Garfield, Holt, Lincoln, Logan, Loup, Rock, Thomas, and Wheeler Counties". This draft report presents the results of the 2020 and 2023 cultural resources inventory completed by POWER Engineers. This effort did not include the expertise of Tribal Cultural Specialists to identify and evaluate properties of traditional religious and cultural importance. The Service acknowledges that Tribal Nations possess special expertise in identifying and evaluating properties of traditional religious and cultural importance, therefore, future surveys will be completed by Tribal Cultural Specialists to provide additional context for evaluation and management recommendations of the resources documented in this Draft Report.

Three previously recorded cultural resources were revisited, and two new cultural resources were recorded. The resources and their eligibility recommendations for the National Register of Historic Places (NRHP) are detailed in the table below.

Resource Number	Resource Type	NRHP Recommendation	Management Recommendation
25LN43	Historic artifact scatter	Not eligible	None
25TM6	Historic stock tank and windmill	Not eligible	None
25TM8	Early- to mid-20th century road	Not eligible	None
RPKB-14	Historic irrigation ditch	Not eligible	None
RPKB-15 (LN00-028)	Trail traces associated with the O'Fallon's Bluff segment of the Oregon-California National Historic Trail (LN00-028)	Eligible. Contributing element to NRHP-Listed LN00-028	NPPD will investigate route adjustments to avoid or minimize adverse effects. Monitoring during construction.

The Service concurs with the recommendations presented in the Draft Report by POWER Engineers and is respectfully requesting review and concurrence from the Nebraska SHPO within thirty (30) days from receipt of this letter.

If you have any questions or need further information on the project, please contact Kassie Karssen at (308) 216-2130 or by e-mail at kassandra_karssen@fws.gov.

Sincerely,

Mark Porath

Mark Porath
Nebraska Project Leader/Field Supervisor
Ecological Services, Mountain-Prairie Region

Enclosure

cc: Chelsea Rose, NSHS, Preservation Archaeologist

Email from the SHPO to the Service Providing Concurrence on the 2020/2023 Survey Report, dated March 31, 2025

From: Rose, Chelsea
To: NPPD R-Project Section 106; Sothan, Michael
Cc: Kolise, Jen; Porath, Mark T; Karssen, Kassandra R; Burgess, Angela; Novak, Kate
Subject: RE: NPPD R-Project: 2020/2023 Draft Survey Report for Review
Date: Monday, March 31, 2025 9:44:15 AM
Attachments: image002.png

Hello,

Thank you for following up! I apologize for the delay in getting our comments back to you. With that said, NESHPO's comments are as follows:

- (4.1.1) NESHPO concurs that trail traces RPKB-15 should be considered as contributing features to LN00-028. Therefore, modifying the existing National Register nomination in addition to micrositing may be potential mitigation actions since the site's setting and feeling (i.e., integrity) will be adversely impacted due to the installation of the transmission line.
- NESHPO concurs with POWER that an archaeological monitor be present during construction in this area.
- (4.1.2.) 25LN43 is likely ineligible for listing in the NRHP due to the absence of identified cultural material by NDOT and POWER.
- (4.1.3.) 25TM6 is likely ineligible for listing in the NRHP.
- (4.1.4.) 25TM8 likely remains ineligible for listing in the NRHP.
- (4.2.1.) RPKB-14 is likely ineligible for listing in the NRHP.
- Other potentially eligible sites (e.g., Birdwood Creek) were not covered in this round of survey updates. These sites are still a primary concern for the S106 process, so please let us know if/when there are any relevant updates or plans to conduct additional survey work in these areas.

Have a great day,

Chelsea Rose, MA, RPA (she/her) | Preservation Archaeologist

Nebraska State HISTORICAL SOCIETY

P: (531) 350-8840 | chelsea.rose@nebraska.gov
1500 R Street, Lincoln, NE 68508
history.nebraska.gov

From: NPPD R-Project Section 106 <R-Project_Section106@icf.com>
Sent: Thursday, March 27, 2025 3:32 PM

Email from the Service to Tribal Nations and Consulting Parties Regarding Identification Efforts in the APE for Physical Effects by Tribal Cultural Specialists, dated July 15, 2025

From: NPPD R-Project Section 106 <R-Project_Section106@icf.com>
Sent: Tuesday, July 15, 2025 6:26 PM
Cc: Porath, Mark T; Kolise, Jen; Burgess, Angela; Karssen, Kassandra R; NPPD HCP SEIS
Subject: R-Project Section 106: Update Regarding Identification Efforts in the APE for Physical Effects by Tribal Cultural Specialists

Dear Tribal Nations and Consulting Parties,

This email is being sent on behalf of the U.S. Fish and Wildlife Service (Service) regarding the Nebraska Public Power District's (NPPD's) R-Project and provides next steps on efforts to identify properties of traditional religious and cultural importance by Tribal Cultural Specialists (TCS) within the Area of Potential Effects (APE) for Physical Effects under the Section 106 process.

During the hybrid meetings in June 2025, the Service provided an update on their position on TCS identification efforts within the APE for Physical Effects. Considering recent executive orders and related secretarial orders, the Service has made the decision to no longer require intensive pedestrian surveys by TCSs throughout the entire APE for Physical Effects. This is in reference to Executive Order 14156, *Declaring a National Energy Emergency*, January 20, 2025: https://www.whitehouse.gov/presidential-actions/2025/01/declaring-a-national-energy-emergency/ and Department of the Interior Secretarial Order 3418, *Unleashing American Energy*, February 3, 2025, which implements EO 14156 : https://www.doi.gov/document-library/secretary-order/so-3418-unleashing-american-energy. Instead, the Service is proposing that intensive pedestrian surveys be utilized in areas of high probability for properties of traditional religious and cultural importance and employing other identification efforts in low-to-medium probability areas within the APE for Physical Effects. The Service has identified the following next steps to initiate efforts to identify Physical Effects:

1. The Service will contact Tribal Nations to identify areas of high probability for properties of traditional, religious, and cultural importance, and develop survey methodology by TCSs for these areas. This information will be documented in the Tribal Participation Plans.
2. The Service will then provide this information to NPPD and Seventh Sovereign.
3. NPPD and Seventh Sovereign will work with Tribal Nations to develop documentation of the TCS survey logistics (e.g., means of payment, survey schedule, lodgings for survey teams) in Tribal Participation Plans.

Please note that to continue the Section 106 process within statutory timeline constraints under the National Environmental Policy Act process, the Service must prioritize its efforts on completing the programmatic agreement (PA) development in the coming months. The PA will memorialize the TCS identification efforts and the process for completing identification, evaluation, assessment, and resolution of effects on historic properties. After the PA is executed, the Service will continue Section 106 consultation pursuant to the terms of the PA.

Please contact Kassandra Karssen (Kassandra_Karssen@fws.gov; 308-216-2130) with any questions on the above information.

Thank you.

Email from the Service to ACHP, SHPO, Tribal Nations, and Consulting Parties Regarding Modified Approach to TCS Surveys in the APE for Physical Effects, dated July 15, 2025

From: NPPD R-Project Section 106 <R-Project_Section106@icf.com>
Sent: Tuesday, July 15, 2025 6:26 PM
Cc: Porath, Mark T; Kolise, Jen; Burgess, Angela; Karssen, Kassandra R; NPPD HCP SEIS
Subject: R-Project Section 106: Update Regarding Identification Efforts in the APE for Physical Effects by Tribal Cultural Specialists

Dear Tribal Nations and Consulting Parties,

This email is being sent on behalf of the U.S. Fish and Wildlife Service (Service) regarding the Nebraska Public Power District's (NPPD's) R-Project and provides next steps on efforts to identify properties of traditional religious and cultural importance by Tribal Cultural Specialists (TCS) within the Area of Potential Effects (APE) for Physical Effects under the Section 106 process.

During the hybrid meetings in June 2025, the Service provided an update on their position on TCS identification efforts within the APE for Physical Effects. Considering recent executive orders and related secretarial orders, the Service has made the decision to no longer require intensive pedestrian surveys by TCSs throughout the entire APE for Physical Effects. This is in reference to Executive Order 14156, *Declaring a National Energy Emergency*, January 20, 2025: https://www.whitehouse.gov/presidential-actions/2025/01/declaring-a-national-energy-emergency/ and Department of the Interior Secretarial Order 3418, *Unleashing American Energy*, February 3, 2025, which implements EO 14156 : https://www.doi.gov/document-library/secretary-order/so-3418-unleashing-american-energy. Instead, the Service is proposing that intensive pedestrian surveys be utilized in areas of high probability for properties of traditional religious and cultural importance and employing other identification efforts in low-to-medium probability areas within the APE for Physical Effects. The Service has identified the following next steps to initiate efforts to identify Physical Effects:

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2. The Service will then provide this information to NPPD and Seventh Sovereign.
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Please note that to continue the Section 106 process within statutory timeline constraints under the National Environmental Policy Act process, the Service must prioritize its efforts on completing the programmatic agreement (PA) development in the coming months. The PA will memorialize the TCS identification efforts and the process for completing identification, evaluation, assessment, and resolution of effects on historic properties. After the PA is executed, the Service will continue Section 106 consultation pursuant to the terms of the PA.

Please contact Kassandra Karssen (Kassandra_Karssen@fws.gov; 308-216-2130) with any questions on the above information.

Thank you.

Emails from the Service to Tribal Nations and Consulting Parties Providing the Revised Draft 2020/2023 Survey Report, dated September 22, 2025

From:	NPPD R-Project Section 106
Cc:	Kolise, Jen; Burgess, Angela; Karssen, Kassandra R; Porath, Mark T
Subject:	NPPD R-Project: 2020/2023 Revised Draft Report for Review
Date:	Monday, September 22, 2025 9:34:19 AM
Attachments:	image002.png

Dear Consulting Parties,

This email is being distributed on behalf of the U.S. Fish and Wildlife Service (Service) regarding the Section 106 process for the Nebraska Public Power District's R-Project.

Please find the **Revised Draft Report** entitled, "*2020 and 2023 Cultural Resources Surveys of the R-Project 345-kilovolt Transmission Line, Blaine, Garfield, Holt, Lincoln, Logan, Loup, Rock, Thomas, and Wheeler Counties, Nebraska"*, at the following link for your review: 02_Revised Draft Report

Please see the Comment Matrix also included in the above folder which provides the Service's responses to comments received on the Draft Report.

Please also note that certain figures and appendices are redacted due to archaeological site location information that is restricted in accordance with Section 304 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 307103).

The Service is respectfully requesting comments on the Revised Draft Report by **October 22**. Please provide written comments to Kassie Karssen.

You may reply directly to this email address (R-Project_Section106@icf.com) or contact Kassie Karssen directly (kassandra_karssen@fws.gov; 308-216-2130).

Thank You

Letter and Enclosures from the Service to ACHP, SHPO, and Tribal Nations Explaining DOI's Approval of the Use of Alternative Procedures for Compliance with Section 106 of the NHPA in Response to the National Energy Emergency, dated January 13, 2026

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
9325 South Alda Road
Wood River, Nebraska 68883

IN REPLY REFER TO:
R-Project
Section 106

January 13, 2026

[redacted]

Subject: Nebraska Public Power District's R-Project Transmission Line Project

[redacted]

On January 20, 2025, the President issued Executive Order 14156 (EO14156) Declaring a National Energy Emergency, which directed the heads of executive departments and agencies to identify and exercise lawful authorities to ". . . facilitate the identification, leasing, siting, production, transportation, refining, and generation of domestic energy resources . . . on Federal lands." Secretarial Orders No. 3417 and 3418 implemented provisions of EO14156 and directed Bureaus and Offices under the Department of the Interior (Department) to identify any emergency authorities to facilitate "energy projects" as defined by EO14156. On February 25, 2025, the Advisory Council on Historic Preservation (ACHP) recognized the need for alternative procedures for compliance under Section 106 of the National Historic Preservation Act (NHPA) concerning proposed actions that address emergency situations, including when the President declares an emergency.

On August 22, 2025, the Nebraska Public Power District (NPPD) submitted a request to the U.S. Fish and Wildlife Service (Service) to use Alternative Procedures for Compliance with Section 106 of the NHPA during the National Energy Emergency for the R-Project Transmission line (Enclosure 1). Along with its request, NPPD agreed to implement, to the extent prudent and feasible, measures that avoid or minimize harm to historic properties. On January 13, 2026, the Department approved NPPD's use of alternative procedures for compliance with Section 106 of the NHPA for the R-Project in response to the national energy emergency.

Under the alternative emergency procedures, the Service is directed to comply with the requirements of Section 106 by following an ad hoc process for undertakings responding to an emergency declaration[1] when there are no formal emergency procedures in place[2] and there is not

[1] 36 § 800.12(b)(2).
[2] 36 CFR § 800.12(a).

an existing programmatic agreement that contains specific provisions for dealing with historic properties in emergency situations.[3] Under 36 CFR § 800.12(b)(2), the ACHP, the appropriate State Historic Preservation Office or Tribal Historic Preservation Office, and Tribal Nations are afforded the opportunity to comment on the proposed emergency undertaking within **seven days** of notification.[4]

I. Project Description

NPPD has applied for an incidental take permit under Section 10 of the Endangered Species Act for the federally threatened American burying beetle (*Nicrophorus americanus*) for incidental take that may occur associated with construction and operation of the R-Project. In June 2019, the Service issued incidental take permit #TE72710C-0 to NPPD for the R-Project. A Programmatic Agreement under NHPA was completed in 2019 in association with the 2019 incidental take permit. In July 2019, a group of R-Project opponents filed a lawsuit challenging the Service's decision to issue the permit and on June 17, 2020, the U.S. District Court for the District of Colorado (court) issued a decision vacating and remanding the permit to the Service for further proceedings consistent with the court's order (*Oregon-California Trails Association v. Walsh*, 1:19-cv-01945-WJM, D. Colo 2020). In response to the court decision, NPPD has revised and resubmitted a permit application. The Service's proposed action associated with the R-Project is the issuance of an Endangered Species Act incidental take permit.

NPPD is proposing to construct, operate, and maintain a new 345-kilovolt transmission line, approximately 226 miles long, located primarily in the Sandhills of Nebraska. NPPD's stated purpose for this project is to 1) improve power transmission reliability, 2) reduce generation congestion, and 3) support future renewable energy development. The north/south segment is 101 miles long and starts at the Gerald Gentleman Substation near Sutherland, proceeds north across the South Platte and North Platte rivers, continues north for approximately eight miles before turning east for 30 miles, crosses Birdwood Creek, and extends eastward to meet with U.S. Highway 83. The north/south segment then parallels U.S. Highway 83 and connects to a new expansion of NPPD's existing substation east of Thedford. The east/west segment is 125 miles long and starts at the Thedford Substation expansion and proceeds east to State Highway 7 north of Brewster. The east/west segment then proceeds north along State Highway 7 for approximately five miles then turns east to its terminus at Western's Fort Thompson to Grand Island transmission line at the Holt County Substation located in the southeast corner of Holt County. The width of the

[3] 36 CFR § 800.12(b)(1)

[4] *See* 54 USC § 302706(b) (requiring federal agencies to consult with any Indian tribe that attaches religious and cultural significant to affected historic properties); ACHP Handbook (identifying properties of religious and cultural significant and evaluating adverse effects); and 36 CFR § 800.2(c)(2)(ii) (defining roles of Indian tribes as consulting parties, including their special expertise in identifying properties of cultural significance, which informs the scope of their comment even in emergency situations).

right-of-way would be 200 feet, 100 feet each side of the centerline for the entire transmission line, unless otherwise specified.

NPPD would place tubular steel monopole structures and steel lattice towers approximately 1,350 feet apart. NPPD would use steel lattice towers in areas of the Sandhills where existing access routes are limited or do not exist. NPPD can construct lattice towers with less overall effect on the surrounding area because it can use smaller equipment and helicopters during construction. Further detailed descriptions of the R-Project are available at: https://icfonline.sharepoint.com/sites/EP/104516.0.001/RProject%20Section20106%20CPs%20Confidentail/Forms/AllItems.aspx.[5]

II. Identification Efforts

Identification efforts to date have included queries about state archaeological and historic structure databases, state and national registers, historic Government Land Office maps, land patent and status records, and pertinent literature available through the Nebraska State Historical Society websites including Historic Building Survey reports. POWER Engineers conducted cultural resource investigations of the R-Project route, including pedestrian field surveys conducted in phases, as NPPD obtained right-of-entry to private land. To date, POWER Engineers have documented results from field surveys conducted in 2015 – 2018, 2020, and 2023. These prior field survey efforts did not include Tribal Cultural Specialists. Prior to the Department's approval to allow NPPD to use alternative emergency procedures to comply with Section 106, the Service was developing a new programmatic agreement (Draft PA) in consultation with the ACHP, Nebraska State Historic Preservation Office (SHPO), Tribal Nations, and Consulting Parties. The Draft PA details historic property identification efforts including processes to: 1) address the completion of identification and evaluation of historic properties; 2) develop findings of effects on historic properties; and 3) develop measures to avoid, minimize, or mitigate any adverse effects on historic properties. The Draft PA and related Section 106 documents[6] are available at: https://icfonline.sharepoint.com/sites/EP/104516.0.001/RProject%20Section20106%20CPs%20Confidentail/Forms/AllItems.aspx.

III. Assessment of Effects

[5] If you have trouble accessing the project file share site (linked above), please contact the Section 106 email address for assistance at: R-Project_Section106@icf.com.

[6] POWER Engineers cultural resource survey reports, 2015 – 2019; Final POWER Engineers cultural resource survey report, 2020 and 2023; *Programmatic Agreement among the U.S. Fish and Wildlife Service – Mountain-Prairie Region, the Nebraska State Historic Preservation Officer, Nebraska Public Power District, and the Advisory Council on Historic Preservation regarding the Construction, Maintenance, and Operation of the R-Project 345-Kilovolt Transmission Line, Blaine, Garfield, Holt, Lincoln, Logan, Loup, Thomas, and Wheeler Counties, Nebraska*, executed on April 10, 2019; *Final Cultural Resources Inventory Report for the R-Project Transmission Line*, 2024; and *Final Cultural Resources Inventory Report for the R-Project Transmission Line*, 2024.

During development of the Draft PA and in consultation with the ACHP, Nebraska SHPO, Tribal Nations, and Consulting Parties, the Service determined that adverse effects on the following identified historic properties will occur unless those adverse effects can be avoided: Birdwood Creek Site (25LN94/25LN113), O'Fallon's Bluff (LN00-028/RPKB-2) and additional segments of the Oregon-California National Historic Trail (RPKB-13 and RPKB-15), Old Highway 83/US Route 183 segment (RPKB-1), St. John's Lutheran Church (BL00-008), Brosius Homestead/Neal Ranch (LO00-001), and Sand Hill Ruts of the Mormon Pioneer National Historic Trail (RPKB-3).

The Service determined that no adverse effects would occur to the Paxton-Hershey Canal (RPKB-5); the National Register of Historic Places (NRHP)-listed Sutherland State Aid Bridge (LN00-032) has been demolished and is no longer subject to the Section 106 process for this Project.

The Service also previously determined that all unevaluated cultural resources would be treated as eligible for inclusion in the NRHP under the Draft PA unless it is determined in consultation with the Nebraska SHPO, Tribal Nations, and Consulting Parties that a property lacks integrity or does not meet the NRHP criteria.[7]

Effects of the R-Project on historic properties will vary depending upon the resource and its characteristics that qualify the property for inclusion in the NRHP. Anticipated effects include:

- Physical destruction or damage to all or part of the historic property;
- Change of the character of the property's use or physical features within the property's setting that contribute to its historic significance; and
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features.

IV. Proposed Measures to Avoid and Minimize

Although the Service has made progress on the Draft PA for Section 106 compliance, because the Department approved NPPD's request to use emergency provisions to comply with Section 106 of the NHPA in response to EO 14156, the Service is complying with the requirements of Section 106 by following an ad hoc process for undertakings responding to an emergency declaration when there is no formal emergency procedure or an applicable Programmatic Agreement (36 CFR. § 800.12(b)(2)). The consultation process of developing and executing a PA for the Project, including finalization of the Draft PA, is not feasible due to time constraints associated with the National Energy Emergency. Appendix B of Enclosure 1 includes the measures to which NPPD committed to avoid and minimize harm to historic properties as part of their request for use of the

[7] *See* Enclosure 3 for the Table of Known Historic Properties and Unevaluated Resources in the Area of Potential Effects (APE); *see also* Enclosure 4 for a map of the APE.

alternative emergency NHPA procedures. Enclosure 2 includes the Tribal Monitoring Program Commitment to which NPPD committed under the alternative NHPA procedures.

V. Request for Comments

The Department has approved NPPD to use the emergency alternative procedures of Secretarial Orders No. 3417 and 3418, which implement the provisions of EO14156, for the R-Project. As such, the Service follows the regulations at 36 CFR § 800.12(b)(2), to meet its obligations under Section 106 of the NHPA. In accordance with 36 CFR § 800.12(b)(2), please provide comments on the proposed emergency undertaking including but not limited to, 1) their potential effects on historic properties, and 2) NPPD's proposed measures to avoid or minimize harm to historic properties, within **seven days** of this emergency notification. Please provide comments by **January 20, 2026,** and submit them to **R-Project_Section106@icf.com.** Should you have any questions, please contact Kassandra Karssen at Kassandra_Karssen@fws.gov or 308-216-2130.

Sincerely,

Mark Porath
Nebraska Project Leader/Field Supervisor

Enclosures:
Enclosure 1: NPPD Request to Use DOI's Emergency Process for Section 106 Compliance, dated August 22, 2025
Enclosure 2: NPPD Tribal Monitoring Program Commitment for the R-Project Under National Historic Preservation Act Section 106, dated December 30, 2025
Enclosure 3: Table of Known Historic Properties and Unevaluated Resources in APE
Enclosure 4: Map of the Area of Potential Effects

Request to Use the Department of the Interior's Emergency Process for Section 106 Compliance

ATTN: U.S. Fish and Wildlife Service
Matt Hogan, Regional Director
Mountain-Prairie Region
1 Denver Federal Center
Building 53 - Room FW100
Denver, CO 80225

Company name: **Nebraska Public Power District**
Project name: **R-Project Transmission Line**
Project city, state: **Central Nebraska**
Lead agency: **U.S. Fish and Wildlife Service**

Nebraska Public Power District (NPPD) requests to use the Department of the Interior's emergency process for complying with Section 106 of the National Historic Preservation Act (NHPA) for the **R-Project Transmission Line** to enable the prompt construction of a 226-mile multi-source transmission line needed to improve grid reliability and reduce transmission line congestion in Nebraska. The alternative arrangements will enable the long-overdue construction of infrastructure that is necessary to improve delivery of affordable and reliable electricity from NPPD's diverse mix of coal, natural gas, hydropower, nuclear, and renewable generation sources, to respond to the national energy emergency, as declared in Executive Order 14156.

The R-Project is eligible for consideration under the alternative arrangements because it is designed to transport energy resources as defined in section 8(a) of Executive Order 14156 and because NPPD has submitted the necessary application materials for the Department of the Interior permit requested, namely an Incidental Take Permit (ITP) from the U.S. Fish and Wildlife Service (USFWS).

The lead federal agency for R-Project permitting is the USFWS, which maintains a website with information on the project.[1] The primary point of contact at the USFWS with access to all relevant information on the project, including the latest version of NPPD's proposed Habitat Conservation Plan (HCP) and accompanying Supplemental Final Environmental Impact Statement, is Mark Porath, the Nebraska Ecological Services Field Supervisor.

Permitting and Litigation History. In 2012, the Southwest Power Pool, the electrical grid reliability managers for the regional transmission grid, which today includes all or parts of fourteen states in the Central Plains stretching from North Dakota to northern Texas, determined that a high-capacity (345kV) transmission line would be needed by January 1, 2018, to connect critical points in the central Nebraska electrical grid to improve reliability for load delivery and to reduce existing congestion on the system. During summer 2012, NPPD was forced to open electrical breakers and interrupted transmission deliveries of electricity to farmers due to the

[1] *See* https://www.fws.gov/project/r-project-transmission-line.

record demand for electricity in north-central Nebraska exceeding the capacity of the local transmission network to deliver it.

Even though NPPD immediately began development of the transmission line, dubbed the R-Project, federal permitting and a judicial vacatur and remand have prevented any construction to date—seven years beyond when the project should have been operational. The route chosen for the R-Project is exclusively on private land. No federal permits from Department of the Interior are required to construct the project.[2] However, because a portion the line will cross habitat for the American burying beetle, which is listed as a threatened species under the Endangered Species Act (ESA), NPPD applied to USFWS for an ITP under ESA Section 10 by submitting a proposed HCP. That application triggered reviews of the entire line under the ESA, National Environmental Policy Act (NEPA), and the NHPA, which were ultimately completed and the ITP issued in June 2019.

Project opponents sued, and the federal district court for the District of Colorado vacated the ITP in June 2020 based upon the court's identification of two errors in USFWS's compliance with the NHPA and its conclusion that USFWS should have considered the impacts of possible future wind energy construction in its ESA, NEPA, and NHPA analyses.[3]

Project Status. Since the judicial remand, NPPD has continued efforts to obtain legal authorization for potential take of the American burying beetle and address the issues identified by the court. NPPD has worked with USFWS to complete another NEPA review and anticipates a Supplemental Final Environmental Impact Statement to be issued in late August or early September 2025. It further anticipates that USFWS will issue a new ITP in mid to late October. If NPPD could commence construction upon issuance of the ITP, NPPD's goal would be to have the line entering service by the third quarter of 2028.

But USFWS's current NHPA trajectory makes that schedule impossible. Since remand, NPPD has adjusted the route in part of the line to address one of the NHPA issues identified by the court, adopted other minimization and mitigation measures,[4] and attempted to negotiate a new agreement to address NHPA compliance for the adjusted route and other project changes.[5] However, USFWS's NHPA consultation process, which formally began in July 2023, has moved well beyond identifying potential impacts to historic sites that could be physically affected by the

[2] NPPD also expects to obtain coverage under the U.S. Army Corps of Engineers' (USACE's) Nationwide Permit 33. USFWS is confirming with USACE that it continues to consider USFWS the lead federal agency such that USACE will rely on USFWS's compliance with NEPA, ESA, and NHPA.

[3] *Oregon-California Trails Association v. Walsh*, 467 F. Supp. 3d 1007, 1015 (2020). The district court's decision pre-dates the Supreme Court's recent decision in *Seven County Infrastructure Coalition v. Eagle County, Colorado,* which ordered a "sharp course correction" from the lower courts' expansive NEPA interpretations, such as the one applied by the District of Colorado.

[4] A summary of cultural resource minimization and mitigation measures is attached in Appendix B.

[5] USFWS has been conducting Section 106 consultation over the last two years, including outreach to and engagement with 31 Tribal Nations. It has held multiple virtual and in-person meetings with the consulting parties and Tribal Nations during that two-year period. NPPD has engaged a consultant to supplement USFWS's extensive efforts. A summary report of that consultant's outreach to tribes on behalf of NPPD, which were in addition to USFWS's efforts, is attached as Appendix C.

line and developing mitigation plans. The consultation spiraled out of control with prior administration Department of the Interior leadership approving an unprecedented tribal survey effort and allowing tribal control over the methodology to be used during the consultation. USFWS's current template for post-decision NHPA compliance envisions that ***before construction begins***, NPPD must develop and conduct multiple reviews of areas within and beyond those that could be physically affected by the R-Project with methodologies to be identified by consulting parties and that USFWS will hold a series of review periods on the yet-to-be-developed plans using those yet-to-be-identified methodologies. This expansive post-decision NHPA compliance process will delay actual construction by at least eighteen months, if not substantially more.

Project Need. The R-Project is already seven years overdue. NPPD is committed to providing safe, reliable, and affordable electrical supply from a diverse mix of sources, but it is becoming increasingly difficult to do so when it must provide temporary work-arounds for the delayed R-Project. The transmission line connects to the largest coal-fired power plant in Nebraska and will improve delivery of energy from the plant to NPPD customers across the state. As discussed in Appendix A, NPPD has adopted a series of interim measures, but it ultimately faces an increased risk of controlled power outages for customers in north-central Nebraska, or worse, as a direct result of delays in the R-Project as customer load levels exceed the available transmission capacity in that area.

For the reasons summarized above, NPPD requests approval to proceed with NHPA compliance under the Department of the Interior's alternative procedures. If USFWS approves NPPD's proposed Habitat Conservation Plan and issues an ITP for the **R-Project Transmission Line**, NPPD agrees, pursuant to the Department's "Emergency Process for Section 106 Compliance," that **Nebraska Public Power District** will implement, to the extent prudent and feasible, measures that avoid or minimize harm to historic properties.

Thomas J Kent — August 22, 2025

Thomas J. Kent — Date
Chief Executive Officer of Nebraska Public Power District

Appendix A: Critical Need Technical Discussion

The need for the R-Project was first identified by the Southwest Power Pool (SPP) in 2012. It is long overdue, and its absence is resulting in significant operational challenges and critical reliability concerns for the entire electrical transmission system in Nebraska. As explained in more detail below, the R-Project needs to be constructed as soon as possible to allow NPPD to ensure reliable, cost-effective service and avoid cascading outages.

The R-Project was classified as a Reliability Project by the SPP with a need by date of January 1, 2018. The need-by date was determined based upon expert projections of when the SPP/NPPD system in Nebraska would begin to experience adverse reliability impacts if the project was not constructed. In the seven years since the "need by" date, the predicted adverse reliability impacts have occurred. The continued delay of the R-Project beyond the original need-by date has had a negative impact on the reliability and including deliverability of energy from Nebraska's largest coal-fired power plant across the NPPD transmission system, and the adverse impacts are expected to continue and worsen with continued delays.

Observed Adverse Impacts and Reliability Risks

Generation limitations, i.e., congestion impacts, have increased costs to all of NPPD's customers because those customers do not have access to the lowest-cost generation resources to serve the load within the SPP Integrated Market. Potential transmission system electrical flows are beyond design limits for the Bulk Electric System that flows to the south and to the east out of the Gerald Gentlemen Station, i.e., the GGS Stability Flowgate. The GGS Stability Flowgate is a transmission interface in west-central Nebraska that has been identified as an Interconnection Reliability Operating Limit (IROL). An IROL is a System Operating Limit (SOL) that, if exceeded, could lead to instability, uncontrolled separation, or cascading outages that negatively impact the reliability of the Bulk Electric System. This interface is the only IROL identified in the entire SPP footprint. This critical transmission interface requires daily real-time management by Transmission System Operators of a complex persistent operating condition. This interface frequently binds (excessive congestion) within the SPP market, which leads to higher overall costs to the customers within the SPP region. We have also experienced generation limitations due to this interface during regional generation shortages, which is a risk to reliability. The construction of the R-Project will substantially improve transmission resiliency and redundancy in this portion of Nebraska and within the SPP footprint.

In the north-central portion of Nebraska, there are continuing operational challenges that would be greatly improved by the construction of the R-Project. Throughout the summer, NPPD manages potential facility overloads and potential low system voltages in the region between Maxwell, Valentine, and Neligh, Nebraska, and Fort Randall, South Dakota. In this area, the loss of a single line can overload a remaining facility or cause low system voltages in the region.

The projected summer season electricity demands in the north-central Nebraska region cannot be met over the future planning horizon until the required R-Project is constructed. Without the R-Project to strengthen the electrical system in the north-central Nebraska area, reliability of the electrical system is jeopardized. The reliability impacts are an increased risk of forced outages to

an increasing number of customers served in north-central Nebraska and potentially beyond. This increased risk is a direct result of the delay of the R-Project as the customer load levels exceed the available transmission capacity in north-central Nebraska.

In accordance with the National Electric Reliability Corporation (NERC) reliability standards, NPPD plans the transmission system to meet all of the customer-demand levels during maximum peak loads and subsequent line outages (contingency events). These localized mitigation plans will no longer be effective for future projected load levels; at that time, additional alternate transmission facility plans would need to be constructed to meet the mandatory NERC reliability standards.

Mitigation Measures Already Deployed

NPPD has already deployed many actions to mitigate the congestion impacts and reduce reliability risks discussed above. The measures NPPD has implemented to ensure reliable power delivery to the customers of north-central Nebraska include the following:

1. Load shifts from the most highly susceptible areas of voltage collapse[*] to alternate sources outside of susceptible areas
2. Temporary undervoltage load-shedding schemes to reduce risk of a larger system collapse
3. Annually renting and installing large mobile diesel generators and interconnecting them at two critical substations to provide localized resource injections
4. Renting a mobile 115 kV capacitor bank to provide supplemental voltage support
5. Expanding the size of existing capacitor banks in the voltage collapse area
6. System reconfigurations to redistribute transmission flows to minimize voltage collapse
7. Construction of a new substation with a new capacitor bank for voltage support

These mitigation measures include running temporary generation in the Ainsworth area, transmission system reconfiguration, and/or working with others to curtail South Dakota hydro generation. These mitigation steps have limitations and drawbacks discussed below and cannot provide a long-term solution. The mitigation measures increase costs for the customers in the SPP footprint and, in some cases, reduce resiliency of the local transmission network. Furthermore, the temporary rental generation units are costly, less reliable than existing utility generation, and raise safety risks for the crews that must operate them. For example, during a recent switching event on the rented mobile generators, the associated switchgear failed catastrophically putting the lives of the switchmen in jeopardy. Typically, in the summer months, NPPD has taken steps to move customer load to less-optimal source locations to help mitigate the loading and voltage issues described above. Moving customer load to a less-optimal source

[*] Voltage Collapse: a severe event characterized by a significant and uncontrolled drop in voltage levels, ultimately leading to instability and potential blackouts

increases system losses and limits operation flexibility. As a stopgap, NPPD has installed temporary undervoltage load-shedding schemes to reduce the risk of a larger system collapse when certain transmission contingencies occur.

All of these actions listed above were developed or accelerated due to the continued delays associated with the R-Project. If there had been a sustained transmission outage during this period, local rotating power outages would have been utilized to serve minimal load levels since adequate transmission would not be available due to the ongoing delay of the R-Project. The R-Project is critical to providing the source strength into this area in order to serve existing and new load additions in a reliable manner. Existing delays have already resulted in hundreds of millions of dollars in increased costs and lost generation opportunities. Further delays in the R-Project construction will create pressure to expand the local mitigation needs, which will result in local area reliability issues for customers served in this north-central Nebraska area. Until the new R-Project is constructed, any new load growth requires expansion of the previously mentioned mitigation measures, so any new load growth is very difficult to accommodate in the north-central Nebraska region, and the transmission system reliability for the entire Nebraska region is negatively impacted.

Appendix B: Cultural Resources Minimization Mitigation Measures

If NPPD's proposed Habitat Conservation Plan is approved, NPPD agrees to implement, to the extent prudent and feasible, measures that avoid or minimize harm to historic properties, including the following measures.

1. Avoid earth-disturbing activities or placement of structures on or immediately adjacent to Oregon, California, Pony Express, and Mormon Pioneer National Historic Trail remnants (RPKB-2, RPKB-3, and RPKB-13).

2. Use steel monopoles within 0.5 mile of any National Historic Trail to minimize visual impacts.

3. Protect historic trail remnants with temporary fencing and monitor use of heavy equipment in the vicinity of trail remnants during construction.

4. Shifted a segment of the transmission line approximately 0.5 mile east from its original location, which eliminated the overhead crossing of the trail ruts on or immediately west of the O'Fallon's Bluff site (LN00-028) located adjacent to Interstate 80 (I-80) and created additional physical separation between the proposed transmission line and this historic site. No structures will be placed within the boundaries of this site.

5. Use a setback distance of structures from historic trail remnants as allowed by engineering constraints (RPKB-2, RPKB-3, and RPKB-13).

6. Minimized effects on the Mormon Trail (RPKB-3) by routing parallel to an existing county road, which runs perpendicular to the Trail and has already disturbed the Trail in this area, as opposed to placement directly over the existing Trail remnants.

7. Use steel monopoles near the historic ranch in Logan County (LO00-001) and St. John's Lutheran Church (BL00-008) and within 0.5 mile of the National Historic Trails to minimize visual impacts.

8. Shifted the transmission line structure near the prehistoric open camp (25LN113) to avoid direct impacts to the site. Fence the site during construction.

9. Shifted the transmission line to be located outside the 100-foot buffer of the RPKB-12 site boundary. Conduct evaluative testing prior to construction.

10. Hire and pay for a canine forensic team that will survey R-Project disturbance areas, including structure work areas, pulling and tensioning sites, and access requiring improvement, within a specific area in the R-Project right-of-way where the Cherokee Nation has raised concerns regarding potential burial sites in the vicinity of the R-Project.

11. Use existing roads and two-tracks for access during construction based on availability and landowner approval.

12. Avoid placement of construction staging areas and tensioning and pulling sites on or immediately adjacent to historic properties, including trail remnants.

13. Locate construction staging areas and pulling and tensioning sites adjacent to existing roads and in previously disturbed areas where practicable, based on availability and landowner approval.

14. Use ground matting or low-ground-pressure equipment to avoid or minimize ground disturbance on or immediately adjacent to historic properties.

15. Use helicopters during construction, including for erection of lattice tower, to minimize ground disturbance.

16. Restrict all construction vehicle movement outside the R-Project transmission line right-of-way to designated access routes and established roads other than for emergency situations.

17. Require fugitive dust control plans identifying possible avoidance and minimization measures as part of construction contract specifications.

18. Locate new transmission line access parallel to landform contours to minimize ground disturbance and/or reduce land scarring.

19. Implement the Restoration Management Plan that includes monitoring provisions to ensure successful restoration is achieved.

20. Minimize the risk of fire ignitions during construction by implementing fire prevention and control measures.

21. Minimize the removal of shelterbelts and trees.

22. Site structures in the Sandhills segments of the R-Project area to avoid obvious visual intrusion, such as hill tops or narrow drainages, where practicable.

23. Predetermine the area limits of construction activities and restrict and confine activity within those limits; do not apply permanent paint or discoloring agents to vegetation or rocks to indicate survey or construction activity limits.

24. Avoid the use of permanent lighting of transmission support structures, unless required by FAA regulations; use down-shield sodium vapor lighting at substations to reduce night glare and light pollution.

NPPD also agrees to implement the following mitigation measures.

1. NPPD will contribute $100,000 towards an in-depth archaeological documentation study of the California-Oregon National Historic Trail in the Platte River Valley encompassing an area approximately five miles east and west of where the R-Project centerline crosses the trail.

2. NPPD will contribute $1,900 to refurbish and repaint the two existing interpretative signs regarding the California-Oregon and Overland trails at the I-80 eastbound rest area near Sutherland, Nebraska.

3. NPPD will contribute $3,800 to replace the existing “attractions” map currently located in the eastbound I-80 rest area near Sutherland, Nebraska with a new map that includes O’Fallon’s Bluff and the various historic trails in Nebraska.

4. NPPD will contribute $1,300 to replace the existing interpretative sign at the Mormon Pioneer National Historic Trail “Sand Hill ruts” located approximately four miles north of Sutherland, Nebraska.

5. NPPD will contribute $45,000 to the owner of LO00-001, a historic ranch in Logan County, to be used for a consulting fee for nominating the ranch to be listed on the National Register of Historic Places and any needed maintenance for the historic property.

6. NPPD will contribute $19,000 to establish a building maintenance fund to resolve impacts to LN00-032, St. John’s Lutheran Church located in Blaine County, Nebraska, if the Church agrees to accept such funds.

Appendix C: Seventh Sovereign's Tribal Engagement & Negotiations Summary

R-Project Tribal Engagement & Negotiations Summary.

Summary: In 2024 and 2025 Seventh Sovereign executed four phases of tribal outreach and negotiations. These efforts used proprietary methods to build and verify a database of tribal contacts for 33 federally recognized tribal governments. Engagement efforts focused on discerning tribal interests in the R-Project, developing Tribal Participation Plans (TPP), creating options for tribal cultural surveys, and negotiating formal agreements to initiate surveys. This led to negotiations with 14 interested tribes, pausing in April 2025.

Methodology—Contacts Criteria & Sourcing.

Prior to conducting tribal government outreach, Seventh Sovereign assessed and verified legally relevant tribal contacts using the following determination criteria:

- Federally recognized tribes per NHPA-106, EO 13175, and guiding ACHP rulings[1];
- Points of contact (*per tribe*) authorized to sign NHPA-106 related agreements,[2] and
- Priority to (1) elected tribal leadership, (2) THPO, or (3) their authorized designees[3].

Next, a proprietary six-phase contact verification method entailed info from and interface with:

- U.S. Dept. of Interior, Bureau of Indian Affairs (BIA);
- U.S. Department of Interior, National Park Service (NPS);
- U.S. Dept. of Interior, U.S. Fish and Wildlife Service (USFWS);
- National Association of Tribal Historic Preservation Officers (NATHPO);
- National Conference of State Historic Preservation Officers (NCSHPO);
- Official tribe-specific contacts, inter-tribal, and 'arm-of-the-tribe' organizations, and
- NATHPO-designated affiliates, and extensive open-source information platforms.

Primary Messaging Platform to Identify Locations.

Each of four outreach phases described below expressly requested tribal input to identify culturally significant locations in the R-Project easement. Each phase reiterated requests for preferred or updated points of contact, and provided phone, email, and direct mail contacts for senior Seventh Sovereign personnel, including the Executive Director and Program Director.

Tribal Outreach Phases & Contact Metrics.

Hard copy and digital records document the following correspondence phases for each Tribe:

Phase I Outreach (*October 2024*) began with 33 federally recognized tribes previously contacted by USFWS. Of these:

- 15 did not respond; 6 expressed no interest or deferred interest to other tribes;
- 8 expressed some interest or desire for notifications;
- 3 expressed high interest and/or specific areas or activities, and
- 1 deferred to existing survey efforts.

[1] Advisory Council on Historic Preservation. Consultation with Indian Tribes in the Section 106 Review Process: The Handbook (2021). Available online HERE.
[2] This phase verified best mail, email, and phone contact for each individual, which was continually updated.
[3] Per ACHP guidance.

Phase II Outreach (*November 2024*) expanded tribal contacts and engagement, which:

- Identified and engaged with 68 tribal contacts from 31 tribes;
- Executed at least 5 points of engagement via 4 channels totaling 341 engagements;
- Received feedback from 9 tribes expressing participation interest;
- Confirmed 13 tribes offering no response, and
- Experienced a 60% raw engagement/response rate.

These efforts reiterated requests to nine survey interested tribes to specify (a) locations, (b) type, and (c) extent of cultural survey interest.

Phase III Outreach (*March 2025*) built on prior engagement to negotiate cultural survey agreements with 14 tribes who expressed such interest. During this time:

- 11 tribes responded and expressed interest in pedestrian surveys;
- 9 tribes expressed interest in surveying the entire R-Project easement;
- No tribes would specify an interest in a specific location or discrete area, and
- 8 tribes proposed specific terms for negotiating an agreement.

Communications and interactions included: Direct email, mail, telephone, in-person on-location meetings, virtual meetings, in-person diplomacy with tribal officials, and cultural site and/or ceremonial facility visits[4].

Each survey interested tribe received an information packet updated regularly with current information. It detailed R-Project easement areas available for surveys, including eight section-specific maps, and a variety of logistical, contact, and coordination information.

Phase IV Outreach & Negotiations (*March 2025*): During and after Phase III, multiple tribes requested non-disclosure agreements with Seventh Sovereign[5]. These agreements facilitated open information exchange to (1) execute cultural survey agreements, and (2) accelerate the site-identification process by sharing sensitive information. During this phase, Seventh Sovereign:

- Received primary and secondary site-selection sourcing from 9 tribes;
- Gained corroborative criteria data for 6 tribes, and
- Gathered confidential data to expedite agreements and survey execution.

Tribal Engagement & Negotiations Summary.
During seventh months of outreach and 340+ engagements, no tribe identified a known discrete historic property or specific location of religious or cultural significance within the R-Project physical APE.[6] (*Each outreach phase reiterated requests for this input*.)

[4] Cultural and ceremonial sites/facilities were within tribal jurisdiction, and not in or near the R-Project easement.
[5] Seventh Sovereign's services were provided NPPD legal counsel, include mediation and negotiation under a federal court order. These activities and information exchanged receive legal protections from discovery and adverse disclosure as outlined in federal law, including FRE 408, 501, 502 and 28 USC 651.
[6] Nine tribes identified the entire region as 'of interest,' but none would identify discrete properties or locations.

Nebraska Public Power District's Tribal Monitoring Program Commitment for the R-Project Under National Historic Preservation Act Section 106

December 30, 2025

If Nebraska Public Power District's (NPPD's) proposed Habitat Conservation Plan (HCP) and application for an Incidental Take Permit (ITP) are approved, NPPD agrees to implement, to the extent prudent and feasible, a tribal monitoring program during R-Project construction to avoid or minimize harm to historic properties.[1] NPPD's tribal monitoring program is designed to provide an opportunity for tribal monitors in areas that have the potential for discovery of previously unknown sites with cultural significance and where construction activities will occur that have the possibility of physically affecting such sites, if discovered. The tribal monitoring program, which occurs entirely on private property, will proceed according to the following parameters.

1. Tribal monitoring location criteria: Portions of the R-Project transmission line project area that are within 0.5 mile of named waterways in the National Hydrology Database shall be eligible for tribal monitoring at locations where the specific construction activities defined below will occur.

2. Activities to be monitored: The activities subject to tribal monitoring within the tribal monitoring areas described in list item 1 above are grading of soils and excavation of foundations within structure work areas and grading of soils in pulling-and-tensioning locations.

3. Number of monitors: Up to three tribal monitors total will be allowed at each site.[2]

4. Tribal monitor compensation and other administration: Tribal monitors will be compensated and other logistical concerns will be handled in accordance with the terms of Tribal Monitoring Agreements to be negotiated in good faith with participating Tribes within four months of final approval of the HCP and issuance of the ITP.

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[1] NPPD's commitment to tribal monitoring during R-Project construction is in addition to the Cultural Resources Minimization and Mitigation Measures set out in Appendix B to NPPD's Request to Use the Department of the Interior's Emergency Process for Section 106 Compliance.

[2] NPPD recognizes that more than three tribes have participated in Section 106 consultation and may be interested in tribal monitoring activities. However, given that the R-Project will be constructed on private land with limited access agreements, an unlimited number of tribal participants is not possible. NPPD commits to negotiate in good faith with interested Tribes for the designation of up to three tribal representatives for monitoring of each site.

5. Failure to reach agreement with participating Tribes: If agreement cannot be reached with one or more Tribes for participation in tribal monitoring within four months of HCP approval and ITP issuance, tribal monitoring shall proceed with the participation of only those Tribes for which an agreement has been reached. Reports prepared by tribal monitors, however, will be made available to all consulting Tribes. In no case will construction of any R-Project segment be delayed due to the lack of availability or attendance of tribal monitors during construction activities previously scheduled for tribal monitoring.

6. Construction outside of monitored areas: Construction may proceed in all areas outside of those designated for tribal monitoring pursuant to the conditions in the USFWS Record of Decision and ITP and without regard to the schedule for tribal monitoring in areas designated for tribal monitoring.

7. Unanticipated discoveries: NPPD will adhere to the provisions of 36 C.F.R. § 800.13 and the Unmarked Human Burial Sites and Skeletal Remains Protection Act, Neb. Rev. Stat.§§ 12-1201 to 12-1212, during construction on all locations, regardless of whether tribal monitors are on site.

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Enclosure 3: Table of Known Historic Properties and Unevaluated Cultural Resources in the APE

1. This enclosure contains a table of resources for all known unevaluated, NRHP-eligible, and NRHP-listed cultural resources within the APE.

2. The table provides each resource's number, name, eligibility, type, brief description, and location within the R-Project's APEs for Physical, Audible, and Visual Effects.

3. The table also indicates if a resource is within 0.5 mile of the proposed transmission line; provides a summary of the results of a 2024/2025 viewshed analysis; and lists the anticipated effects of the undertaking to each of the resources.

4. The anticipated effects to the resources in this table are predicated on the following stipulations:

    a. Effects of the undertaking to historic properties will vary depending upon the resource and its characteristics that qualify the property for inclusion in the NRHP.

    b. Non-indigenous, historic-period resources greater than 0.5 mile from the R-Project transmission line should not incur adverse visual effects from the proposed transmission line, in accordance with USFWS consultation with the SHPO in October 2018.

    c. Resources that ***do not*** have an unobstructed view of the R-Project transmission line (as indicated by the 2024 Viewshed Analysis field) should not incur adverse visual effects from the proposed transmission line.

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25AP11	N/A	Unevaluated	Site	Non-specific ceramic scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP12	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP13	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP14	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP15	N/A	Unevaluated	Site	Non-specific ceramic scatter	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25AP16	N/A	Unevaluated	Site	Non-specific ceramic scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP17	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP18	N/A	Unevaluated	Site	Non-specific ceramic scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP2	N/A	Unevaluated	Site	Prehistoric habitation site	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP23	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP24	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP25	N/A	Unevaluated	Site	Non-specific ceramic scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP27	Husbands	Unevaluated	Site	Prehistoric habitation site	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP3	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP505	McGee Mill	Unevaluated	Site	Historic industrial site	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP69	Van Horn-3	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25AP71	Cedar Moon	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25AP72	Switzer-2	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25BL1	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	Y	R-Project transmission line likely not visible (trees)	No anticipated effect
25BL10	Elfgren Site	Unevaluated	Site	Multicomponent artifact scatter	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of visual or audible elements that may diminish the integrity of the properties' significant historic features
25BL11	N/A	Unevaluated	Site	Historic artifact scatter	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25BL12	Fox	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25BL13	N/A	Unevaluated	Site	Historic farm/ranch site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25BL14	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL15	N/A	Unevaluated	Site	Prehistoric extraction/processing site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL16	N/A	Unevaluated	Site	Prehistoric extraction/processing site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL17	N/A	Unevaluated	Site	Prehistoric extraction/processing site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25BL18	N/A	Unevaluated	Site	Multicomponent habitation site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL19	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL2	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL20	N/A	Unevaluated	Site	Prehistoric extraction/processing site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL21	N/A	Unevaluated	Site	Prehistoric extraction/processing site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL22	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL23	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25BL24	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL25	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL26	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL27	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL28	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL29	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL30	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25BL31	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL32	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL33	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL34	N/A	Unevaluated	Site	Pawnee habitation site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL35	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL36	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL37	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25BL38	N/A	Unevaluated	Site	Historic transportation route site	APE for Audible and Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25BL4	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Physical, Audible, and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential physical, audible or visual effects that may diminish the integrity of the properties' significant historic features
25BW19	Torpin II	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25BW21	N/A	Unevaluated	Site	Historic habitation site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25CE138	N/A	Unevaluated	Site	Prehistoric habitation site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25CE29	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25HT23	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25HT56	N/A	Eligible	Site	Historic farm site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25KH24	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25KH25	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25LN100	N/A	Unevaluated	Site	Multicomponent site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN101	N/A	Unevaluated	Site	Historic farm site	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25LN102	N/A	Unevaluated	Site	Historic farm site	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN103	N/A	Unevaluated	Site	Prehistoric site	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN104	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN106	N/A	Unevaluated	Site	Historic farm site	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN107	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN108	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25LN109	N/A	Unevaluated	Site	Historic farm site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25LN110	N/A	Unevaluated	Site	Historic farm site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25LN111	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN112	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN114	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN115	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN116	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN117	N/A	Unevaluated	Site	Multicomponent site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25LN119	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN120	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN121	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN123	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN124	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN125	N/A	Unevaluated	Site	Historic farm site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25LN126	Star-Ferbrache Ranch	Unevaluated	Site	Historic farm site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25LN127	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25LN128	N/A	Unevaluated	Site	Multicomponent habitation site	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN129	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN130	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN131	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN132	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN133	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25LN134	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN17	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN18	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN20	N/A	Unevaluated	Site	Site (period not recorded in NCRGIS site data)	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN23	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN30	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25LN31	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
25LN32	N/A	Unevaluated	Site	Prehistoric artifact scatter and historic military site	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25LN33	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25LN37	O'Fallon Station	Unevaluated	Site	Historic transportation route site	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN38 (may be same resource as LN00-021)	N/A	Unevaluated	Site	Historic transportation and military site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25LN39	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN505	Eshleman Bros./Hershey Mill	Unevaluated	Site	Historic industrial site	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
25LN66	N/A	Unevaluated	Site	Historic farm site	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25LN7	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25LN72	N/A	Unevaluated	Site	Protohistoric site	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN73	N/A	Unevaluated	Site	Historic farm site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25LN83	N/A	Unevaluated	Site	Historic farm site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25LN90	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25LN91	Sherman Homestead	Unevaluated	Site	Historic farm site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25LN92	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN93	N/A	Unevaluated	Site	Historic farm site	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25LN94/25LN113	Birdwood Creek site	Eligible	Site	Multicomponent archaeological site	APE for Physical, Audible, and Visual Effects	Y	Unobstructed view of R-Project transmission line	Anticipated adverse effect
25LN95	N/A	Unevaluated	Site	Prehistoric site	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN96	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN97	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN98	N/A	Unevaluated	Site	Historic farm site	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25LP12	N/A	Unevaluated	Site	Non-specific ceramic scatter	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25LP14	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25LP15	N/A	Unevaluated	Site	Prehistoric artifact scatter and historic religious site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25LP16	N/A	Unevaluated	Site	Historic farm site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25LP23	N/A	Unevaluated	Site	Historic religious site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25LP3	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LP30	N/A	Unevaluated	Site	Historic farm site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25LP4	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LP49	Bloody Buck	Unevaluated	Site	Prehistoric Central Plains Villagers/Itskari Phase	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LP58	N/A	Unevaluated	Site	Historic farm site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25RO11	N/A	Unevaluated	Site	Historic artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25TM10	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25TM11	Bessey Nursery	Listed	Site		APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25TM12	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25TM13	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25TM14	N/A	Unevaluated	Site	Multicomponent site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25TM15	N/A	Unevaluated	Site	Government/administrative site	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25TM17	N/A	Unevaluated	Site	Habitation site	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25TM18	N/A	Eligible	Site	Historic archaeological site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25TM19	N/A	Eligible	Site	Historic archaeological site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25TM2	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
25TM20	N/A	Eligible	Site	Historic archaeological site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25TM21	N/A	Eligible	Site	Historic archaeological site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25TM22	N/A	Eligible	Site	Historic archaeological site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25TM23	N/A	Unevaluated	Site	Historic artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25TM35	N/A	Unevaluated	Site	Government/administrative site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25TM39	Ponderosa & Banksiana	Unevaluated	Site	Historic artifact scatter	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25TM5	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25TM9	N/A	Unevaluated	Site	Historic transportation site	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25WH1	N/A	Unevaluated	Site	Artifact scatter (period not recorded in NCRGIS site data)	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25WH2	N/A	Unevaluated	Site	Historic artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25WH3	N/A	Unevaluated	Site	Prehistoric Coalescent/ Caddoan-Pawnee site	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
AP00-001	Ewing Chicago & Northwestern Depot	Unevaluated	Building	Depot	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-049	N/A	Unevaluated	District	1900 abandoned farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
AP00-050	N/A	Unevaluated	Building	1895 abandoned farmhouse	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
AP00-051	N/A	Unevaluated	District	1883 farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP00-062	N/A	Unevaluated	Building	1910 abandoned school	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
AP00-067	N/A	Unevaluated	District	1910 farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
AP00-111	N/A	Unevaluated	Building	1914 abandoned farmhouse	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-112	N/A	Unevaluated	District	1909 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-113	N/A	Unevaluated	District	1897 abandoned farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
AP00-115	1913 Park Lenter School	Unevaluated	Building	School	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-116	N/A	Unevaluated	District	1906 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-117	N/A	Unevaluated	District	1887 farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line but not seen in aerial photography, building not extant?	No anticipated adverse effect
AP00-118	N/A	Unevaluated	District	1886 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-119	N/A	Eligible	District	1887 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
AP00-121	N/A	Unevaluated	Building	1890 abandoned farmhouse	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-122	N/A	Unevaluated	District	1880 abandoned farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-123	N/A	Unevaluated	District	1913 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-124	Fairview Church & Cemetery	Eligible	District	1903 Catholic church and cemetery	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
AP00-125	N/A	Unevaluated	District	1900 abandoned farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
AP00-127	N/A	Unevaluated	Building	1905 farmhouse	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
AP00-128	N/A	Unevaluated	District	1909 farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
AP00-129	N/A	Eligible	District	1908 farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
AP00-130	N/A	Eligible	District	1910 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-131	N/A	Unevaluated	District	1895 abandoned house	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
AP00-209	N/A	Unevaluated	District	1901 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-210	N/A	Unevaluated	Building	1907 abandoned farmhouse	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-211	N/A	Unevaluated	District	1897 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-212	N/A	Unevaluated	District	1911 farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
AP00-213	N/A	Eligible	District	1900 farmstead	APE for Visual Effects	N	Non-Extant? Not seen in aerial photography	No anticipated effect
AP00-248	Kallhoff Farmstead	Eligible	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-301	N/A	Unevaluated	?	No resource information in SHPO data	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
AP02-001	N/A	Unevaluated	Building	1902 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-002	N/A	Unevaluated	Building	1901 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP02-003	St. Theresa Catholic Church and Parsonage	Eligible	Building	1904-1913 church	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-004	N/A	Unevaluated	Building	1900 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-005	N/A	Unevaluated	Building	1897 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-006	N/A	Unevaluated	Building	1905 grain storage facility	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP02-007	N/A	Unevaluated	Building	1913 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP02-008	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-009	N/A	Eligible	Building	1895 abandoned house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-010	N/A	Eligible	Building	1911 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-011	N/A	Unevaluated	Building	1920 former filling station	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-012	N/A	Unevaluated	Structure	1920 water tower	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-013	N/A	Eligible	Building	1906 former city library	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-014	N/A	Unevaluated	Building	1908 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-015	N/A	Unevaluated	Building	1904 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-016	N/A	Unevaluated	Building	1907 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-017	N/A	Eligible	Building	1905 former Lutheran church	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-018	N/A	Unevaluated	Building	1900 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-019	N/A	Unevaluated	Building	1912 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
AP02-020	N/A	Unevaluated	Building	1897 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-021	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-022	N/A	Unevaluated	Building	1901 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-023	N/A	Unevaluated	Building	1918 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-024	N/A	Unevaluated	Building	1918 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-025	N/A	Unevaluated	Building	1887 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-026	N/A	Unevaluated	Building	1912 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP02-027	N/A	Unevaluated	Building	1895 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP02-028	N/A	Unevaluated	Building	1900 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP02-029	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP02-030	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP02-031	N/A	Unevaluated	Building	1915 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-032	N/A	Unevaluated	Building	1895 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP02-033	N/A	Unevaluated	Building	1880 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-034	N/A	Unevaluated	Building	1890 garage/livery	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-035	N/A	Unevaluated	Building	1890 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-036	Contois Bros. Auto Dealership	Eligible	Building	1917 building	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-037	1890 Church of Christ	Unevaluated	Building	Church	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-038	Former Clearwater Record Building	Eligible	Building	1880 building	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
AP02-039	Citizens State Bank	Eligible	Building	1915 bank	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
BL00-001	N/A	Unevaluated	District	1910 ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
BL00-002	N/A	Unevaluated	Ranch	1910 concrete block house	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BL00-003	N/A	Unevaluated	District	1908 ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BL00-004	N/A	Unevaluated	Building	1910 school	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
BL00-005	Lister Clay House	Eligible	Building	1930 house	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
BL00-006	N/A	Eligible	District	1905 abandoned ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
BL00-008	St John's Lutheran Church-Wisconsin Synod	Eligible	Building	1948 church and parsonage	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Anticipated adverse effect
BL00-009	1915 Schneidereits Ranch	Unevaluated	District	Ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
BL00-010	Ferdinand Schneidereit Ranch	Eligible	District	1890, 1918 ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
BL00-011	N/A	Unevaluated	District	1915 ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
BL00-012	N/A	Unevaluated	District	1890 abandoned ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
BL00-013	N/A	Unevaluated	District	1895 abandoned ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
BL00-014	1910 Abandoned School #15	Unevaluated	Building	school	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BL00-015	N/A	Unevaluated	District	1920 ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
BL00-016	N/A	Unevaluated	District	1895 abandoned farmhouse	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
BL00-021	N/A	Unevaluated	District	1903 abandoned ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
BL00-022	N/A	Unevaluated	District	1900 abandoned ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
BL00-023	N/A	Eligible	District	1905 abandoned ranch with sod house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
BL00-024	N/A	Unevaluated	Building	1885 abandoned dugout	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
BL00-025	N/A	Unevaluated	Building	1910 school	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BL00-027	N/A	Eligible	District	1905 abandoned sod house	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BL00-028	N/A	Unevaluated	Building	1900 farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BL00-029	Hersh, Dean, House	Eligible	District	1940 house	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BL00-031	N/A	Unevaluated	District	1910 ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BL00-032	N/A	Unevaluated	District	1890 farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BL00-034	Harris Homestead	Eligible	Building	1901 homestead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
BL00-035	N/A	Unevaluated	Object	1910 range corral	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
BL00-036	Minister, Buck, Homestead	Eligible	District	1903 homestead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BL00-037	Dist.#14 Schoolhouse	Eligible	District	1915 school	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
BL00-038	N/A	Unevaluated	Building	1912 stucco house	APE for Audible Effects	N	R-Project transmission line not visible	No anticipated effect
BL00-039	N/A	Unevaluated	District	1900 abandoned ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
BL00-040	N/A	Unevaluated	Building	1908 school	APE for Visual Effects	N	Unobstructed view of R-Project transmission line but not seen in aerial photography, building not extant?	No anticipated adverse effect
BL01-001	Blaine County Courthouse	Unevaluated	Building	1908 courthouse	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
BL01-002	N/A	Unevaluated	House	1893 frame house	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
BL01-003	N/A	Unevaluated	House	1900 stucco house	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
BL01-004	N/A	Unevaluated	House	1900 stucco house	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
BL01-005	N/A	Eligible	Building	1908 house	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
BL03-001	N/A	Unevaluated	Building	1908 house	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BW00-031	N/A	Unevaluated	Building	1910 school	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BW00-032	N/A	Unevaluated	Building	1910 abandoned farmhouse	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BW00-037	N/A	Unevaluated	District	1890 abandoned ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BW00-045	N/A	Eligible	Building	1910 school	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BW00-046	N/A	Unevaluated	District	1900 abandoned homestead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BW00-048	N/A	Eligible	Building	1912 school	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
BW00-049	U.S. Post Office	Eligible	Building	1928 U.S. Post Office	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
CE00-168	1890 Johnson Ranch	Unevaluated	District	Ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
CE00-169	N/A	Eligible	Building	1895 school	APE for Visual Effects	N	Unobstructed view of R-Project transmission line but not seen in aerial photography, building not extant?	No anticipated adverse effect
GF00-009	N/A	Unevaluated	Building	House	APE for Visual Effects	N	Unobstructed view of R-Project transmission line but not seen in aerial photography, building not extant?	No anticipated adverse effect
GF00-010	N/A	Unevaluated	Building	Farmhouse	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
HT00-178	Swan Schoolhouse (District 233)	Unevaluated	Building	Frame schoolhouse	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line but not seen in aerial photography, building not extant?	No anticipated adverse effect
HT00-179	N/A	Unevaluated	Building	Abandoned farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-180	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
HT00-181	N/A	Unevaluated	Building	Church and parsonage	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
HT00-182	N/A	Unevaluated	Building	Farmhouse	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
HT00-183	N/A	Unevaluated	Building	1890 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
HT00-185	N/A	Unevaluated	Building	Abandoned Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-195	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-196	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-208	N/A	Unevaluated	Building	1885 abandoned farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
HT00-215	N/A	Unevaluated	Building	Abandoned farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-216	N/A	Unevaluated	Building	Abandoned farmhouse	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
HT00-217	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
HT00-218	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
HT00-219	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-220	N/A	Unevaluated	Building	Abandoned schoolhouse	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
HT00-221	N/A	Unevaluated	Building	Abandoned farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
HT00-222	N/A	Unevaluated	Building	Abandoned farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
HT00-223	N/A	Unevaluated	Building	Abandoned schoolhouse	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
HT00-224	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
HT00-225	Farmers Hill Cemetery	Eligible	Site	1880 cemetery	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-226	Lutheran Cemetery	Unevaluated	Building	Cemetery	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-227	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-228	N/A	Eligible	Structure	1915-1920 horse-drawn road grader	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-229	Valley View Cemetery	Unevaluated	Building	Cemetery	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-230	N/A	Unevaluated	Building	Abandoned farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-231	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-232	N/A	Unevaluated	Building	Abandoned farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
HT00-233	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-234	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
HT00-235	N/A	Eligible	Building	1915 farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-236	N/A	Unevaluated	Building	Cemetery	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
HT00-238	N/A	Unevaluated	House	Historic-period frame house	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
HT00-239	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
HT00-240	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
HT00-254	1899 Vandersnick Cemetery	Unevaluated	Site	Cemetery	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
HT00-255	1886 Ziems Cemetery	Unevaluated	Site	Cemetery	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-257	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-258	N/A	Eligible	Building	1904 abandoned schoolhouse	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-260	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-285	Chambers Cemetery	Unevaluated	Site	Cemetery	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
HT03-013	N/A	Unevaluated	?	No resource information in NCRGIS	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-001	N/A	Unevaluated	Building	Commerce building	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-002	N/A	Unevaluated	Building	Concrete block garage	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-003	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-004	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-005	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-006	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-007	N/A	Unevaluated	Building	1890 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-008	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-009	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-010	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-011	Smith Bros. Cash Store	Eligible	Building	1890 store	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-012	N/A	Unevaluated	Building	1890 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
HT05-014	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-015	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-016	N/A	Unevaluated	Building	1890 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-017	N/A	Unevaluated	Building	1890 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-018	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-019	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-020	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-021	Chambers Public School	Unevaluated	Building	School	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-022	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-023	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT05-024	N/A	Unevaluated	Building	Abandoned house	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT05-025	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT05-026	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
KH00-008	N/A	Unevaluated	District	1910 farm	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
KH00-009	1920 Lawler Farm & Ranch Co	Unevaluated	District	Ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
KH00-011	N/A	Unevaluated	District	1920 farm	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
KH00-013	N/A	Eligible	District	1890 farm	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
KH00-014	N/A	Unevaluated	District	1925 farm	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
KH00-015	N/A	Unevaluated	Building	1940 barn	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LN00-003	N/A	Unevaluated	Building	1915 barn and windmill	APE for Visual Effects	N	Unobstructed view of R-Project transmission line but not seen in aerial photography, building not extant?	No anticipated adverse effect
LN00-004	1923 Maria Lutheran Church	Unevaluated	Building	Church	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-005	N/A	Eligible	Building	1885 stone farmhouse	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-011	Millen, Peter House	Eligible	Building	1900 house	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-021 (may be same resource as 25LN38)	Adobe Fort (Site)	Unevaluated	Site	Site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-028	O'Fallon's Bluff Oregon-California National Historic Trail	Listed	Structure	Trail ruts	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Anticipated adverse effect
LN00-028 [RPKB-13]	O'Fallon's Bluff Oregon-California National Historic Trail (segment)	Eligible	Structure	Trail ruts	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Anticipated adverse effect
LN00-028 [RPKB-15]	O'Fallon's Bluff Oregon-California National Historic Trail (segment)	Eligible	Structure	Trail ruts	APE for Physical, Audible, and Visual Effects	Y	Unobstructed view of R-Project transmission line	Anticipated adverse effect
LN00-032	Sutherland State Aid Bridge	Listed (Demolished)	Bridge	1914/1915 concrete spandrel-arch bridge	N/A (Demolished)	N/A	N/A (Demolished)	No effect
LN00-038	1885 Lamont Cemetery	Unevaluated	Site	Cemetery	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-039	1932 Pony Express Memorial Marker	Unevaluated	Object	Marker	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-040	N/A	Unevaluated	Building	1920 farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LN00-067	N/A	Unevaluated	District	1900; 1940 abandoned ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LN00-068	1900 Sykes Cemetery	Unevaluated	Site	Cemetery	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
LN00-083	1885 Trinity Cemetery	Unevaluated	Site	Cemetery	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LN00-170	1882 Frontier Cemetery	Unevaluated	Site	Cemetery	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
LN00-171	N/A	Unevaluated	District	1885 abandoned farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
LN00-172	N/A	Unevaluated	District	1900; 1925 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LN00-173	N/A	Unevaluated	Building	1890 abandoned farmhouse	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LN00-174	N/A	Unevaluated	District	1920 farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
LN00-175	N/A	Unevaluated	Building	1900 abandoned school	APE for Visual Effects	N	Unobstructed view of R-Project transmission line but not seen in aerial photography, building not extant?	No anticipated adverse effect
LN00-176	N/A	Unevaluated	Building	1915 farmhouse on non-contributing farm	APE for Visual Effects	N	R-Project transmission line likely not visible (trees, existing transmission lines)	No anticipated effect
LN00-177	N/A	Unevaluated	District	1920 abandoned farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LN00-178	N/A	Unevaluated	District	1925 farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LN00-179	N/A	Unevaluated	District	1908 farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LN00-180	N/A	Unevaluated	District	1890 abandoned farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LN00-181	1900 Sutherland Riverview Cemetery	Unevaluated	Site	Cemetery	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LN00-182	N/A	Unevaluated	District	1927 farm with non-contributing house	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-183	N/A	Unevaluated	Building	1920 farmhouse on non-contributing farm	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-184	N/A	Unevaluated	Building	1905 abandoned school	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-185	N/A	Unevaluated	District	1910 farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LN00-186	1910 Birdwood School Dist #36	Unevaluated	Building	School	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LN00-187	N/A	Unevaluated	District	1905 ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-188	N/A	Unevaluated	District	1910 abandoned farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-189	N/A	Unevaluated	Building	1885 abandoned farmhouse	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LN00-190	N/A	Unevaluated	District	1915 ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LN00-191	N/A	Unevaluated	District	1880; 1920 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LN00-193	N/A	Unevaluated	Building	1885 abandoned farmhouse	APE for Visual Effects	N	Unobstructed view of R-Project transmission line but not seen in aerial photography, building not extant?	No anticipated adverse effect
LN00-194	1890 Riverside Cemetery	Unevaluated	Site	Cemetery	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-195	N/A	Eligible	District	1905 house and barn	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LN00-196	N/A	Unevaluated	District	1915 farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-197	N/A	Unevaluated	District	1920 farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-198	N/A	Unevaluated	Building	1920 barn on non-contributing farm	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LN00-199	N/A	Unevaluated	District	1900; 1925 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LN00-202	N/A	Eligible	District	1888 abandoned ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LN00-205	N/A	Unevaluated	Building	1910 farmhouse	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LN00-207	N/A	Unevaluated	Building	1910 ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (trees), but not seen in aerial photography, building not extant?	No anticipated effect
LN00-208	1888 Garfield Cemetery	Unevaluated	Site	Cemetery	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN03-004	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-005	N/A	Unevaluated	Building	1920 commercial building	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-006	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-007	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-008	1925 Hershey Water Tower	Unevaluated	Structure	Water tower	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-009		Unevaluated	Building	1900 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-010	N/A	Unevaluated	Building	1890 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-011	N/A	Unevaluated	Building	1900 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-012	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-013	N/A	Unevaluated	Building	1900 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-014	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-015	N/A	Eligible	Building	1927, 1930 abandoned motel court	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN03-016	N/A	Unevaluated	Building	1890 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-017	N/A	Unevaluated	Building	1900 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-018	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LN03-019	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-021	N/A	Eligible	Building	1908 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-022	N/A	Eligible	Building	1910 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-023	N/A	Unevaluated	Building	1915 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-024	N/A	Unevaluated	Building	1915 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-001	Wesleyan Church (Now Boutique & Fitness Center)	Unevaluated	Building	Church	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-004	N/A	Unevaluated	Building	1912 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-006	1890 Rodeo Office	Unevaluated	Building	Office	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN08-007	N/A	Unevaluated	House	1890 frame house	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-008	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-010	N/A	Unevaluated	Building	1891 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-011	N/A	Unevaluated	Building	1915 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-012	1914 Spaulding – Aly House	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-013	N/A	Unevaluated	Building	1915 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-014	N/A	Eligible	Building	1920 house	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-015	N/A	Unevaluated	House	1917 frame house	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-016	N/A	Unevaluated	House	1908 frame house	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-017	N/A	Unevaluated	House	1900 frame house	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-018	N/A	Unevaluated	House	1915 frame house	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LN08-019	N/A	Eligible	Building	1927, 1937 filling station and service garage	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN08-020	Coates, Frank House	Unevaluated	House	1900 frame house	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN08-021	1919 Vanarskall – Paulman House	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-022	N/A	Unevaluated	Building	1915 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-023	N/A	Unevaluated	Building	1920 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-024	N/A	Unevaluated	Building	1890 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-025	N/A	Unevaluated	Building	1918 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-026	N/A	Unevaluated	Building	1890; 1880 house with former house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-027	N/A	Unevaluated	Building	1917 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-028	N/A	Unevaluated	Building	1900 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-029	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-030	N/A	Unevaluated	Building	1915 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-031	N/A	Unevaluated	Building	1917 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-032	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-033	N/A	Unevaluated	Building	1928 service station	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-034	N/A	Unevaluated	Building	1920 brick commercial building	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-035	1931 Former Sutherland Town Hall	Unevaluated	Building	Town hall	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-036	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LN08-037	N/A	Unevaluated	Building	1920 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-038	N/A	Unevaluated	Building	1895 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-039	N/A	Eligible	Building	1938 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-040	N/A	Unevaluated	Building	1917 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-041	N/A	Eligible	Building	1927 former filling station	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-042	N/A	Unevaluated	Building	1927 former filling station/cafe	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-043	N/A	Unevaluated	Building	1927; 1950 park motel & service station	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-044	N/A	Eligible	Building	1927 former motel court (now apartments)	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-045	N/A	Unevaluated	Building	1950 service station/restaurant	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-046	N/A	Eligible	Building	1930 former filling station	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-048	Lincoln Hwy Marker	Eligible	Object	1927-1930 highway marker	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN08-049	N/A	Unevaluated	Building	1890 abandoned house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-050	N/A	Eligible	Building	1925 split log house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-051	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-052	N/A	Eligible	Building	1900 adobe brick house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-053	N/A	Unevaluated	Building	1900 abandoned elevator	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-055	N/A	Eligible	Site	Rodeo grounds	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LO00-001	Brosius Homestead/ Neal Ranch	Eligible	District	Circa 1905 ranch with a frame house, small brick house, garage, workshop, barn, shop/garage, small outbuildings, and corral	APE for Audible and Visible Effects	Y	Unobstructed view of R-Project transmission line	Anticipated adverse effect
LO00-003	N/A	Unevaluated	District	1920 farm	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LO00-004	N/A	Unevaluated	District	1910 farm	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
LO00-005	N/A	Eligible	District	1900 abandoned ranch with sod house	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LO00-006	Baker Ranch with baled hay house	Eligible	District	1923 ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LO00-008	N/A	Unevaluated	District	1907 farmstead - ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LO00-009	N/A	Unevaluated	District	1901 ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LO00-010	N/A	Unevaluated	Building	1912 sod house	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LO00-011	N/A	Unevaluated	District	1910 ?	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LO00-012	N/A	Eligible	District	1905 ranch with sod house	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LO00-013	N/A	Unevaluated	Building	1907 abandoned ranch house	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LO00-015	N/A	Unevaluated	District	1907 abandoned ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
LO00-016	N/A	Unevaluated	District	1918 ranch house	APE for Visual Effects	N	R-Project transmission line likely not visible (trees, existing transmission lines)	No anticipated effect
LO00-017	Gross-Drake House	Eligible	District		APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LO00-018	N/A	Eligible	District	1893 abandoned ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LO00-019	N/A	Eligible	Building	1913 ranch with sod house	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LO00-020	N/A	Eligible	District	1901 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LO00-021	N/A	Unevaluated	District	1910 ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LO00-022	N/A	Eligible	District	1925 ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LO00-023	N/A	Eligible	Building	1914 farmhouse	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO00-027	N/A	Unevaluated	?	No resource information in SHPO data	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LO01-001	N/A	Eligible	Building	1880 abandoned commercial building	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO01-002	Former Logan County Jail	Eligible	Building	1908 jail	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO01-003	N/A	Unevaluated	Building	1895 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO01-004	Independent Order of Odd Fellows Hall and Gandy Cash Store	Eligible	Building	1890 store and club	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO01-005	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO01-006	Logan County High School	Eligible	Building	1930 school	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LO03-001	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-002	N/A	Unevaluated	Building	1917 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-003	N/A	Unevaluated	Building	1920 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-004	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-005	N/A	Eligible	Building	1921 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-006	N/A	Eligible	Building	1920 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-007	N/A	Unevaluated	Building	1895 ?	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LO03-008	N/A	Unevaluated	Building	1915 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-009	N/A	Unevaluated	Building	1913 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-010	N/A	Unevaluated	Building	1903 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-011	N/A	Unevaluated	Building	1887 abandoned commercial building	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-012	N/A	Eligible (no longer extant)	Building	1881 abandoned lumber company	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	No anticipated effect
LO03-013	1931 United Presbyterian Church	Unevaluated	Building	Church	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-014	Old City Hall	Eligible	Building	1900 municipal building	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-015	U.S. Post Office	Eligible	Building	1927 U.S. Post Office	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-017	N/A	Unevaluated	House	Circa 1901 frame house	APE for Audible and Visual Effects	Y	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-018	N/A	Unevaluated	House	Circa 1901 frame house	APE for Audible and Visual Effects	Y	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-019	N/A	Unevaluated	Building	1919 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-020	N/A	Unevaluated	Building	1923 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-021	N/A	Unevaluated	Site	1939 city park	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LP00-002	N/A	Unevaluated	Building	1895 abandoned ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LP00-020	1890 Worth, George, Ranch	Unevaluated	District	Ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
MP00-007	N/A	Unevaluated	Building	1909 house – abandoned ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
MP00-008	1918 Barn on N.C. Ranch	Unevaluated	Building	Barn	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
MP00-020	N/A	Unevaluated	District	1910 ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
MP00-021	N/A	Eligible	Building	1913 school	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
RO00-051	1900 Rose-Hill Church, Cemetery & Parsonage	Unevaluated	District	Church complex	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
RO00-052	N/A	Unevaluated	District	1890; 1900 abandoned homestead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
RO00-053	N/A	Unevaluated	Object	1915 abandoned range corral	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
RO00-054	N/A	Eligible	District	1890 abandoned homestead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
RO00-055	N/A	Unevaluated	Building	1906 abandoned house	APE for Visual Effects	N	Unobstructed view of R-Project transmission line but not seen in aerial photography, building not extant?	No anticipated adverse effect
RO00-056	N/A	Unevaluated	District	1910 abandoned ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
RO00-057	N/A	Unevaluated	Building	1900 abandoned house	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
RO00-058	N/A	Unevaluated	Building	1915 school	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
RO00-059	N/A	Unevaluated	Building	1910 abandoned cellar	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
RO00-060	N/A	Unevaluated	District	1885; 1900 ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
RO00-061	N/A	Unevaluated	District	1910 ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
RO00-062	N/A	Unevaluated	Building	1910 school	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
RPKB-1	Old Highway 83/U.S. Route 183 (segment)	Eligible	Structure	1920s – 1980s abandoned highway	APE for Physical, Audible, and Visual Effects	Y	Unobstructed view of R-Project transmission line	Anticipated adverse effect
RPKB-12	Ballagh Schoolhouse	Unevaluated	Site	Historic school	APE for Physical, Audible, and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential physical effect that may diminish the integrity of the properties' significant historic features
RPKB-3	Sand Hill Ruts, Mormon Pioneer NHT	Eligible	Structure	Trail ruts	APE for Physical, Audible, and Visual Effects	Y	Unobstructed view of R-Project transmission line	Anticipated adverse effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
RPKB-5	Paxton-Hershey Canal	Eligible (Contributing)	Structure	Canal	APE for Physical, Audible, and Visual Effects	Y	Unobstructed view of R-Project transmission line	No adverse effect
TM00-001	Bessey Nursery	Listed	District	U.S. Forest Service facility	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
TM00-003	N/A	Unevaluated	Building	1925 barn	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-004	N/A	Unevaluated	District	1915 ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-005	N/A	Unevaluated	Building	1900 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-006	N/A	Unevaluated	District	1915 ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (trees, existing transmission lines)	No anticipated effect
TM00-007	N/A	Unevaluated	District	1915 ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-008	Johnson, Charles, House	Eligible	Building	1890 house	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-009	Mowery, Clark, Homestead	Eligible	Building	1911 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-010	Albright, Edward, Homestead	Eligible	District	1907 homestead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-011	Jameson, Frederick, House	Eligible	District	1911 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-012	N/A	Unevaluated	Building	1900 abandoned house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-013	1910 Turner Homestead	Unevaluated	District	1910 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-014	N/A	Unevaluated	District	1910 abandoned homestead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-015	1910 Madron Ranch	Unevaluated	District	Ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-017	N/A	Eligible	District	1910 abandoned ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-018	U.S. Post Office	Eligible	Building	1900 U.S. Post Office	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-019	N/A	Unevaluated	Building	1905 school	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
TM00-020	1910 Glen Nutter Ranch	Unevaluated	District	Ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-021	N/A	Unevaluated	District	1910 abandoned ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-023	N/A	Unevaluated	District	1920 ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-024	Warner, Archie, House	Eligible	Building	1917 house	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
TM00-025	N/A	Unevaluated	District	1910 abandoned ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-026	1935 Bessey National Forest Tree Plantings/ Groves	Unevaluated	Landscape	CCC tree planting project	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-027	Charles Scott Lookout Tower, Nebraska National Forest	Eligible	Building	1930 fire tower	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-028	N/A	Unevaluated	District	1928 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-029	N/A	Unevaluated	Building	1930 frame barn	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-030	N/A	Unevaluated	District	1910 abandoned ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-032	Rodocker Ranch	Eligible	District	1925 ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-033	Jess Ewing Ranch	Eligible	District	1915-1930 ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-034	1965 Bessey Tree Planting / Halsey National Forest	Unevaluated	Landscape	Tree plantings spelling word “Bessey” on hillside	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-035	N/A	Unevaluated	Building	1920 house	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
TM00-036	N/A	Unevaluated	District	1920 abandoned ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-039	N/A	Unevaluated	District	1908-1930 ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
TM00-040	Blue Star Highway Rest Area	Unevaluated	Site	Rest area	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
TM00-041	Figard Sod House	Unevaluated	District	1938 farmstead	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
TM00-042	Paul, W. D., House	Eligible	Building	1916 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-044	1950 Arrow Café	Unevaluated	Building	Restaurant	APE for Visual Effects	N	R-Project transmission line likely not visible (highway embankment)	No anticipated effect
TM00-045	1950 Arrowhead Lodge	Unevaluated	Building	Hotel	APE for Visual Effects	N	R-Project transmission line likely not visible (highway embankment)	No anticipated effect
TM00-046	N/A	Unevaluated	Building	1950 service station & café	APE for Visual Effects	N	R-Project transmission line likely not visible (highway embankment)	No anticipated effect
TM00-049	Nebraska National Forest - Bessey Ranger District	Listed	District	U.S. Forest Service facility	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-050	N/A	Unevaluated	Structure	1930 tornado shelter	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-051	Thedford Cemetery	Eligible	Site	1887 cemetery	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-052	N/A	Eligible	Structure	Revetment/boardwalk	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
TM00-053	N/A	Eligible	Building	Cellar/tornado shelter	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-055	N/A	Eligible	Structure	Put-take/launch	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-056	N/A	Eligible	Structure	Retaining wall	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-057	N/A	Eligible	Structure	Stairs	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-058	1941 District Ranger Dwelling	Unevaluated	Building	USFS ranger dwelling	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-059	1941 Assistant Ranger Dwelling	Unevaluated	Building	USFS Ranger dwelling	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-060	N/A	Eligible	Building	Engineer bunkhouse	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-061	N/A	Eligible	Building	1946 lifeguard house	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-062	1939 West Shop	Unevaluated	Building	USFS shop	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-063	1941 District Ranger Garage	Unevaluated	Building	USFS garage	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
TM00-064	1941 Assistant Ranger Garage	Unevaluated	Building	USFS garage	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-065	1935 Fire Cache	Unevaluated	Structure	USFS fire cache	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-066	N/A	Eligible	Building	1935 storage garage	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-067	1937 Picnic Shelter House	Unevaluated	Building	USFS picnic shelter	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-068	1935 Pool Pump House	Unevaluated	Building	USFS pump house	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-070	Memorial Gates	Unevaluated	Structure	Gates	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-071	1941 Nurseryman Dwelling	Unevaluated	Building	USFS dwelling	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-072	N/A	Eligible	Building	1931 assistant nurseryman dwelling	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-073	1937 Seed Extractory	Unevaluated	Building	USFS seed extractor	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-074	N/A	Eligible	Building	1930 flammable storage	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect

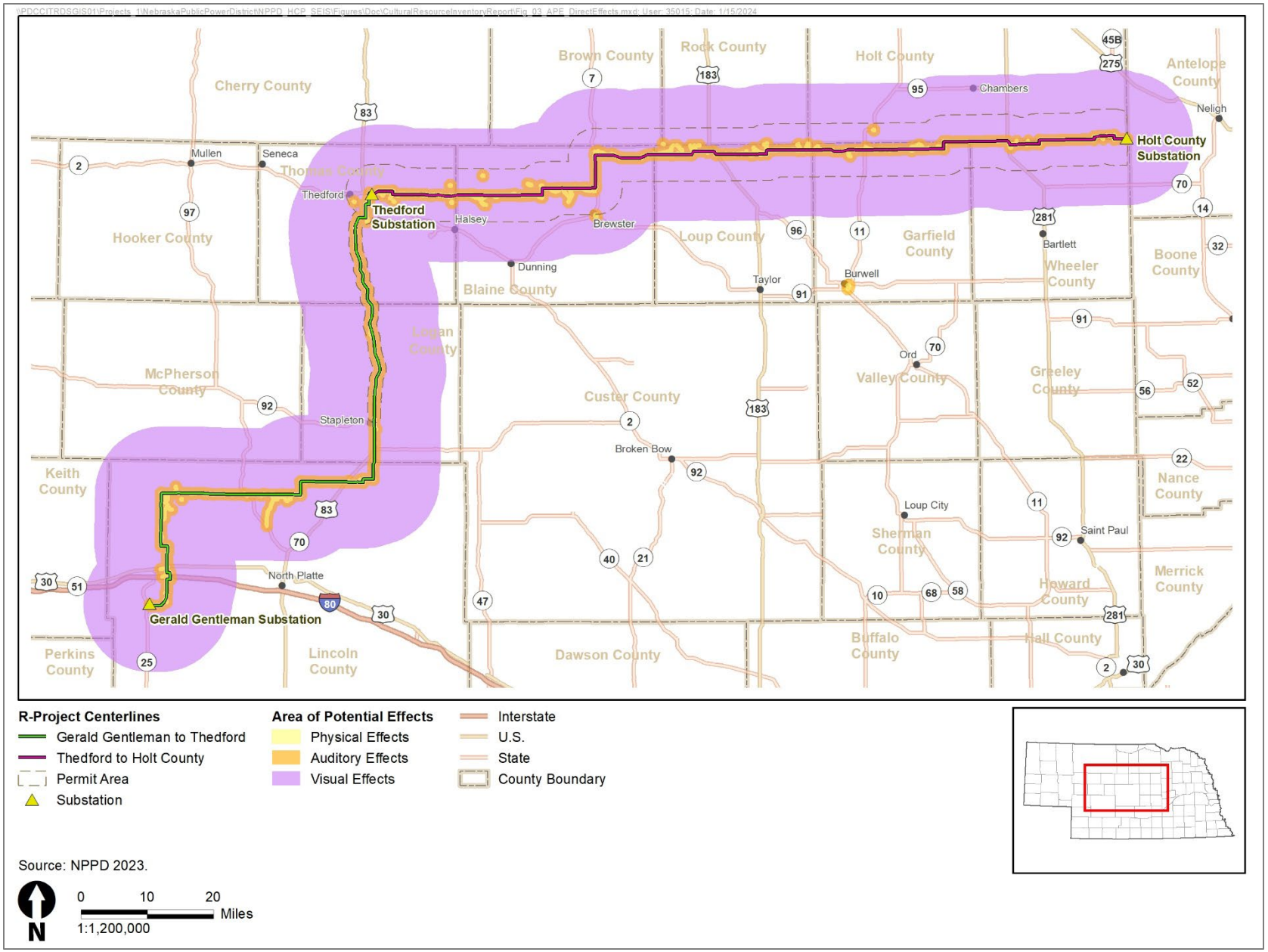
Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
TM00-075	1937 Shop & Storage	Unevaluated	Building	USFS shop and storage	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-076	1937 Implement Shed	Unevaluated	Building	USFS shed	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-077	1930 Tree Packing Shed	Unevaluated	Building	USFS shed	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-078	1935 Cold Storage	Unevaluated	Building	USFS cold storage	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-079	N/A	Eligible	Building	1932 chemical storage	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-080	N/A	Eligible	Building	1932 seed storage	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-081	1933 Six Car Garage	Unevaluated	Building	USFS garage	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-082	1932 Tractor Storage	Unevaluated	Building	USFS storage	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-083	1941 Nurseryman Garage	Unevaluated	Building	USFS garage	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-084	N/A	Eligible	Building	paint cellar	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
TM00-085	N/A	Eligible	Building	1912 nursery office	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-086	N/A	Unevaluated	Structure	Revetment	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM01-001	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-002	N/A	Unevaluated	Building	1906 abandoned house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-003	N/A	Eligible	Building	1910 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-004	N/A	Unevaluated	Building	1914 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-006	N/A	Eligible	Building	1917 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-007	N/A	Unevaluated	Building	1917 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-008	N/A	Unevaluated	Building	1927 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-009	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-010	N/A	Unevaluated	Building	1918 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-011	N/A	Unevaluated	Building	1908 abandoned house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-012	N/A	Eligible	Building	1909 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-013	N/A	Eligible	Building	1912 commercial building	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-014	Kenney Stockade Motel	Eligible	Building	1929 motel	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-015	N/A	Eligible	Building	1912 commercial building	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-016	N/A	Eligible	Building	1910 commercial building	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
TM01-017	N/A	Eligible	Building	1912 former hotel	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-018	1910-1960 Halsey Public School	Unevaluated	District	School	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-019	N/A	Unevaluated	Building	1950 service station	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM05-001	N/A	Unevaluated	Building	1915 commercial building	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-002	N/A	Unevaluated	Building	1925 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-003	N/A	Unevaluated	Building	1913 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-004	N/A	Unevaluated	Building	1912 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-005	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-006	N/A	Unevaluated	Building	1910 abandoned house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-007	N/A	Unevaluated	Building	1915 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-008	N/A	Unevaluated	Building	1910 former bank	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-009	Jim Weaver Hotel & Restaurant	Eligible	Building	1916 building	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-010	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-011	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-012	N/A	Unevaluated	Building	1900 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-013	N/A	Unevaluated	Building	1929 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-014	N/A	Unevaluated	Building	1915 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-015	N/A	Eligible	Building	1915 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Mile of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
TM05-016	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-017	N/A	Unevaluated	Building	1914 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-018	N/A	Unevaluated	Building	1916 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-020	Thomas County Jail Building	Eligible	Building		APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-021	Thedford City Park	Eligible	Building		APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-024	N/A	Unevaluated	Building	1945 service station	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
WH00-002	N/A	Eligible	Building	Farmhouse	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
WH00-005	N/A	Eligible	Building	Farmhouse	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
WH00-006	N/A	Eligible	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
WH00-008	N/A	Eligible	Building	Abandoned farmstead	APE for Visual Effects	N	Non-Extant? Not seen in aerial photography	No anticipated effect
WH00-017	N/A	Eligible	Building	Abandoned farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
WH00-018	N/A	Eligible	Building	Frame farmhouse	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
WH00-019 / WH00-HD001	Headquarters Ranch	Listed	District	1906 ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
WH00-021	N/A	Eligible	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
WH00-024	N/A	Eligible	Building	Abandoned farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
WH00-025	N/A	Eligible	Building	Abandoned farmstead	APE for Visual Effects	N	Non-Extant? Not seen in aerial photography	No anticipated effect

Enclosure 4: Map of the Area of Potential Effects (APE)



Attachment 2: Final Cultural Resources Inventory Report

REVISED CULTURAL RESOURCES INVENTORY REPORT FOR THE R-PROJECT TRANSMISSION LINE

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July 2024

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Acronyms and Abbreviations

ABB	American burying beetle
ACHP	Advisory Council on Historic Preservation
APE	area of potential effects
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
court	U.S. District Court for the District of Colorado
CRIR	Cultural Resources Inventory Report
EIS	Environmental Impact Statement
ESA	Endangered Species Act
FEIS	Final EIS
FOE	Finding of Effects
HCP	habitat conservation plan
ITP	incidental take permit
kV	kilovolt
LDS	Latter-Day Saints
MBCP	migratory bird conservation plan
Museum	Lincoln County Historical Society and Museum
NCRGIS	Nebraska Cultural Resources Geographic Information System
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOI	Notice of Intent
NPPD	Nebraska Public Power District
NPS	National Park Service
NRHP	National Register of Historic Places
OCTA	Oregon-California Trails Association
PA	programmatic agreement
SEIS	Supplemental EIS
SH	State Highway
SHPO	State Historic Preservation Officers
the Service	U.S. Fish and Wildlife Service
THPO	Tribal Historic Preservation Officers

Chapter 1
Introduction

In November 2018, the U.S. Fish and Wildlife Service (the Service) issued a final Environmental Impact Statement (EIS) concerning environmental impacts of the R-Project, a 345-kilovolt (kV), 225-mile-long transmission line in Nebraska. The EIS noted that impacts on cultural resources included "permanent visual impacts on historic properties." It also noted that "identification of historic properties and determinations of effects are ongoing, and measures to avoid, minimize, or mitigate potential adverse effects would be developed in consultation with the Nebraska State Historic Preservation Office and other consulting parties" (FWS and Berger 2018:xxxvi). The federal action requiring preparation of the EIS, however, was the R-Project's impact on the American burying beetle (*Nicrophorus americanus)*, which required the Nebraska Public Power District (NPPD) to prepare a habitat conservation plan (HCP), a required part of an application for an incidental take permit (ITP) under the Endangered Species Act (ESA) Section 10(a)(1)(B), issued by the Service. After completion of the EIS, the Service issued an ITP to NPPD on June 12, 2019, authorizing the incidental take of American burying beetle that would result from the R-Project.

In July 2019, a lawsuit was filed challenging the Service's decision under the ESA, National Environmental Policy Act (NEPA), and National Historic Preservation Act (NHPA). On June 17, 2020, the U.S. District Court for the District of Colorado (court) found in favor of the Service on several counts; however, it identified certain discrete errors in the Service's decision-making process. In its ruling, the court vacated and remanded the ITP to the Service for further proceedings consistent with the court's order (*Oregon-California Trails Association v. Walsh*, 1:19-cv-01945-WJM, D. Colo 2020). In response to the court decision, NPPD developed a revised HCP and plans to submit a new ITP application. The revised HCP includes a transmission line route that is similar to the original HCP but includes a 0.5-mile realignment to the east of the original HCP route that NPPD is proposing to avoid having the transmission line pass over trail ruts and minimize visual impacts on the National Register of Historic Places (NRHP)-listed O'Fallon's Bluff site. This realignment increases the overall length of the proposed transmission line from 225 to 226 miles.

In response to the conditions of the court remand, the Service is preparing a Supplemental EIS (SEIS) for the R-Project and Revised HCP. In support of this effort, this Cultural Resources Inventory Report (CRIR) is being developed to document cultural resource survey, evaluation, and consultation efforts spanning from prior to the court remand through December 2023. To this end, this CRIR:

- Summarizes the archaeological and built environment resources documented and evaluated during previous cultural resource inventories conducted for the R-Project;
- Identifies cultural resources eligible for or listed in the NRHP in the area of potential effects (APE) for ground disturbance and physical construction, as well as within the audible and visual APEs; and
- Summarizes the administrative record of the Service's Section 106 consultation for the R-Project.

Ultimately, the CRIR will inform the second phase of the historic properties analysis, which will be the Finding of Effects (FOE) report for the R-Project. This FOE report will summarize adverse effects on historic properties from implementation of the R-Project.

To this end, the CRIR represents a compiled record of all historic property file searches, surveys, consultations, and legal agreements related to the R-Project and its compliance with the NHPA. The CRIR consists of the following sections.

- Chapter 1. *Introduction*.
- Chapter 2. *Project Description*. This section provides a general description of the R-Project.
- Chapter 3. *Federal Regulations*. This section provides an overview of the NHPA and NEPA and how they apply to the R-Project.
- Chapter 4. *Cultural Context*. This section provides historical context information intended to supplement the information in previous cultural resource survey reports.
- Chapter 5. *Previous Consultation Efforts*. This section includes an outline of the evolution of the APE from 2016 to 2023 and a summary of the Section 106 consultation efforts conducted by the Service for the R-Project. This section also includes a discussion of post-2020 Section 106 consultation and discussion of an updated records review for resources within the original and revised APEs.
- Chapter 6. *Summary of Survey Efforts*. This section provides a description of survey efforts and results associated with the R-Project from 2014 to present.
- Chapter 7. *Conclusions*. This section includes a summary of known NRHP-listed, eligible, or unevaluated cultural resources located in the physical, audible, and visual APEs, summary of information gaps, and a listing of outstanding tasks pursuant to completion of the Section 106 process.
- Chapter 8. *References*. This section provides references cited in earlier sections of the CRIR.
- Appendix A. *NRHP-Listed, Eligible, and Unevaluated Cultural Resources in Visual APE*. This appendix lists the known cultural resources that are NRHP-eligible, NRHP-listed, or unevaluated for the NRHP, or have inconclusive NRHP eligibility status, within the current visual APE.

Chapter 2
Project Description

The information in this section is based on Revised HCP Chapter 2, *Project Description/Activities Covered by the Permit*, and provides an overview of the proposed undertaking as it relates to permanent and temporary occupancy of land, general land use, and ground-disturbing actions. Revised HCP Chapter 2 provides more detailed information about the proposed R-Project and the covered activities included in the HCP (NPPD 2023).

The R-Project involves the construction of a 226-mile-long, 345-kV transmission line in two segments (**Figure 1**). The north/south segment is 101 miles long and starts at the Gerald Gentleman Substation near Sutherland, proceeding north across the South Platte and North Platte rivers, and continues north for approximately 8 miles before turning east to meet with U.S. Highway 83. The north/south segment then parallels U.S. Highway 83 to connect to a new expansion of NPPD's existing substation east of Thedford. The east/west segment is 125 miles long and starts at the Thedford Substation, proceeding east to State Highway 7, north of Brewster. The east/west segment then proceeds north along State Highway 7 for approximately 5 miles, then turns east to its terminus at Western's Fort Thompson to Grand Island transmission line at the Holt County Substation located in the southeast corner of Holt County. The transmission line ROW width will typically be 200 feet (100 feet each side of centerline) for the entire transmission line unless otherwise specified.

Two types of structures will be used for this transmission line: tubular steel monopoles and steel lattice towers. Tubular steel monopoles will be used along the transmission line route where major access roads exist, including U.S. Highway 83. Tubular steel monopole structures will be placed approximately 1,350 feet apart (average ruling span) with a nominal structure height of 150 feet. The average ruling span refers to the "standard, typical, or expected" span distance while specific spans may be increased or decreased depending on site conditions. Tubular steel monopoles require cast-in-place concrete foundations. In areas where sloughing or water-compromised soils are present, underground temporary steel casings may be used to hold excavated walls for monopole foundations. Cast-in-place concrete foundations are typically seven feet in diameter and will include one foundation per structure. The poles will be installed on drilled pier concrete foundations to a depth of 25 to 45 feet depending on load and soil characteristics.

Due to construction advantages in transportation and installation of these structures, steel lattice towers will be used in areas of the Sandhills where existing access roads are limited or do not exist. Lattice towers can be constructed with less overall impact to the surrounding area than steel monopoles due to the use of smaller equipment and helicopter construction. The average ruling span will be the same as for steel monopoles (1,350 feet) and nominal structure height will be 130 feet.

Lattice tower foundations will employ the use of helical pier foundations that do not require concrete or temporary casings. The purpose of a helical pier foundation is to transfer the load of a structure through the pier to a suitable depth of soil. A helical pier foundation is an extendable deep-foundation system with helical plates welded or bolted to a central shaft. Load is transferred from the shaft to the soil through the bearing plates. Each lattice tower will require several helical piers per leg of the structure. Once installed, the helical piers will be cut off at ground level and a square metal plate will be attached to the top of the piers. In total, the portion of the helical pier foundations

above ground will include four 16-square-foot plates, one plate for each leg of the structure. Final designs have not been completed, but it is anticipated that each foundation will consist of three or four 7- to 12-inch-diameter piles that are 20 to 40 feet in length.

2.1 Access for Construction

Construction of the R-Project will maximize the use of existing roads and two-tracks wherever feasible for accessing structure locations to minimize ground disturbance. However, large areas of the Sandhills do not have an existing road network, such as section line roads. In these areas, temporary access routes have been designated for construction access. The alignment of temporary access routes will follow the existing landform contours in designated areas where practicable, providing that such alignments do not impact other sensitive resources.

Consideration of access begins where construction equipment leaves the existing maintained road network. Access to structure locations, fly yards and assembly areas, pulling and tensioning sites, and other temporary work areas is broken down into two categories.

- **Temporary Access:** All construction-related travel outside of currently existing and maintained roads is included under temporary access. Temporary access includes the use of overland travel, creation of new access paths, and improvement of existing two-tracks for construction. All temporary access routes have an assumed width of 16 feet, although the final width will be dependent on terrain. All temporary access paths will be restored at the end of construction based on the requirements specified in Revised HCP Section 6.3.2, *Effectiveness Monitoring*. Compacted areas may be disced or ripped to loosen soil prior to reseeding. Areas where a sidehill is flattened for safety during construction access will not be recontoured to allow for future maintenance access, if necessary, but will be reseeded.
- **Permanent Access:** Permanent access includes new improvements that will be left in place and not restored and revegetated following completion of construction activities. Permanent access will be used at substation locations and specific circumstances where improvements may be left in place at the landowner's request following the completion of construction.

2.2 Work Areas

Temporary work areas will be required for materials and equipment storage and staging for construction activities. The construction yards and staging areas will serve as field offices, reporting locations for workers, parking space for vehicles and equipment, storage of construction materials, and fabrication and assembly. Fly yards will be used for helicopter construction and will be where materials and equipment are loaded into slings or choker cables for transport and placement at structure locations via helicopter. Fly yards will be in the same footprint as the lattice tower assembly areas. Fly yards, assembly areas, construction yards, and staging areas will be located along existing access roads and in previously disturbed areas when practicable.

Grading and fill or the placement of construction matting on these sites may be required to prevent soil erosion and sediment runoff or soil compaction. Equipment used to construct and operate within fly yards, assembly areas, construction yards, and staging areas may include, but is not limited to, earthmoving equipment, heavy cranes, semi-trucks, helicopters, and support vehicles. Upon completion of construction, all fill materials, including gravel, will be removed, soils will be decompacted (if necessary), and the area will be revegetated to the appropriate specifications.

At each structure location, a temporary work area will be needed for construction lay-down, structure assembly, and structure erection. To the extent necessary, work areas will be cleared of vegetation and bladed to create a safe working environment for placing equipment, vehicles, and materials. In grassland areas, little, if any, clearing of vegetation will be needed. The area required for lattice tower structures is 100 feet by 100 feet. Work areas for steel monopole structures are 200 feet by 200 feet. Following construction, all areas not needed for normal transmission line maintenance will be graded to blend as near as possible with the natural contours, then revegetated as required.

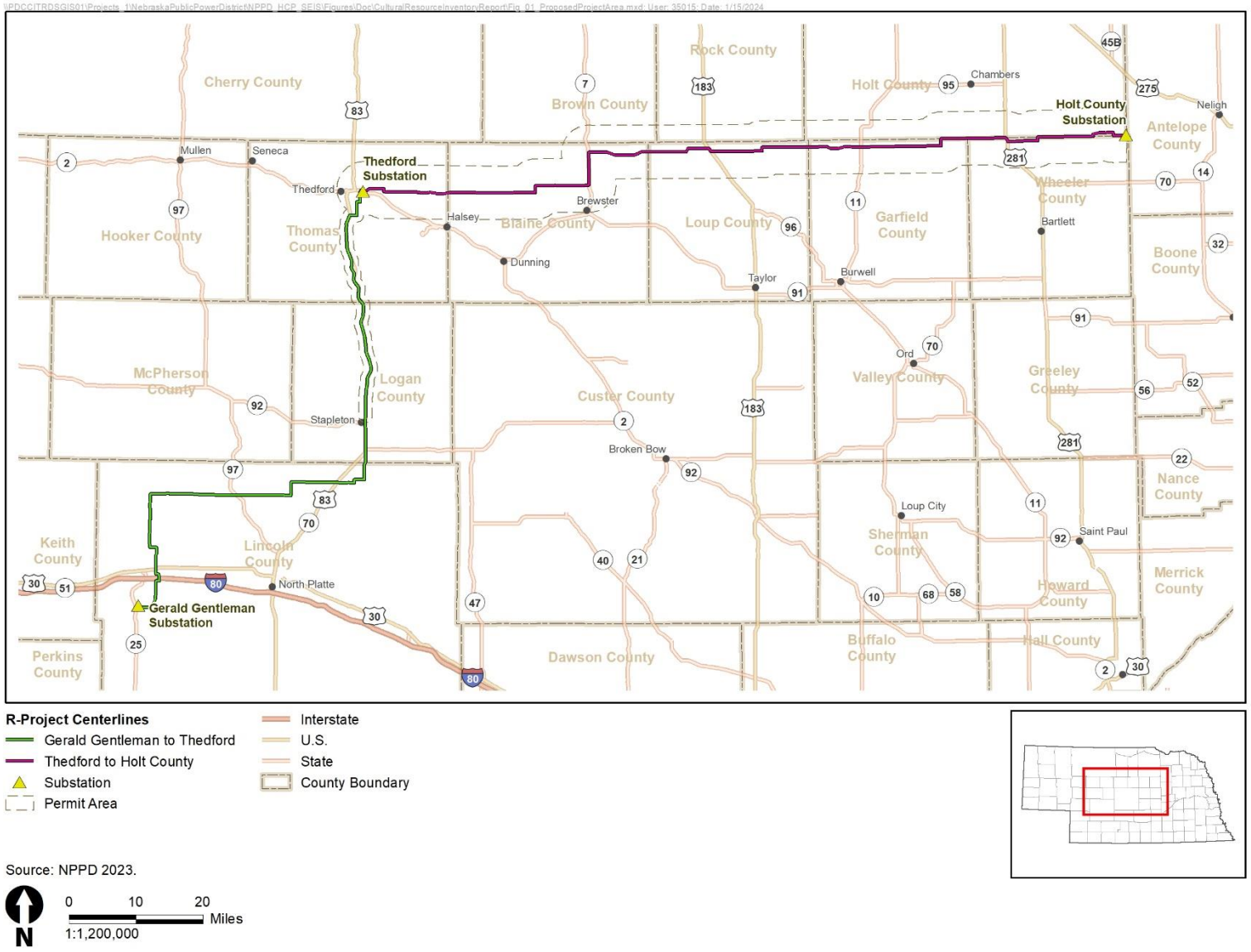


Figure 1. Proposed R-Project

Chapter 3
Federal Regulations

The primary applicable federal regulations protecting cultural resources for the undertaking are NEPA and Section 106 of the NHPA.

3.1 National Environmental Policy Act

NEPA, as amended, establishes the federal policy of protecting important historic, cultural, and natural aspects of our national heritage during federal project planning. All federal or federally assisted projects requiring action pursuant to Section 102 of NEPA must consider their effects on cultural resources. According to NEPA implementing regulations, environmental consequences in an EIS must include "[u]rban quality, historic and cultural resources, and the design of the built environment, including the reuse and conservation potential of various alternatives and mitigation measures" (40 Code of Federal Regulations [CFR] 1502.16(a)(8)). Additionally, the NEPA implementing regulations define effects on "include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effects will be beneficial" (40 CFR 1508.1(g)(4)).

When drafting EISs, NEPA requires federal agencies to notify agencies, tribes, local governments, other organizations, and the public, and give them an opportunity to comment. Agencies are required to make diligent efforts to involve the public, including preparing public notices of NEPA-related hearings, public meetings, and other opportunities to comment on environmental documents.

The NEPA regulations also require that, to the fullest extent possible, agencies prepare draft EISs concurrently and integrated with cultural resource analyses and related surveys and studies required by the NHPA and the Section 106 review process (40 CFR 1502.24(a)) (see Section 3.2, *National Historic Preservation Act* below).

The *Federal Register* (FR) notice of availability for this project's original ITP, associated HCP, and Final EIS (FEIS) were published on February 8, 2019 (84 FR 2900). In response to the June 2020 court decision and NPPD's revised HCP, the Service is preparing a SEIS in accordance with NEPA, as amended, and the NEPA implementing regulations issued by the president's Council on Environmental Quality (CEQ) (40 CFR 1500–1508) and the Department of the Interior (43 CFR 46). The SEIS is also being prepared in accordance with the Builder Act of the Fiscal Responsibility Act of 2023, signed into law on June 3, 2023, (Title III. Permitting Reform Section 321), which amended NEPA by revising Section 102(2) and by adding Sections 106–111 to the statute.

3.2 National Historic Preservation Act

The NHPA is a federal statute that sets forth processes for historic preservation and establishes the NRHP. Section 106 of the NHPA requires federal agencies to consider the effects of undertakings they carry out, assist, fund, or permit on historic properties. The NHPA also established the Advisory Council on Historic Preservation (ACHP), an independent agency responsible for implementing

Section 106 of the NHPA by developing procedures to protect cultural resources included in, or eligible for inclusion in, the NRHP (36 CFR Parts 60, 63, and 800). The implementing regulations for Section 106 (36 CFR Part 800) establish a process of: (1) initiating the Section 106 process, (2) identifying historic properties, (3) assessing adverse effects, and (4) resolving adverse effects. Under the Section 106 process, the Service must consult with certain parties on the effects an undertaking may have on historic properties. Consulting parties may include the ACHP, State Historic Preservation Officers (SHPO), federally recognized tribal representatives, Tribal Historic Preservation Officers (THPO), state and local governments, project applicants, and other individuals and organizations with a demonstrated interest in the project.

Under the NHPA, significant cultural resources, referred to as historic properties, include any prehistoric or historic district, site, building, structure, or object included in, or determined eligible for inclusion in, the NRHP. Historic properties also include resources determined to be National Historic Landmarks. National Historic Landmarks are nationally significant historic places designated by the Secretary of the Interior because they possess exceptional value or quality in illustrating or interpreting United States heritage.

Traditional Cultural Properties may also be determined eligible for inclusion in the NRHP. Under the National Register Bulletin 38, "Guidelines for Evaluating and Documenting Traditional Cultural Properties," the National Park Service (NPS) defines a Traditional Cultural Property as "one that is eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintain cultural identify of community" (NPS 1992). A Traditional Cultural Property must be a site, district, building, structure, or object.

A property is considered historically significant if it is associated with an important historic context and meets at least one of the four primary NRHP criteria:

a) The property is associated with events that have made a significant contribution to the broad patterns of our history; or

b) The property is associated with the lives of persons significant in our past; or

c) The property embodies the distinctive characteristics of a type, period, or method of installation, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

d) The property has yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting one of these criteria, a property must also possess sufficient integrity of location, design, setting, materials, workmanship, feeling and association to convey significance under that criterion (36 CFR 60.4).

Chapter 4
Cultural Context

The purpose of this section is to provide a more comprehensive prehistoric, protohistoric, and historic context of the tribes that have historical and cultural connections with the project area. It is intended to supplement the cultural context sections of the 2015–2019 POWER Engineers survey reports (Bedingfield 2017, 2019; Bedingfield and McKenzie 2018; Bedingfield and Webb 2015; Bedingfield and Tucker 2016). The contents of this section are also intended to address comments regarding the cultural resource survey reports from the SHPO, Pawnee Nation, Rosebud Sioux Tribe, and other stakeholders.

4.1 Prehistoric Context

A brief prehistoric context of the project area is summarized below and primarily derived from the 2015, 2016, 2017, 2018, and 2019 cultural resource survey reports of the R-Project (Bedingfield 2017, 2019; Bedingfield and McKenzie 2018; Bedingfield and Tucker 2016; Bedingfield and Webb 2015), with additional context from Koch (1999). Please refer to those reports for a more detailed discussion of the prehistoric context. Sections 3.3.1, *Prehistoric Setting*, of the 2015 to 2019 survey reports detail that the earliest human occupation in Nebraska is known as the Paleoindian Period (12,000 to 9,000 years ago), and numerous archaeological sites from this period have been identified throughout the state. These earliest sites have contained fragments of chipped stone spear points, as well as faunal remains, representative of the nomadic peoples that occupied Nebraska during the Paleoindian Period.

The Archaic Period (9,000 to 2,000 years ago) saw a transition to more permanent settlement villages as large animal populations diminished and nomadic peoples became more reliant on bison, smaller game, and flora for subsistence.

During the Plains Woodland Period (2,000 to 1,000 years ago) and the Central Plains Village Tradition (1,000 to 600 years ago), archaeological evidence suggests that populations became more reliant on the bow and arrow rather than the spear-throwing atlatl and further developed horticultural skills. During these two periods, populations became semi-permanent and relied on a subsistence strategy that divided time between raising crops (e.g., squash, beans, corn, and amaranth), hunting (e.g., bison, deer, beaver, birds, turtles, and freshwater mussels) and gathering (e.g., plums, chokecherries, hackberries, and black walnuts).

The prehistoric setting sections of the 2015–2019 survey reports indicate that tribes have been historically documented within the project area. For further information on the protohistory of the tribes associated with the project area, see Section 4.2.1 for a supplementary historic tribal context. It should be noted that 31 federally recognized Native American tribes may have a current or ancestral tie to the proposed project area.

4.2 Historic Context

Sections 3.3.2, *Historic Setting*, of the 2015 to 2019 cultural resource survey reports provide a brief history of the proposed project area, beginning with Spanish and French explorations in the seventeenth century through the destructive dust storms and economic hardships brought on by the

Great Depression (Bedingfield 2017, 2019; Bedingfield and McKenzie 2018; Bedingfield and Tucker 2016; Bedingfield and Webb 2015). These sections outline the transition from military occupation and missionary efforts to the development of immigrant routes (such as the Oregon-California Trail) in the mid-1800s. These sections also note the formal establishment of the Nebraska Territory in 1854, followed by the coming of the railroads that encouraged an increase in agricultural and ranching pursuits.

In addition to the historic context presented in the previous cultural resource survey reports, this report expands on the protohistory and history of the tribes historically associated with the project area and provides a more involved discussion of the effects of European and Euro-American exploration, trade, and settlement of the area.

4.2.1 Historic Tribal Context

4.2.1.1 Tribes and European Exploration and Trade

European contact with indigenous groups on the Central Plains began with the arrival of the first Spanish explorers in the mid-1500s. In 1540, the Spanish explorer Coronado led an exploratory expedition of 300 Spanish and 1,000 Indian auxiliaries north to what is now Arizona and New Mexico in search of the mythical Seven Cities of Gold, finding instead a collection of modest Zuñi villages in present-day New Mexico. Believing Indian stories about another city of gold named Quivira, which lay far to the east, Coronado led his men through Texas and then north through present-day Oklahoma and then to Kansas. In 1541, Coronado found Quivira in the vicinity of the Wichita, but it was a village of grass huts and not a "city of gold" (Morton 1911:45–46; Vigil 1990:10–11). Spain continued to lay colonial claim to the High Plains for the next 200 years but, outside of tenuous trade contacts, conducted no further military or exploratory expeditions to the Nebraska area until the early 1700s.

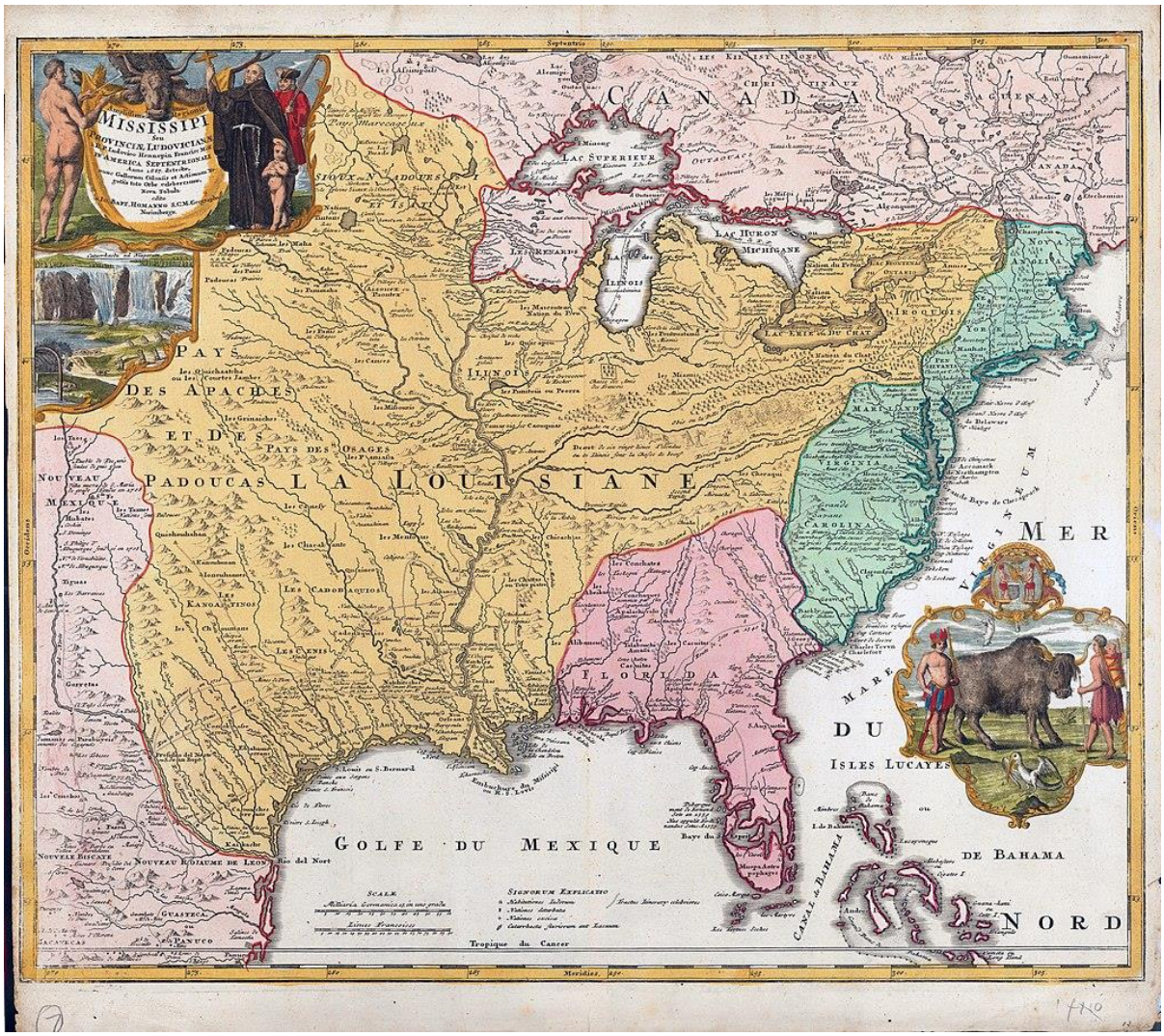
Likewise, the French, who claimed colonial possession of the entirety of the American West in 1671 to include present-day Nebraska (**Figure 2**), explored the Mississippi River beginning in the late 1600s from their colonial base centered at Quebec in Canada and by the 1680s and 1690s began establishing trading posts on the Mississippi River (Shedd et al. n.d.:13–18). French traders, primarily operating out of what is now Illinois, conducted business with the Pawnee, Lakota, and other tribes for beaver furs and other goods during the 1700s (Bilgri 2012:103).

In 1720, a Spanish expedition under Pedro de Villasur set out east from Santa Fe with a force of about 40 Spanish soldiers, 60 Pueblo auxiliaries, and 6 civilians (including a priest) to destroy French outposts that they erroneously believed were located on the Platte River in Colorado and Nebraska, as Spain was then in conflict with France during the War of the Quadruple Alliance (Bilgri 2012:25–41). At the confluence of the Loup and Platte Rivers, approximately 80 kilometers southeast of the easternmost portion of the study area, this force was almost entirely wiped out by the Pawnee (**Figure 3**). This disaster essentially terminated Spanish colonial claims to the Central Plains (Bilgri 2012:25–42, 53–55, 82).

The French began exploration west of the Mississippi in the early 1700s, shortly after the demise of the Villasur expedition. In 1739, the Mallett Brothers attempted to start a trade route between Illinois and the Spanish colony in Santa Fe. To this end, the Mallets journeyed up the Missouri, believing this route would take them to New Mexico. Realizing their mistake, they trekked overland due south until they reached the Platte Valley near present-day Fremont. The Malletts journeyed

down the Platte for 11 days before again starting overland, eventually reaching Santa Fe (History Nebraska 2023). This journey established a semi-traveled commercial link between the French settlements in Illinois and the Spanish southwest settlements (Shedd et al. n.d.:27). With the French cession of Canada to Great Britain in the aftermath of the Seven Years War (or French and Indian War), France ceased its role as a major power in North America.

From an indigenous perspective, the advent of European exploration and the effects of the European-driven beaver trade caused seismic cultural and political changes for the tribes of the Central Plains. Although Europeans seldom intruded into the project area during the 1600s and 1700s, European trade, tribal involvement with conflicts between European powers, displacement of tribes from the east, and subsequent internecine Indian wars created ripple effects within the Plains region and the study area. Changes in tribal power dynamics in the Great Lakes and upper Missouri areas, combined with the expansion of the fur trade, shifted tribal territories of newly nomadic groups further west and into the Plains (Kehoe 1992:303).



Source: Homann 1720

Figure 2. French Territorial Claims, 1720



Source: Bozell 2023

Figure 3. Villasur Massacre, Replica of 18th Century Hide Painting of the Incident

Simultaneously, the introduction of the horse to the Plains tribes in the 1700s via trade with Spanish settlements in the southwest revolutionized both hunting and tribal warfare (Waldman 1985:56). At roughly the same time, tribes acquired flintlock firearms from French (and later British) traders to the northeast (Lowie 1954:40). Many tribes completely transformed their subsistence strategy and way of life to center around the horse, shifting from a semisedentary to a nomadic culture. Three tribes associated with the project area—the Arapaho, Cheyenne, and Lakota—exemplify this major cultural shift.

The Arapaho likely originated in present-day Minnesota, migrating west of the Mississippi by the late 1700s, with Perrin du Lac locating the Arapaho in the Platte River Region by about 1800. The Cheyenne were originally located in the upper Mississippi River, exhibiting a sedentary, horticulture-based society. By the late 1600s, the Cheyenne began a gradual, 200-year migration west and south, first to the Minnesota River and then to what is now eastern North Dakota with the Mandan, Hidatsa, and Ojibwe. Conflict with the Ojibwe and epidemic disease caused another move further west, and by the early 1800s, the Cheyenne occupied the Cheyenne River, White River, and Black Hills regions, with its hunting range extending south to the Platte River. With this migration and the introduction of the horse to the Plains, both the Arapaho and Cheyenne changed from a horticulture-based semisedentary society to a horse-based society based on hunting and trade (Gussow 1974:57–73).

The Lakota (or Sioux; **Figure 4**), like the Cheyenne, originated along the upper Mississippi. Forced out of this area by the Cree and Assiniboine armed with French firearms, the Lakota relocated to the Minnesota prairie. When the Lakota also acquired firearms from the French in the early 1700s, they expanded their territory to take in more of the beaver trade, dislodging such tribes as the Cheyenne and Omaha to the south and west. As the 1700s wore on, the Lakota shifted from beaver to bison with the increased trade in buffalo robes, largely driven by trade with the Spanish (White 1978:321).



Source: Catlin 1847

Figure 4. Lakota Council, Painted by George Catlin in 1847

In contrast with the Lakota, Arapaho, and Cheyenne, the Pawnee and their ancestors had lived in present-day Nebraska since at least the 1500s and probably earlier. Even after the introduction of the horse, they continued to live a semisedentary lifestyle. The ancestors of the modern-day Pawnee, a Caddoan-speaking group, likely originated from the southwest or the southern Plains and moved into what is now Nebraska prior to the 1600s, although they may have moved into the area even earlier (900 AD–1450 AD). Ancestors of the Pawnee are also identified with the Initial variant of the Coalescent tradition, dating to the 1300s and 1400s and originating with a migration of people into the Middle Missouri/Dakotas region from the Great Plains. Within the archaeological record, they are also identified within what is known as the Upper Republican phase of the Central Plains tradition. The present-day Pawnee are almost certainly direct descendants of the Lower Loup people, who lived in villages on the banks of the Loup and Platte Rivers from around 1600 to 1750 (Bamforth 2023:5; Grange 1979:134; Johnson 2007:119; O'Brien 1984:59; Wishart 1994:4).

The Pawnee marked their years by planting and tending crops in May and June, hunting bison from July to August, harvesting crops in September, hunting bison in the late fall, camping in creek bottoms in the winter, and then returning to their numerous small (and at this point, usually unfortified) villages in March to begin the cycle again (Wedel and Parks 1985:146, White 1983:149). The Pawnee and Lakota consistently fought each other throughout the 1700s (Mallery 1894:296–306).

In the 1600s, the Spanish established limited trade contacts with the Pawnee, with the French also trading with the Pawnee by the 1700s. In addition to trade goods, however, trade contacts with the Europeans brought devastating disease to the tribes of the Plains, with the disease incurring greater loss of life on tribes living in agricultural villages, such as the Pawnee, compared to the nomadic Lakota. By 1795, the village dwelling Arikara, in the upper Missouri north of present-day Nebraska, had been reduced from about 5,000 warriors living in approximately 30 villages to 500 warriors in 2 villages. The disease also killed about half of the Omaha further to the east. The epidemic had a strategic effect on intertribal conflict, devastating the Mandan and Hidatsa, traditional Lakota enemies in the present-day Dakotas. By the 1790s, the western Lakota had pushed the weakened Mandan out of the Heart River country in western North Dakota (Lowie 1954:191; White 1978:325).

4.2.1.2 Tribes and Euro-American Explorers and Trappers (1802–1840)

The Lewis and Clark expedition represented the first major Euro-American incursion into present-day Nebraska, when in 1804 Lewis and Clark voyaged northwest down the Missouri River. At this time, the tribes currently associated with the project area were situated as follows.

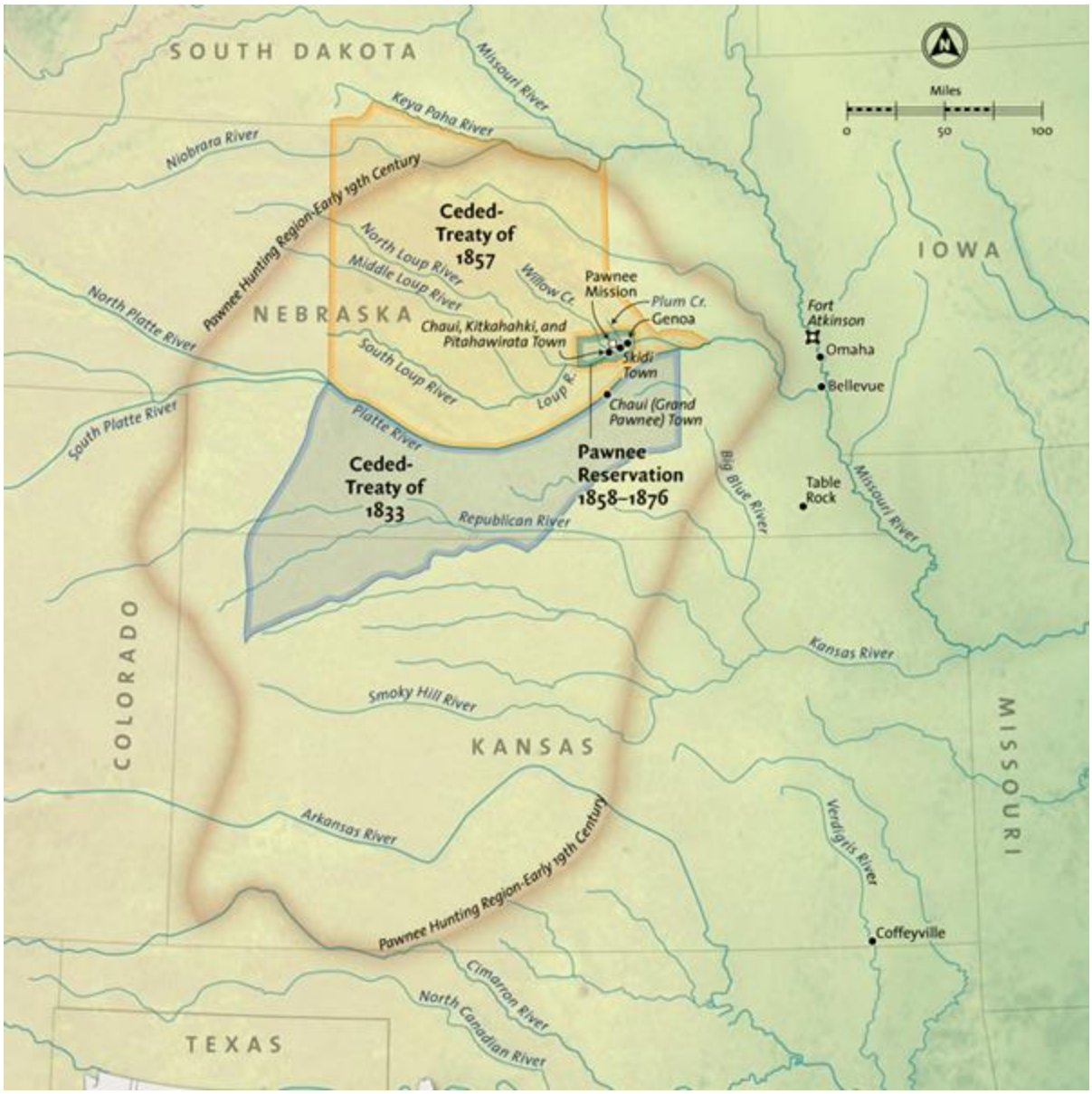
The Lakota controlled the area along the Missouri River between the Arikara to the north and the Omaha to the south. By this time, the Lakota consisted of a confederation of many bands consisting of three great divisions, Eastern, Central, and Western (or Teton). The Tetons consisted of seven bands: the Oglala, Brule, Minneconjou, Hunkpapa, Sans Arc, Two Kettle, and Blackfeet Sioux. By the late 1700s, the Teton had shifted from hunting buffalo in the summer and beaver to the winter to hunting almost exclusively buffalo (White 1978:323–324). The Oglala and Brule were by far the most numerous of the Teton, numbering altogether about 13,000 individuals (White 1978:323–324; Wilson 1941:15). With the depletion of the buffalo along the Missouri River, the Oglala contested the country between the Missouri River and the Rockies with the Kiowa, Crow, Arapaho, and Cheyenne. The Brule in turn moved into Ponca and Omaha country in present-day northern and eastern Nebraska and fought with their traditional enemies, the Pawnee, to the south (White 1978:326–327).

By about 1800, the Pawnee consisted of a loose confederacy of four bands, the Skiri, the Chawi (or Grand), the Kitkahahki (or Republican), and the Pitahawirata (or Tappage). Numbering between 7,000 and 10,000 individuals, the Pawnee were the most numerous and powerful tribe on the Plains in the late 1700s and early 1800s. At the time of the Lewis and Clark expedition, the Pawnee lived in a few fortified principal towns (**Figure 5**) of between 800 and 3,500 inhabitants each on the Platte and Loup Rivers (Wedel and Parks 1985:146). The Pawnee's primary hunting grounds, depending on the band, ranged from south to the Arkansas River north to the Loup River drainage (**Figure 6**). The project area is within the traditional hunting range of the Skiri band of the Pawnee (Rollins 1935:221).



Source: Fanta 2021

Figure 5. Pawnee Loup Fork Village, ca. 1870



Source: Smithsonian Institution 2019

Figure 6. Pawnee Hunting Grounds and Treaty Cessions

In the wake of Lewis and Clark's expedition came Euro-American fur traders, who traded with tribes for beaver and other animal skins. By the 1820s, William Sublette's trade operation established a trading post at what became Fort Laramie, Wyoming, in 1834, about 190 miles west of the project area. Traders such as Sublette engaged in commerce with tribal grounds such as the Lakota, who supplied buffalo robes and hides in exchange for European goods (White 1978:330). Development of steamboat transportation on the Missouri in 1830 made it easier to transport buffalo hides from the Plains to market, increasing ease of access to the goods and therefore increasing profitability. As the boat trade increased, so did the trading posts in the vicinity of Fort Laramie, which conducted trade with the tribes around the White and Niobrara Rivers. Traders also established two trading posts in northwest Nebraska on the White River, about 200 kilometers northwest of the project area (Hanson and Walters 1976:297–299).

Starting in the 1820s, Euro-American buffalo hunters began a general slaughter of the great herds that once dominated the Plains, increasing pressure on the Lakota, Cheyenne, and other tribes that relied on the buffalo both for subsistence and trade. This in turn fueled intertribal conflict. By the late 1820s, the buffalo had been hunted to extinction from the Missouri River below the Omaha villages, and the Lakota had to follow the vanishing herds to new hunting grounds (White 1978:330–331). In the early 1800s, the Brule lived mostly in the area between the Black Hills and the vicinity of Fort Laramie. According to Susan Bordeaux Bettelyoun's and Josephine Waggoner's account, the Brule also rode into the Sand Hills of Nebraska to capture wild horses, which were plentiful in that region (Bettelyoun and Waggoner 1998:21). At least one Lakota winter count first mentions capturing horses on the South Platte and catching wild horses in the Nebraska Sand Hills as early as 1810–1812 (Mallery 1894:315).

By the 1830s, the Brule and Oglala bands of Lakota had expanded their hunting grounds to the Platte River because of the decreasing number of buffalo along the Missouri River (White 1978:323–334). The Oglala and the Brule, moving up the Teton and White River drainages, had driven out the Kiowas and Crows and formed an alliance with the Arapaho and Cheyenne (White 1978:333). Initially, the Cheyenne and Arapaho had become allies against Lakota western expansion but together, the Arapaho-Cheyenne-Lakota alliance dominated the Upper and Central Great Plains during the early and mid-nineteenth century.

By the 1820s and 1830s, the Nebraska Sand Hills, where the project area is primarily located, was a borderland area dividing Pawnee, Arapaho, Cheyenne, and Lakota territories. Essentially, the area fell within multiple tribes' hunting or neutral grounds into which only war parties ventured. Because little pressure was placed on existing animal populations, the political situation in the area allowed for preservation of larger animal populations in the region (White 1978:334–335).

In the 1820s, the Skiri band of the Pawnee had successfully contested their traditional Platte River hunting grounds with the Cheyenne and Arapaho, but by the 1820s, their power was under increasing threat from the Lakota (White 1978:336–337). In 1833, the U.S. negotiated a treaty with all the Pawnee bands, wherein the Pawnee ceded all lands they claimed lying south of the Platte River to the United States to create a common hunting area for a number of tribes displaced and relocated to the east (Wedel and Parks 1985:146).

Increasing trade and other contact with Euro-Americans brought the tribes another massive wave of smallpox epidemics in 1837–1838, which by some estimates halved the Plains Indian population. In 1838, smallpox struck both the Pawnee and Oglala. The disease, however, caused greater damage to the Pawnee, as the southern and western advance of the Oglala and Brule put those tribes mostly out of reach of the main epidemic corridor along the Missouri River. A year later, the Oglala fought the Pawnee in a pitched battle that cost the latter about a hundred dead, resulting in the *de facto* Skiri Pawnee surrender of the Platte hunting grounds to the Oglala (White 1978:329, 336–337).

4.2.1.3 Conflict and Catastrophe (1840–1890)

In the early nineteenth century, the few Euro-American incursions into the Missouri River drainage and other areas west of the Mississippi consisted of exploring parties, fur trappers, and Indian traders. By the 1820s and 1830s, the Euro-American frontier began edging further westward. In 1821, Missouri became a state. In 1846–1847, the U.S. fought the Mexican War, acquiring all Mexican territory north of the Rio Grande, from Texas to California. Manifest Destiny—the idea of a divinely ordained, justifiable, and inevitable United States stretching from the Atlantic to the Pacific—

animated the nation's spirit and popular imagination (McPherson 1988:42–50) and was used to rationalize the removal of indigenous groups from their native homelands.

In the 1840s, Euro-Americans began mass migration to Oregon, California, and Utah. Both the Mormon and Oregon trails followed the Platte River valley through Nebraska (Horn 1974:22–23). In the words of one historian, "The continuous lines of covered wagons, with thousands of horses, mules, and cattle, hourly passing along the Oregon Trail had desolated the neighboring areas. In addition to depleting the forage the emigrants slaughtered the game everywhere as they passed along" (Hill 1966:92). The decrease in game, including further decline of the buffalo population, brought by this traffic exacerbated conflicts amongst the tribes (Hill 1966:86). Central and western Nebraska in the 1840s and 1850s remained a neutral ground between the Pawnee and Lakota, an area where war parties went on horse raids against their respective enemies or where hunting parties killed the rapidly dwindling buffalo. To protect Euro-American settlers against Indian raids, in 1848 to 1849, the U.S. Army established Fort Kearny at Grand Island, Nebraska, and Fort Laramie, the latter post in an area claimed by the Lakota, Arapaho, and Cheyenne alliance (Hill 1966:86–88).

The 1851 Fort Laramie Treaty between the U.S. government and many of the Plains tribes proved a watershed moment in tribal history in the area. At the treaty council, the Lakota, Cheyenne, Arapaho, and Crow sought assurances from the U.S. Government for sustenance to replace the buffalo, deer, and pronghorn vanishing with the advance of the Euro-Americans. The U.S. Government desired the right of unmolested passage over the prairie and the right to establish military posts. In compensation for the devastation to the buffalo and other wild game, the U.S. government would give the tribes an annuity of $50,000 for goods, merchandise, and provisions for a term of 50 years, and proposed that the tribes divide up their land in definite territories to decrease the possibility of conflict (Hill 1966:99). In this way, the U.S. Government could theoretically hold a tribe responsible for hostilities committed within its area (White 1978:340). The U.S. Government insisted that each tribe select one chief or representative to be responsible for the tribe within the terms of the treaty. Because the Lakota tribal structure had no central authority, the Lakota stated they could not do this. In response, the U.S. delegation selected one of their number, Conquering Bear,[1] to represent the Lakota (Hill 1966:107).

The Treaty of Fort Laramie did not resolve intertribal conflict. Decades of intertribal enmity would not dissipate with the signing of a piece of paper; in fact, Lakota threats had kept the Pawnee from coming to Fort Laramie (White 1978:340). Under this treaty, the tribes ceded no land to the Euro-Americans, but the increased access to the Platte River Valley allowed through the Treaty led to inevitable conflict. Increasing use of the Platte River valley by Euro-Americans, increasing with the Colorado gold rush of 1858 and the construction of telegraph lines along the Oregon Trail, further heightened tensions (Brown 1970:68). Initial hostilities opened in 1854 when the Lakota ran off a Mormon emigrant's cow. Lieutenant John Grattan, an inexperienced lieutenant out of West Point, instigated an unnecessary incident at Conquering Bear's camp of Brule Sioux, resulting in the death of Conquering Bear and the complete annihilation of Grattan's command. This incident instigated intermittent warfare on the Plains between the U.S. Government, the Lakota, and other tribes that would last into the late 1870s. Within two months of the Grattan fight, the U.S. War Department ordered Colonel William Harney to lead a punitive expedition against the Brule. Harney's combined force of cavalry and infantry attacked Little Thunder's Brule camp of men, women, and children at

[1] Sources alternatively refer to this individual as Conquering Bear, Frightening Bear, Stirring Bear, or Scattering Bear (Bettelyoun and Waggoner 1998:53, 54, 59, 181; Hill 1966:101). For the purposes of this report, he will be referred to as Conquering Bear.

Ash Hollow in present-day Nebraska, about 55 miles west of the project area, killing 86 Brule with a loss of 4 soldiers (Schubert 1981:ix, xiv).

From the early to the mid-nineteenth century the Lakota, unlike most other Plains tribes, appear to have increased in number from about 5,000 in the early 1800s (a low estimate) to about 25,000 in the 1850s (White 1978:330). Conversely, the Pawnee, devastated by smallpox and cholera from the late 1700s to a recent outbreak in 1852, had dwindled by one contemporary estimate to about 4,000 individuals (Parks 2010; Warren 1875:51). In 1857, the Pawnee and the U.S. Government signed the Treaty of Table Creek, wherein the Pawnee ceded most of their land north of the Platte River, except for a small reservation on the Loup River near Genoa. The Pawnee also accepted monetary and other economic support from the government (Parks 2010).

Lieutenant Gouverneur Warren, a U.S. Army Engineer officer, explored and mapped much of the region around the Platte and Sand Hills in 1855–1857. Warren noted in the late 1850s that the Oglala numbered "about 460 lodges, and are generally to be found on or near the Platte near Fort Laramie," (Warren 1875:48) west of the project area. The Brule numbered "about 380 lodges, and live on the Niobrara and White Rivers [generally, northwest of the project area], and range from the Platte to the [Cheyenne River]" (Warren 1875:48). The Lakota allies, the Cheyenne, generally occupied the region between the Arkansas and the Platte, to the south (Warren 1875:51). Warren observed that increasing Euro-American settlement along the Missouri, displacement of the tribal groups, failure to provide for and protect the displaced Indians, and shrinking food resources would result in an inevitable war with the Lakota:

> [W]hen the white settlements advance their frontier, the natives linger about till disease, poverty, and vicious indulgence consign them to oblivion. The present policy of the Government seems, therefore, the best calculated that could be devised for exterminating the Indian… There are so many inevitable causes at work to produce a war with the [Lakota] before many years, that I regard the greatest fruit of the explorations I have conducted to be the knowledge of the proper routes by which to invade their country and conquer them… I believe many of the causes of war with them might be removed by timely action in relation to the treaties… and a prompt and faithful fulfillment of our own part of the stipulations. (Warren 1875:52–54)

In the 1850s, Euro-Americans began settling in earnest in Nebraska and Kansas. The acquisition of territory from the Mexican War exacerbated the question of political balance between slave and free states. Democrats like Stephen A. Douglas, senator from Illinois, desperately sought compromise. Passage of the Kansas-Nebraska Act, which in exchange for southern support for the organization of the Nebraska Territory voided the Missouri Compromise of 1820 by opening the possibility of the establishment of slavery in new territories above the 36˚ 30' latitude line, became one of the most significant inflection points leading to the Civil War. With rising internecine tensions between north and south, fighting soon broke out between proslavery and antislavery settlers in Kansas in 1855. To the north, Euro-American settlement in Nebraska occurred mostly within the eastern part of the state close to the Missouri River, although Euro-Americans also began to settle in the Nebraska grasslands at this time (Horn 1974:191; McPherson 1988:121–125, 145–148).

In 1861, the American Civil War began. Policing the frontier, which had hitherto occupied most of the energies of the U.S. Army, greatly receded in importance to the national government. In 1862, far to the northeast in Minnesota, the Santee Lakota, provoked by a litany of abuses from traders who cheated them out of their promised government annuities, decreasing game, poor crops, and rising

tensions with Euro-American settlers, attacked their agency and local settlers (Brown 1970:38–45). The conflict soon spread westward into the Dakota and Montana Territories and involved all the major Lakota bands, merging with other Indian conflicts on the prairies. The situation forced the U.S. Army to divert infantry and cavalry units from fighting the Confederates to dealing with the Indian uprisings. In 1865, the government signed a series of treaties to bring temporary peace to the area. However, the signing of the Homestead Act and congressional approval of the transcontinental railroad (both passed in 1862) increased the tempo of Euro-American settlement. The policy of the government became the concentration of Indians on reservations, away from the path of Euro-American settlement. In the words of two historians:

> The reservation system combined blatant greed and misguided philanthropy. Confined to unwanted land, the Indians would not interfere with settlement… Denied their nomadic life style [sic], they could be "civilized"—taught the white man's language, turned into sedentary agriculturalists, and Christianized. The policy's flaw was that many tribes or tribal factions hated reservation life and rebelled against it (Millett and Maslowski 1994:252).

Euro-American settlement of Nebraska only accelerated after the Civil War, "when pioneers surged into the region by the tens of thousands—farmers from the increasingly crowded Mississippi valley, disappointed gold seekers returning from California and the Rockies and wave after wave of immigrants from Europe" (Horn 1974:191). These Euro-American settlers established farms in the river bottoms of eastern Nebraska before, during, and after the Civil War, but by the late 1870s, with the choice farmland already acquired, newcomers spread their claims west into the Nebraska prairie (Horne 1974:191). David Wishart's account sheds light on the insurmountable obstacles facing the Pawnee during this time:

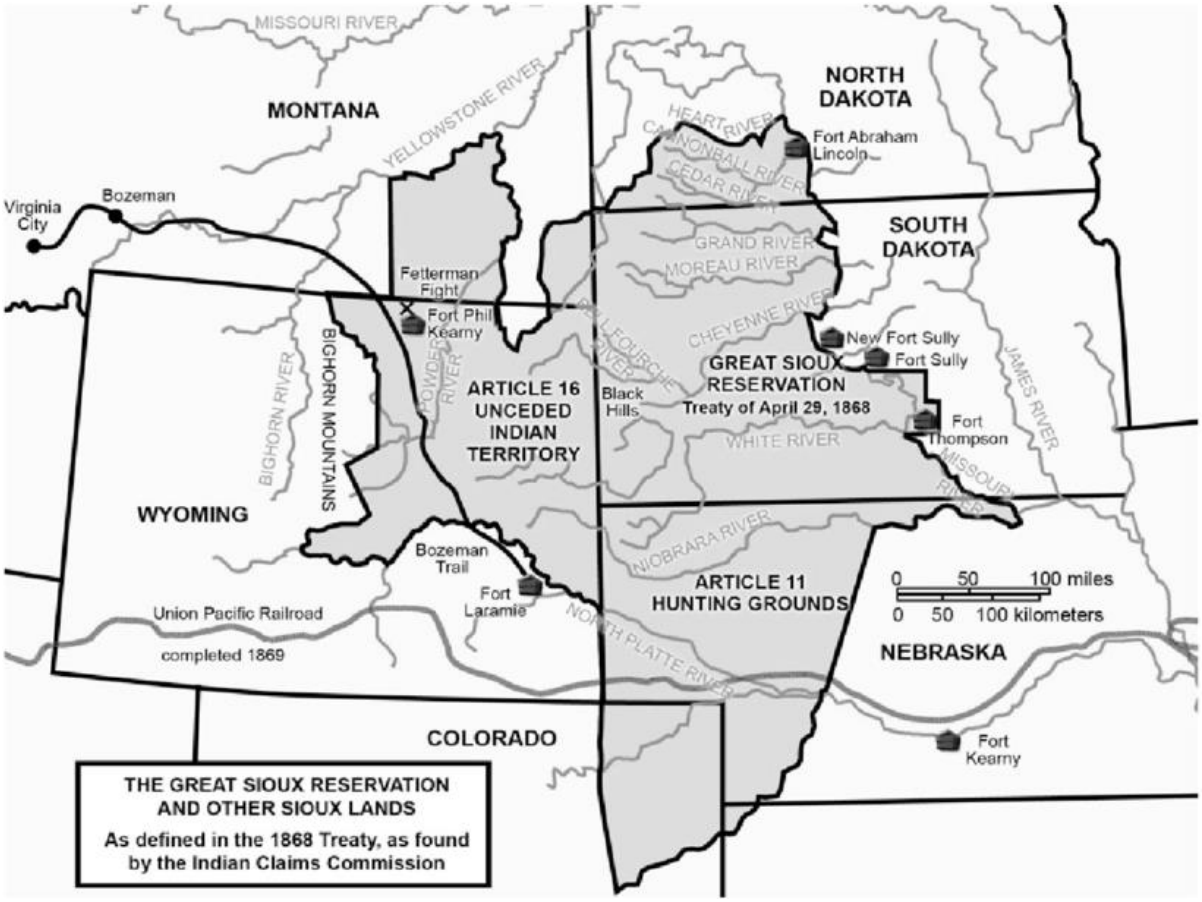
> The Pawnee faithfully continued in their old ways, but increasingly they were made to feel like strangers in their own land… They would ride the Union Pacific freight cars to Omaha… [b]ut there they were shunned because of their appearance and persecuted because of their begging… Nebraskans loudly agitated for their removal to Indian Territory, and the [Lakota] vowed to exterminate them. A noose was being drawn tightly around the Pawnee, leaving them no room to breathe in Nebraska (Wishart 1994:185).

In 1868, the U.S. government signed a Treaty at Fort Laramie with the Lakota, including the Brule and Oglala bands (the latter having recently fought and won a campaign against the U.S. Army in 1866–1868 under Red Cloud in the Powder River country in Wyoming, South Dakota, and Montana). Under this treaty, the Lakota signatories agreed to give up thousands of acres guaranteed to them under previous treaties but retained hunting and fishing rights in their former territory (**Figure 7**). They also agreed to not attack railroads or settlers. In return, the government established the Great Sioux Reservation, which bordered Nebraska directly to the north and included the Black Hills in the western Dakotas, which are sacred to the Lakota. The treaty terms were poorly explained or translated to the tribes, if not in some cases completely misrepresented (Brown 1970:122–146; NARA 2022; Utley 1973:239).

In terms of how the treaty affected tribal use of the project area, the Lakota, Arapaho, and Cheyenne would cede the right of permanent occupation of areas outside of the reservation. The treaty did, however, give these tribes the right to hunt outside of the reservations north of the North Platte River, which includes the entirety of the present-day north-south segment of the proposed

transmission route line north of the North Platte River, and a portion of the east-west segment (Royce 1899:848, Plate CXLVIII).

In the meantime, the old conflict between Pawnee and Lakota continued. During the campaigns against the Lakota earlier in the 1860s, the Army began enlisting Pawnee scouts in their service. In 1873, in southwest Nebraska about 55 miles south of the project area, a massive war party of 1,000 Oglala and Brule warriors fell upon a Pawnee hunting party of 350 at present-day Massacre Canyon, killing about 70 Pawnee warrzzziors, women, and children. With this latest disaster, and after much debate, the Pawnee left their ancestral homeland along the Loup River for the Indian Territory, as it became evident the U.S. Government would not protect them against attacks from their ancestral enemies (Hagen 2020; Parks 2010).



Source: Pirlet 2013

Figure 7. 1868 Fort Laramie Treaty, Great Sioux Reservation and Hunting Grounds

In 1873, five years after the signing of the 1868 Treaty of Fort Laramie, the government established permanent agencies for Red Cloud's Oglala and Spotted Tail's Brule bands on the White River in northwest Nebraska, locations in fact outside of the Great Sioux Reservation. At the former reservation, it was estimated that about 9,000 Oglala, 2,000 Northern Cheyenne, and 1,500 Northern Arapaho drew rations at the Red Cloud agency, while the Spotted Tail agency issued rations to about 8,000 Brule. The treaty did not stop Indian raids into Nebraska or elsewhere, nor did it stop Euro-American provocation, including the extension of the Northern Pacific Railroad to the vicinity of

present-day Bismarck, North Dakota, which alarmed the Lakota who felt this was a violation of their hunting grounds. More egregiously, in 1874 and 1875, the Euro-Americans violated treaty provisions respecting the Lakota land in the Black Hills after gold was found in the region. Faced with swarming prospectors, Army columns marching through their territory, and government agents now trying to chisel the Black Hills out of the hands of the Lakota, hostilities broke out between most of the Cheyenne and Lakota bands and the U.S. Government (Utley 1973:239–246). The resulting campaign in 1876–1877 led to the most dramatic Army defeat of the Indian Wars, when Lakota and Cheyenne warriors overwhelmed and annihilated Lieutenant Colonel George Armstrong Custer and 215 men at the Little Bighorn in eastern Montana. This proved to be a short-lived triumph, as the Army poured troops into Lakota country and, aided by Indian scouts, discovered and destroyed Indian camps and forced the last holdouts onto reservations (Millett and Maslowski 1994:255–256).

For the Pawnee, reservation life in Indian Territory in the late nineteenth century nearly caused extinction. Disease took its toll, hastened by lack of subsistence. They no longer went on the traditional annual buffalo hunt, as the herds were essentially extinct in that part of the country. In 1887, the Dawes Act was passed, which aimed to force Indians into becoming farmers and assimilate into larger American society. In 1893, the government imposed individual farming allotments and abolished the Pawnee Reservation, with much of the "surplus lands" sold to Euro-Americans, and their numbers continued to decline to below 700 until 1917, when the Pawnee population began to increase slightly (NPS 2021; Wishart 1994:201–202).

The Lakota fared little better. In the late 1870s, Red Cloud's Oglalas were settled at the Pine Ridge Agency in South Dakota, on the Dakota-Nebraska border about 75 miles northwest of the project area. The government established four other agencies for the remaining Lakota Tribes, including the Rosebud Indian Reservation for the Brule, located in South Dakota about 70 miles north of the project area. They were unarmed, dismounted, and unable to keep Euro-American interlopers out of their land (Brown 1970:417; Rosebud Sioux Tribe 2023). In 1889, by pressure and chicanery, the government essentially forced the breakup of the Great Sioux Reservation into multiple smaller reservations, selling off the excess land to Euro-Americans. A year later, in 1890, the Ghost Dance, begun by Wovoka, a Pauite Messiah, spread amongst the Plains Indians. A religious movement interweaving Indian and Christian belief systems, the movement taught that the earth would renew itself in the spring of 1891, burying the white man, with the buffalo and wild game returning, and that sacred garments, Ghost Shirts, would stop soldiers' bullets. The Dance spread through all the Lakota reservations, alarming the Indian agents (Brown 1970:430–435). One group of Minneconjou under Big Foot attempted to flee to the Pine Ridge Agency. Intercepted by troopers of the 7th Cavalry, they were forced to encamp at Wounded Knee Creek, 120 miles northwest of the project area. The next morning, when the soldiers attempted to disarm the party, a shot was fired, precipitating a general massacre. The soldiers, who sustained over 60 casualties, killed between 150 and 300 Lakota men, women, and children. The Ghost Dance was over, and so was a way of life (Brown 1970:439–445).

From the late nineteenth century to the 1960s, the U.S. Government pursued a policy of assimilation, which sought to gradually get rid of tribes altogether as recognized entities and have the tribesmen be assimilated completely into the general population. These efforts included the forcible removal of Indian children from their homes to tribal schools, where the intent was to separate the Indian children from their native culture. For a number of years, expressions of traditional Indian belief were expressly forbidden (Barrett et al. 1995:18–19,22, 39, 54; Wishart 1994:244).

During the twentieth century, tribal populations increased. After World War II, the U.S. government established the Indian Claims Commission, which sought to redress awards for prior land cessions based on market value adjustments, although in most cases the award translated to a paltry dollar value amount per capita (Barrett et al. 1995:23–24; Wishart 1994:241–243).

In the 1960s and 1970s, the tribes successfully reversed the government policy of assimilation, with both Presidents Lyndon B. Johnson and Richard Nixon broadly supporting Indian self-determination. Since the 1960s, multiple laws have been passed protecting Indian self-determination and self-government, religious freedom, civil rights, and historic Indian burials (Barrett et al. 1995:24; Mann 2021; NPS 2023; Wishart 1994:239). Despite modern-day challenges, such as pervasive lack of economic opportunity and widespread poverty on reservations, the fact remains that "Despite the concerted and protracted efforts of Americans to suppress and transform them, the Nebraska Indians have prevailed and reinforced their shaken tribal identities" (Wishart 1994:239).

For more information regarding the historic setting of the proposed project, refer to Sections 3.3.2, *Historic Setting,* of the 2015, 2017, 2018, and 2019 cultural resource surveys of the R-Project.

Chapter 5
Consultation Efforts

This section details the extensive cultural resource consultation efforts conducted for the R-Project from 2012 through the present, including informal coordination, formal correspondence, stakeholder meetings, and public meetings. This section is organized by time period. Section 5.1, *Project APE Evolution*, details the consultation process up to 2019 when the Service issued the original ITP. Information in this section details NPPD's initial coordination with the Nebraska SHPO; initial formal correspondence between the Service and tribes, the ACHP, and other organizations; and multiple public meetings. This section also summarizes discussions about and development of a programmatic agreement (PA) to address the effects of the R-Project.

Section 5.2, *Consultation Prior to Permit Issuance (Prior to June 2019),* discusses consultation that occurred from 2019 to 2020, prior to the court remand. This consultation consisted primarily of discussions with the Cherokee Nation as well as consultation between the NPPD, SHPO, NPS, and the ACHP regarding an amendment to the PA.

Section 5.3, *Consultation After Permit Issuance to Court Remand (2019 to 2020)*, discusses consultation that occurred after the court remand, which included correspondence with the Nebraska Chapter of the Oregon California Trail Association and the Rosebud Sioux Nation regarding their concerns about both the project and the NEPA process and cultural resource survey efforts to date.

5.1 Project APE Evolution

A crucial issue during these consultations concerned the establishment of the APE for this project. The APE is defined as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if such properties exist. The [APE] is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking" (36 CFR 800.16[d]). Determining the APE is a foundational step in the Section 106 process and is done prior to conducting site file research and cultural resource surveys.

Prior to discussion of consultation, therefore, it must be noted that the understanding of the APE evolved from the inception of the project in 2012 through publication of the FEIS in 2019 and again, to a lesser extent in 2023. This evolution of the APE was a result of continued consultation with consulting parties from 2016 to 2018, the court remand in 2020, and post-remand consultation.

5.1.1 NPPD Preliminary APE

While the Service initiated the NEPA and Section 106 processes in 2014 with the release of the NOI in October 2014, the Service had not yet developed an APE. NPPD developed a preliminary APE by 2015 based on what was considered at that point as the most likely R-Project transmission line

route. At this time, an actual APE had not yet been identified by the Service, so NPPD used the following APE to conduct cultural resource surveys for the R-Project:

1. Direct Effects: 100-foot area on either side of the final route centerline with a 50-foot buffer, for a 300-foot-wide APE for direct effects. Direct effects also included footprints of substations and other permanent ancillary facilities as well as temporary disturbance areas. The latter areas included access routes and staging areas outside of the ROW, as well as a 50-foot buffer around these temporary disturbance areas.
2. Indirect Effects: A 1-mile corridor consisting of 0.5 miles on either side of the proposed centerline route and surrounding the substations.

NPPD used this preliminary APE when conducting cultural resource surveys from 2015 to 2018. Later iterations of the APE did not materially alter the APE for direct effects surveyed by POWER Engineers from 2015 to 2018 (Bedingfield 2017:1–2; Bedingfield and McKenzie 2018:2; Bedingfield and Tucker 2016:1; Bedingfield and Webb 2015:1; Hostetler 2016).

5.1.2 U.S. Fish and Wildlife Service Development of the APE, 2016–2023

The Service began developing the APE in 2016. From 2016 to 2018, the Service consulted with the SHPO, the ACHP, NPS, and NPPD regarding the APE. Initially, the Service determined that the APE consisted of the entire HCP permit area plus an additional 22 miles of the proposed R-Project route to take into account the proposed transmission line's impacts on migratory birds. After internal discussion, the Service then determined that the APE would consist solely of the HCP permit area, because that was where the federal undertaking (considered at this time to be the issuance of an ITP) would occur. The Service and consulting parties agreed upon the APE for physical effects (e.g., the distances surrounding the R-Project centerline, work areas, and access routes) developed by NPPD and being surveyed (at the time) by POWER Engineers.

The SHPO formally disagreed, however, with the Service's decision, sent to the consulting parties on December 15, 2016, to only apply the APE to the HCP Permit Area, rather than the full extent of the R-Project. The ACHP also expressed concern with the decision and requested participation in Section 106 consultation. Discussions about the federal undertaking and the APE continued through 2018, when, in April, the SHPO agreed with the Service regarding what was then considered the final APE (Bainbridge 2016; Dolberg 2018; Fowler 2017; Rissetto 2016). The federal undertaking that was determined through this consultation was presented in the FEIS (**Figure 8**) and consisted of the following:

- American Burying Beetle Permit Area – The segment of the R-Project transmission line where the permit authorizes the incidental take of the American burying beetle. The permit area encompassed the portion of the route from Stapleton to the Holt County Substation.
- Offsite American Burying Beetle Mitigation Area – A 600-acre parcel in Blaine County for which NPPD had an option to purchase for purposes of offsite beetle mitigation. Management of the parcel as mitigation for take was part of the undertaking.
- Bird Flight Diverter Segments – All segments along the R-Project transmission line where bird flight diverters would be installed to avoid take of whooping crane, interior least tern, and piping plover.

The dimensions of the APE for the federal undertaking included the following:

1. Direct Effects: A 300-foot-wide APE for direct effects around the R-Project centerline (150 feet on either side). Direct effects also included work areas outside of the transmission line corridor, and an area 50 feet beyond the perimeter of the work areas. For access routes outside the transmission line survey corridor, the APE was drawn at 50 feet on each side of the R-Project centerline. In effect, the APE for Direct Effects did not change from NPPD's preliminary APE. The Service and the SHPO agreed that the cultural resource surveys previously conducted by POWER Engineers adequately covered this APE (Bainbridge 2016; Rissetto 2016; FWS and Berger 2018:3–287).

2. Indirect Effects: The APE for indirect visual, audible, and atmospheric effects was delineated as 10 miles on either side of the R-Project centerline (FWS and Berger 2018:3–287).

As shown in **Figure 8**, there were discrete segments of the proposed transmission line that were not part of the federal undertaking. However, all portions of the line fell within the visual APE due to the overlapping visual line of sight between portions of the line that were considered part of the federal undertaking. POWER Engineers surveyed all areas of proposed disturbance to which access was granted, regardless of whether those areas were within the boundaries of what was defined as the scope of the federal undertaking.

After completion of the FEIS, in 2019, the D.C. Circuit court clarified the difference between an APE's direct and indirect effects in its decision in *National Parks Conservation Association v. Semonite*, 916 F.3d 1075 (D.C. Cir. 2019), by "referring to the causality, and not the physicality, of the effect to historic properties. This means that if the effect comes from the undertaking at the same time and place with no intervening cause, it is considered 'direct' regardless of its specific type (e.g., whether it is visual, physical, auditory, etc.). 'Indirect' effects on historic properties are those caused by the undertaking that are later in time or father removed in distance but are still reasonably foreseeable" (ACHP 2019). Prior to this clarification, both visible and audible effects within the APE were defined as "indirect effects." In 2020, the court remand specifically stated that the Service failed to act "'in accordance with the law,' 5 U.S.C. Section 706(2)(A), with respect to its consideration of possibilities to avoid impacts on O'Fallon's Bluff" (*Oregon-California Trails Association v. Walsh,* 1:19-cv-01945-WJM, D. Colo 2020).

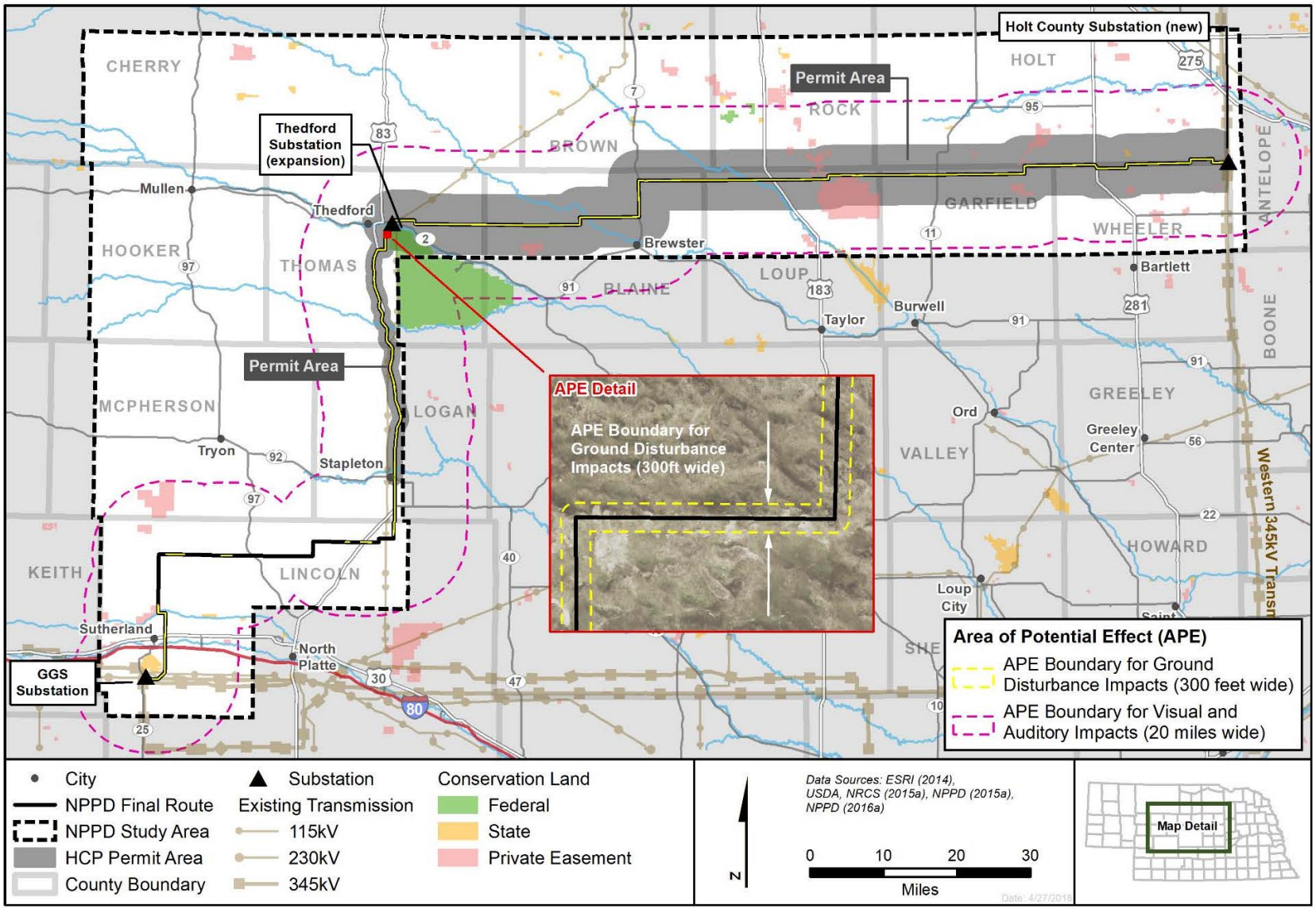
Based on the 2019 clarification of the definition of direct and indirect effects, the R-Project APE has been redefined to include both visual and audible effects as "direct." Since the court remand, NPPD has also decided to mark the entire proposed transmission line with bird flight diverters to minimize whooping crane risk.

For the purposes of Section 106, the current federal undertaking for the R-Project is defined as the construction, maintenance, and operation of the entire proposed transmission line. Therefore, the current APE consists of physical, auditory, visual, and atmospheric effects along the entire proposed transmission line. This latest iteration of the APE featured a shift eastward to reflect NPPD's route adjustment in the north-south portion of the R-Project transmission line to avoid O'Fallon's Bluff (**Figure 9**).

The current APE, as of July 2023, is described as follows.

1. Direct Physical Effects: Identical description to the previous APE for direct effects.
2. Direct Audible Effects: Area encompassing 0.5 mile on either side of the proposed R-Project centerline and 0.5 mile around access routes and work areas.
3. Direct Visible Effects: Area encompassing 10 miles on either side of the proposed R-Project centerline (identical to indirect effects of previous APE).

Atmospheric effects include effects such as those resulting from fugitive dust, which would affect the visual setting. Such effects would be temporary and would not be permanent or adverse. They are not defined with a standardized buffer distance from the project.



Source: FWS and Berger 2018:3–288

Figure 8. Area of Potential Effects, Defined by the Service and Confirmed by SHPO in April 2018

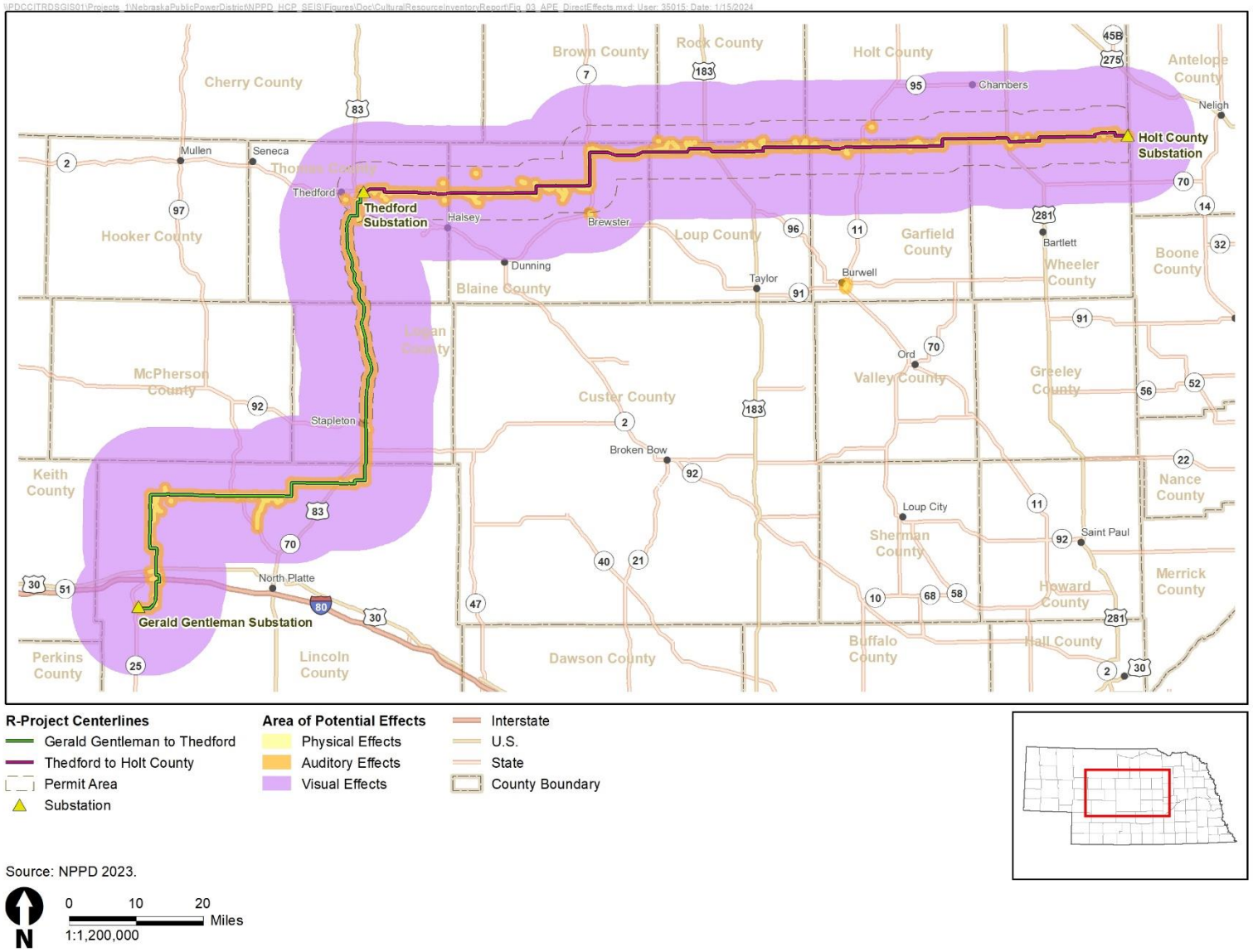


Figure 9. Current APE (July 2023 – Present)

5.2 Consultation Prior to Permit Issuance (Prior to June 2019)

This section outlines consultation efforts and development of the APE prior to issuance of the ITP by the Service in June 2019. NPPD began coordination with the SHPO in 2012 during the initial routing and public-involvement processes. This included obtaining information from the SHPO databases in 2013 for consideration in the routing process; however, based on available records, the official consultation efforts for the R-Project began in 2014 as part of the NEPA process. The NEPA scoping process was initiated on October 30, 2014, when the Service issued a Notice of Intent in the Federal Register to prepare an EIS for the proposed project. In a parallel effort, the Service notified the public of its intent to conduct Section 106 consultation in conjunction with the NEPA process. Table 1 summarizes the record of Section 106 consultation correspondence prior to June 2019 and is based on available information. A description of these consultation efforts is provided after Table 1. Any meetings held and corresponding attendees are provided in the paragraphs below.

Table 1. Record of Section 106 Consultation (2014 to June 2019)

Organization	Date of Outreach – Purpose	Date of Response – Content
Advisory Council on Historic Preservation	10/17/2014 – Initial Outreach	3/10/2017 – Disagreed with revised APE, requested clarification
	-	5/26/2017 – Notification indicating its participation in Section 106 consultation
	03/06/2018 – Clarification regarding revised APE and provided further revisions to APE	-
	05/24/2018 – Draft PA	5/24/2018 – Attended meeting regarding PA with other consulting parties 5/30/2018 – Provided edits to the PA
	06/14/2018 – Distribution of Draft PA, invitation to 6/19/2018 meeting	6/15/2018 – Comments on PA. 6/19/2018 – Participated in consulting parties meeting in North Platte
	12/17/2018 – Clarification of undertaking and determination of APE	-
		2/21 – 3/6/2019 – ACHP redrafted PA, changed period of expiration to 10 years with a chance to review, expanded content, and changed format. Email exchanges between NPPD and ACHP regarding these changes
	3/29/2019 – Submittal of PA for signature	4/10/2019 – ACHP emailed executed version of PA
Antelope County Historical Society and Museum	04/06/2018 – Initial Outreach	No response received
Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation, Montana	10/17/2014 – Initial Outreach	No response received
	02/24/2016 – Details of Final Route	No response received
	10/26/2018 – Final Outreach	No response received
Blaine County Historical Society	04/06/2018 – Initial Outreach	No response received
Brown County Historical Society	04/06/2018 – Initial Outreach	No response received

Organization	Date of Outreach – Purpose	Date of Response – Content
Cherokee Nation	-	4/25/18 – Contacted the Service for additional information
	4/26/18 – Response to request for additional information and invitation to the Cherokee Nation to be a consulting party	5/29/2018 – Requested consulting party status and additional consultation to avoid a culturally sensitive area 07/06/2018 – Requested avoidance of culturally sensitive area
	06/14/2018 – Distribution of Draft PA, invitation to 6/19/2018 meeting	6/19/2018 – Attended meeting 7/6/2018 – Response to Draft PA
	11/07/2018 – Solicit input and request consultation	
	2/28/2019 – 3/25/2019- email exchange between Service, NPS, and Cherokee regarding potential Cherokee-related culturally sensitive area	2/28/2019 – 3/25/2019- email exchange between Service, NPS, and Cherokee regarding potential Cherokee-related culturally sensitive area
	3/6/2019 – Service submitted PA for Cherokee review	-
	3/29/2019 – Service submitted PA for Cherokee signature as a concurring party	-
Cheyenne and Arapaho Tribes, Oklahoma	10/17/2014 – Initial Outreach	No response received
	02/24/2016 – Details of Final Route	No response received
	10/26/2018 – Final Outreach	No response received
Cheyenne River Sioux Tribe of the Cheyenne River Reservation, South Dakota	10/17/2014 – Initial Outreach	No response received
	02/24/2016 – Details of Final Route	No response received
	10/26/2018 – Final Outreach	No response received
Church of Jesus Christ of Latter-Day Saints	06/14/2018 – Distribution of Draft PA, invitation to 6/19/2018 meeting	7/16/2018 – Stated they had been informed of the project after public comment period for the DEIS had closed and that the project would have significant adverse effects on Sand Hill ruts of the Mormon Pioneer Trail and the Oregon Trail.
	3/6/2019 – Service submitted PA for review	3/14/2019 – Church had concerns with vague effects minimization measures and urged expansion of group consulting on mitigation measures, noting that these consisted only of the ACHP, the Service, the NPPD, and the SHPO.
	3/29/2019 – Service submitted PA for signature as a concurring party	-

Organization	Date of Outreach – Purpose	Date of Response – Content
Crow Creek Sioux Tribe of the Crow Creek Reservation	10/17/2014 – Initial Outreach	No response received
	02/24/2016 – Details of Final Route	No response received
	10/26/2018 – Final Outreach	No response received
Garfield County Historical Society and Museum	04/06/2018 – Initial Outreach	No response received
Holt County Historical Society/Moses P. Kinkaid Museum	04/06/2018 – Initial Outreach	No response received
Ivan Schneidereit, St. John's Lutheran Church	04/10/2018 – Initial Outreach	No response received
Lincoln County Historical Society and Museum	04/06/2018 – Initial Outreach	
	06/14/2018 – Distribution of Draft PA, invitation to 6/19/2018 meeting	7/16/2018 – Concerns regarding Programmatic Agreement
	3/6/2019 – Service submitted PA for review	-
	3/29/2019 – Service submitted PA for signature as a concurring party	-
Loup County Historical Society	04/06/2018 – Initial Outreach	No response received
Lower Brule Sioux Tribe of the Lower Brule Reservation, South Dakota	10/17/2014 – Initial Outreach	No response received
	02/24/2016 – Details of Final Route	No response received
	10/26/2018 – Final Outreach	No response received
National Park Service	2/23/2016 – Service submitted DEIS for NPS review	3/24/2016 -Concerns regarding preferred route through O'Fallon's Bluff, urged opting for the western or eastern alternative routes
	6/21/2016 – Section 106 consultation letter	9/2016 – Site visit with Service and SHPO (Bainbridge 2016)
	04/23/2018 – Initial Outreach	No response received
	06/14/2018 – Distribution of draft PA, invitation to 6/19/2018 meeting	-
	3/6/2019 – Service submitted PA for review	-3/12/2019 – NPS provided comments on PA
	3/29/2019 – Service submitted PA for signature as a concurring party	7/17/2019 – NPS signed PA as a concurring party

Organization	Date of Outreach – Purpose	Date of Response – Content
Nebraska State Historic Preservation Office/Nebraska State Historical Society	12/2012 – 2015 – Initial outreach by NPPD, meetings, email updates on coordination with Service and routing updates, email from Service confirming they were lead federal agency for NEPA and Section 106 consultation, NPPD coordination regarding cultural resource surveys of project area	12/2012 – 2015 – Attended meetings, coordinated with NPPD regarding cultural surveys, inquired regarding status of routing decisions and Section 106 process, relayed comments of public to NPPD
	4/16/2015 – Update on status of forthcoming consultation agency letters	-
	-	9/2/2015 – Concerns regarding lack of consultation of final route
	02/23/2016 – Details of Final Route	3/2/2016 -Request to be cooperating agency and concerns with route selection process
	-	5/19/2016 – Concerns regarding Section 106 process and lack of consultation regarding APE
	06/21/2016 – APE Consultation Request	7/21/2016 – Agreed with initial APE as proposed by Service, provided comments on POWER Engineers cultural resource survey results.
		9/2016 – Site visit with Service and SHPO (Bainbridge 2016)
	11/8/2016 – Submitted DEIS for review	12/15/2016 – Disagreed with newly defined APE. Also, DEIS did not include complete assessment of all APEs because of unsecured landowner permissions. Requested opportunity to comment on completed DEIS report after agreed upon APE was established.
	11/29/2016 – Revisions to APE	12/16/2016 – Disagreed with revised APE, requested clarification; concurrence of survey methods for visual impact assessment
	03/06/2018 – Clarification regarding revised APE and provided further revisions to APE	4/9/2018 – Concurrence with revised APE, timeline of Section 106 process, and requested Programmatic Agreement
	05/24/2018 – Draft PA	5/24/2018 – Attended meeting on PA with other consulting parties
	06/14/2018 – Distribution of Draft PA, invitation to 6/19/2018 meeting	
	07/16/2018 – Updated Draft PA & Appendices	

Organization	Date of Outreach – Purpose	Date of Response – Content
		9/19/2018 – review of POWER Engineers cultural resource survey reports
		2/21/2019 – List of potential mitigation measures
	3/29/2019 – Submittal of PA for signature	4/2/2019 – SHPO signs PA
North Platte/Lincoln County Visitors Bureau	04/06/2018 – Initial Outreach	No response received
	06/14/2018 – Distribution of Draft PA, invitation to 6/19/2018 meeting	-
	3/6/2019 – Service submitted PA for review	-
	3/29/2019 – Service submitted PA for signature as a concurring party	-
Northern Arapaho Tribe of the Wind River Reservation, Wyoming	10/17/2014 – Initial Outreach	12/01/2014 -No effect to cultural & historic properties; request to be contacted regarding inadvertent discoveries
	02/24/2016 – Details of Final Route	No response received
	10/26/2018 – Final Outreach	No response received
Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation, Montana	10/17/2014 – Initial Outreach	No response received
	02/24/2016 – Details of Final Route	No response received
Oglala Sioux Tribe	10/17/2014 – Initial Outreach	No response received
	02/24/2016 – Details of Final Route	No response received
	10/26/2018 – Final Outreach	No response received
Omaha Tribe of Nebraska	10/17/2014 – Initial Outreach	No response received
	02/24/2016 – Details of Final Route	No response received
	10/26/2018 – Final Outreach	No response received
Oregon-California Trails Association [OCTA] (Nebraska Chapter & National Organization)	October 2014	05/14/2016 – Requested to be a cooperating agency in the preparation of the EIS
	04/06/2018 – Initial Outreach	
	06/14/2018 – Distribution of Draft PA, invitation to 6/19/2018 meeting	6/19/2018 – participated in meeting 07/16/2018 (two letters) – Concerns regarding cultural resources and Programmatic Agreement
	3/6/2019 – Service submitted PA for review	3/13/2019 – Sent email to SHPO urging them not to sign PA

Organization	Date of Outreach – Purpose	Date of Response – Content
	3/29/2019 – Service submitted PA for signature as a concurring party	-
Pawnee Nation of Oklahoma	10/17/2014 – Initial Outreach	No response received
	02/24/2016 – Details of Final Route	No response received
	10/26/2018 – Final Outreach	No response received
Ponca Tribe of Nebraska	10/17/2014 – Initial Outreach	No response received
	02/24/2016 – Details of Final Route	02/29/2016 – Stated that area of interest is Knox, Antelope, Holt, and Garfield Counties
	10/26/2018 – Final Outreach	No response received
Rock County Historical Museum	04/06/2018 – Initial Outreach	No response received
Rosebud Sioux Tribe of the Rosebud Indian Reservation, South Dakota	10/17/2014 – Initial Outreach	No response received
	02/24/2016 – Details of Final Route	No response received
	10/26/2018 – Final Outreach	No response received
Sac and Fox Nation of Missouri in Kansas and Nebraska	10/17/2014 – Initial Outreach	No response received
	02/24/2016 – Details of Final Route	No response received
	10/26/2018 – Final Outreach	No response received
Sac and Fox Nation of Oklahoma	10/17/2014 – Initial Outreach	No response received
	02/24/2016 – Details of Final Route	No response received
	10/26/2018 – Final Outreach	No response received
Sac and Fox Tribe of the Mississippi in Iowa	10/17/2014 – Initial Outreach	No response received
	02/24/2016 – Details of Final Route	No response received
	10/26/2018 – Final Outreach	No response received
Santee Sioux Nation, Nebraska	10/17/2014 – Initial Outreach	No response received
	02/24/2016 – Details of Final Route	No response received
	10/26/2018 – Final Outreach	No response received
Sutherland History Center	04/06/2018 – Initial Outreach	
	06/14/2018 – Distribution of Draft PA, invitation to 6/19/2018 meeting	6/19/2019 – participated in meeting 7/16/2018 – Concerns regarding cultural resources and Programmatic Agreement

Organization	Date of Outreach – Purpose	Date of Response – Content
	3/6/2019 – Service submitted PA for review	3/12/2019 – Sent email to SHPO urging them not to sign PA
	3/29/2019 – Service submitted PA for signature as a concurring party	-
Standing Rock Sioux Tribe of North and South Dakota	10/17/2014 – Initial Outreach	No response received
	02/24/2016 – Details of Final Route	No response received
	10/26/2018 – Final Outreach	No response received
Thomas County Historical Society	04/06/2018 – Initial Outreach	No response received
Wheeler County Historical Society	04/06/2018 – Initial Outreach	No response received
Winnebago Tribe of Nebraska	10/17/2014 – Initial Outreach	No response received
	02/24/2016 – Details of Final Route	No response received
	10/26/2018 – Final Outreach	No response received
Yankton Sioux Tribe of South Dakota	10/17/2014 – Initial Outreach	No response received
	02/24/2016 – Details of Final Route	No response received
	10/26/2018 – Final Outreach	No response received

5.2.1 Historic Property Identification and Finding of Effects Consultation: 2014–2018

Three public meetings were held between November 18 and November 20, 2014, in Burwell, Sutherland, and Thedford, Nebraska. On December 1, 2014, the Northern Arapaho Tribe responded that if the viewshed does not contain any historic properties, there would be "no effect" to cultural and historical properties from NPPD's final route. The Northern Arapaho Tribe requested that they be contacted and provided a copy of the report if there were any inadvertent discoveries, such as human remains, found during ground-disturbing activities related to the R-Project.

On September 2, 2015, the Nebraska SHPO sent a letter to the Service expressing concerns that the final route was selected by NPPD without consultation with the SHPO and without consideration of historic and cultural resources. It should be noted, however, that NPPD had coordinated with SHPO on multiple occasions between 2012 and when the final route was selected in 2015. On October 26, 2015, the Service conducted field visits with interested parties, which included the Nebraska SHPO, to areas of interest in Lincoln County, including O'Fallon's Bluff, the Mormon Pioneer Trail, and Birdwood Creek.

On February 23, 2016, the Service sent a letter to the Nebraska SHPO requesting input including data, comments, new information, or suggestions to help inform the DEIS. On February 24, 2016, the Service sent a second letter to Tribal Nations detailing NPPD's final route and requesting consultation. On February 29, 2016, the Ponca Tribe of Nebraska responded that it has an interest in any work done in Knox, Antelope, Holt, and Garfield counties and requested to be informed of any work that will be done in those areas.

On March 2, 2016, the Nebraska SHPO requested to be a cooperating agency in the preparation of the EIS. The SHPO requested a GIS shapefile of the study area, voiced concerns that the route selection process had progressed without cultural resources being a part of the selection criteria and was not comfortable with limiting the APE to one linear route. On May 19, 2016, the Nebraska SHPO contacted the Service with concerns that the Section 106 process had not been followed and that the APE was determined without consideration between the federal agency, the Nebraska SHPO, Tribes, and other consulting parties. The Nebraska SHPO also raised concerns about a narrow APE for visual effects, that surveys had proceeded without Nebraska SHPO participation, and that the Section 106 process appeared to be occurring without acknowledgement by NPPD. Within the APE, the Nebraska SHPO had concerns about the Oregon Trail and Mormon Trail ruts and the boundaries of O'Fallon's Bluff. These concerns were addressed in a meeting attended by NPPD, the Service, Nebraska SHPO, POWER Engineers, and other parties on October 25, 2016 (summarized below).

On June 21, 2016, the Service requested consultation with the Nebraska SHPO under Section 106 regarding definition of the APE, which comprised approximately 200 miles of the 225-mile-long R-Project route. The Service also requested input from the Nebraska SHPO regarding their list of 29 Tribal Nations that were initially contacted. The Service, Nebraska SHPO, and ACHP worked through multiple revisions to the APE during the consultation process, which is described in further detail below.

In September 2016, the Service conducted a second field visit with consulting parties, including the Nebraska SHPO, to areas of interest in Lincoln County. On August 9, 2016, the Service received an

email from Courtney Ziska at the Nebraska SHPO, Highway Archeology Program, to provide an update on the property owned by Jim and Dan Fleecs. In her email, she noted the discovery of approximately 45 archeological sites, "with 12 to 18 of the sites related to Euro-American occupation and ranching operations, and of the remaining sites many are smaller prehistoric chipped stone scatters." In further email correspondence through 2016, Ms. Ziska continued to raise concerns about Birdwood Creek and its potential for archeological sites. In early 2017, the correspondence between Ms. Ziska and the Service continued as the two parties drafted cultural statements for inclusion in the DEIS.

On October 25, 2016, the Service met with representatives from NPPD, POWER Engineers, Nebraska SHPO, Nebraska Game and Parks Commission, Holland and Hart, Parametrix, and Louis Berger to discuss a handout provided by the Service regarding the NHPA Section 106 process. At that time, the Service suggested that NPPD conduct cultural resource surveys for the entire R-Project route, not only the proposed APE and HCP permit area. NPPD explained that two-thirds of the R-Project centerline had been surveyed. Remaining areas had not been surveyed, as landowners refused right-of-entry. All parties present in the meeting were satisfied with the current survey status. The SHPO recognized that NPPD would complete a viewshed analysis to determine if any historic properties would be impacted. NPPD, the Service, SHPO, and other consulting parties would then coordinate next steps for field-verification and determining potential impacts. The Service would also send a revised cultural resource consultation letter with the revised APE to all consulting parties. During this meeting, the parties were in apparent agreement regarding the APE for both physical effects and the APE for visual effects, the latter based on a 10-mile buffer on each side of the R-Project centerline.

On November 29, 2016, the Service sent a letter to the Nebraska SHPO requesting feedback on proposed revisions to the APE based on a re-examination of what constitutes a federal undertaking The area where the NPPD's proposed migratory bird conservation plan would be applied under the Migratory Bird Treaty Act does not constitute part of the federal undertaking since the Service can only recommend, not require, that NPPD develop and implement a migratory bird conservation plan. The APE, as proposed by the Service, was reduced to comprise approximately 160 miles of the proposed transmission line and did not include the 65-mile-long segment of the R-Project from Gerald Gentlemen Station to Stapleton, Nebraska. The Service also proposed a survey methodology for the visual impact assessment. On December 6, 2016, the Service met with representatives from the Nebraska SHPO, NPPD, and POWER Engineers and came to an agreement regarding the varying widths of the APE, visual impact analysis methodology, and agreed that the prior survey methods were considered sufficient. On December 16, 2016, however, the Nebraska SHPO sent a letter to the Service formally disagreeing with the proposed APE, which was defined solely based on where the Service would authorize an ITP for the American burying beetle. The Nebraska SHPO requested clarification from the Service regarding the revisions to the APE. The Nebraska SHPO concurred with the proposed survey methodology for the visual impact assessment.

On February 1, 2017, the ACHP, Service, and Nebraska SHPO met via teleconference and discussed how the Service had determined the APE. On March 10, 2017, the ACHP requested more information from the Service about the specific undertaking "in light of the information received from the Nebraska SHPO [on January 5, 2017] and contained within the [newly issued] Handbook."[2] In their letter, the ACHP disagreed with the Service's revised definition of the APE and undertaking for

[2] "Handbook" refers to the *Habitat Conservation Planning and Incidental Take Permit Processing Handbook* (FWS and NMFS 2016).

Section 106 purposes. The ACHP also requested an update from the Service on the status of the Section 106 review and explain how the Service may consider the potential effects on historic trails. On May 26, 2017, the ACHP sent a letter to the Service indicating their participation in Section 106 consultation, at the request of the Nebraska SHPO, because the proposed undertaking presents important questions of policy or interpretation and has the potential to present procedural problems. On March 6, 2018, the Service sent a letter to the ACHP and Nebraska SHPO providing clarification and justification on the revisions to the APE. The Service further revised the APE to also include the ITP's required implementation of other conservation measures in NPPD's HCP to avoid take of whooping cranes, interior least terns, and piping plovers. On April 9, 2018, the Nebraska SHPO concurred with the Service's revised APE and identified next steps in the Section 106 process: (1) identification of historic properties; (2) assessment of effects; (3) and avoidance, minimization, and mitigation (see Section 5.1.2 for details of this version of the APE). In order to proceed with the issuance of an ITP, the Nebraska SHPO also requested that the consulting parties work together to develop a PA.

On April 6, 2018, the Service sent out 21 letters to various organizations, inviting them to participate in the Section 106 process. Recipients included the NPS, St. John's Lutheran Church, OCTA Nebraska Chapter, OCTA national organization, and various local historical societies and museums in the project area.

The Cherokee Nation contacted the Service via email on April 26, 2018, requesting information about the R-Project, to which the Service responded with the requested information. The Cherokee Nation later requested to be a consulting party under Section 106 of the NHPA in a May 29, 2018, letter. The letter noted that, based on the Cherokee Nation's database of cultural, historic, and prehistoric resources, the R-Project intersects with a culturally sensitive site located near Sutherland, Nebraska. Again, on July 6, 2018, the Cherokee Nation requested that an area near Sutherland, Nebraska, be avoided for the proposed project as it may include culturally sensitive sites. The tribe requested additional consultation with the Service if that area could not be avoided. The Cherokee Nation continued email and letter correspondence with the Service throughout the remainder of 2018 to identify the specific area to which the tribe was referring. On October 26, 2018, the Service sent a third round of letters to all Tribal Nations listed above and on November 7, 2018, to the Cherokee Nation to continue to solicit input and participation in the Section 106 consultation process.

On July 25, 2018, the Service hosted a public meeting regarding potential impacts on cultural resources at a conference center in North Platte, Nebraska. The purpose of the meeting was to seek input about ways to avoid, minimize, and mitigate potential impacts pursuant to Section 106 of the NHPA. Over 90 members of the public attended. Feedback received during this meeting is summarized in Table 2. The Service also received comments regarding the project from additional interested individuals that were not originally contacted by the Service as part of Section 106 consultation efforts. This correspondence, as it relates to cultural resources, is summarized below in Table 2.

Table 2. Additional Public Comments Regarding Cultural Resources

Organization/ Individual	Date of Contact	Method	Notes
Charlie Fote, Whitetail Farms	07/25/2018	Public Meeting Comment	Requested that the project wait until all cultural resource data is put together.
Amanda Gibbs, Oregon-California Trails Association	07/25/2018	Public Meeting Comment	Provided information regarding an online petition with over 5,000 signatures had been put together to stop the project and explained that the trail ruts on the swales near Sutherland are some of the best left in Nebraska.
Brent Steffen	07/25/2018	Public Meeting Comment	Requested that the only mitigation for impacts to cultural resources is to change the route of the line.
Linda Tracey	07/25/2018	Public Meeting Comment	Noted that there were historic ranches in the area even before the railroad, as well as graves of immigrants and Native Americans that must be preserved. She also explained that non-registered ruts, related to the Mormon trail, are just as significant and expressed concern for the cultural resources in the Birdwood Creek area.
Barb Leatherland	07/25/2018	Public Meeting Comment	Expressed concern regarding the impact on tourism as people come to see the cultural resources, such as the last segments of the Mormon Trail, especially in Sutherland. She noted that it is worth saving and the lines would destroy it.
James Fleecs	07/25/2018	Public Meeting Comment	Noted that he is opposed to the project going through his property.
Dan Fleecs	07/25/2018	Public Meeting Comment	Recommended that the route follow an existing corridor, and there is another line that NPPD has already looked at that would avoid the Oregon Trail/Mormon Trail.
Mike Kelly	07/25/2018	Public Meeting Comment	Indicated that the line will discourage visitors to the trail marker at the Mormon Trail in Sutherland. Also requested that NPPD listen to the comments.
Dave Hutchinson	07/25/2018	Public Meeting Comment	Does not believe NPPD has looked at historical resources or read any comments handed in. There are graves and artifacts along the Calamus River, and the wagon trail ruts have been mentioned several times.
Tom Brewer, Nebraska State Senator	07/25/2018	Public Meeting Comment	Stated that Omaha Public Power District wants money from Nebraska, but when they don't listen to the people and spend their money recklessly there are serious consequences. He asked where the information is regarding the research occurring at the University of Nebraska on artifacts recovered from Birdwood Creek.

Organization/ Individual	Date of Contact	Method	Notes
Jim Roseberry	07/25/2018	Public Meeting Comment	Noted that there is a cultural heritage area two miles north of the line. There are ruts there and vehicles would damage them.
Jim Griffin, Lincoln County Historical Museum	07/25/2018	Public Meeting Comment	Indicated the museum is a consulting party to the Section 106 process. Encouraged the Service to finish the Section 106 process completely before the permit is issued. Asked if all surveys would be completed before the final Programmatic Agreement is signed.
Cleve Tremble	07/25/2018	Public Meeting Comment	Noted that on his property there are Native American graves and a couple of Indian trails, and they can see the night sky east of the Rocky Mountains. Indicated that NPPD is not listening and requested another EIS.
Craig Andresen, Preserve the Sandhills	07/25/2018	Public Meeting Comment	Noted that the only thing they will do to mitigate cultural resource impacts is to put up an information kiosk. The R-Project would cut through the Sandhills affecting many cultural resource sites including tribal sites and Native American graves. The idea of allowing NPPD to disturb those sites would violate the sense of morality that landowners take so seriously today.
Pat Pilster	07/25/2018	Public Meeting Comment	Expressed an interest in showing the historical sites in question to her grandchildren. Indicated that NPPD could alter the route slightly and miss those areas. Also noted that NPPD is not listening.
Justin Bradley	07/25/2018	Public Meeting Comment	Asked the Nebraska SHPO whether finding something after the project would shut the whole project down.
Shaylee Scranton	07/25/2018	Public Meeting Comment	Asked NPPD why they would want to destroy a cultural landscape.
Linda Tacey	07/25/2018	Public Meeting Comment	Asked the Nebraska SHPO what the office would do to protect archeological resources on Birdwood.
Anonymous and 50 additional individuals	10/05/2018	Mailed Letter	Identical letters. Asked the Service to include their concerns about "historical areas that relate to the Mormon Trail and Oregon Trail; and Historical areas which are historically documented by the many Indian Tribes in the area" in the EIS.
Jim Haugland	7/25/2018 and 08/10/2018	Public Comment	Noted concerns about the Oregon Trail, O'Fallon's Buff, Duck Reserve, Sutherland State Aid Bridge, Mormon Trail, and the Birdwood Area. Also stated that he had other cultural resources on his property and requested guidance on what to do about them.

Organization/ Individual	Date of Contact	Method	Notes
McIntosh Ranch LLC	Unknown	Mailed Letter	The letter noted a concern in placing the R-Project in the Sandhill of Nebraska because it will be in the path of migrating birds and other preservation concerns.

5.2.2 Programmatic Agreement Consultation: 2018 – 2019

Consultation regarding the R-Project PA began on May 24, 2018, when the Service emailed a draft PA to NPPD, SHPO, and ACHP in advance of a meeting held the same day between said parties. The ACHP provided edits to the draft PA on May 30, 2018. A consulting party meeting was held on June 19, 2018, and the draft PA and map of the APE was distributed via email in advance of the meeting on June 14, 2018. Recipients included the North Platte/Lincoln County Visitors Bureau, Sutherland Historical Society, OCTA Nebraska Chapter, OCTA national organization, Lincoln County Historical Society & Museum, Church of Jesus Chris of Latter-Day Saints (LDS) Church History Department, NPS, ACHP, SHPO, James Haugland, Mike Kelly, Gene Tacey, and the Cherokee Nation. On July 2, 2018, the Service provided additional follow-up information to the recipients of the draft PA. On July 16, 2018, the Service provided an updated draft PA to the SHPO and NPPD via email which included edits from NPPD and the Service. Additional outstanding issues were also listed in the body of the email.

In a letter dated July 16, 2018, the Lincoln County Historical Society and Museum expressed disagreement with the contents of the draft PA. The Museum requested revision of the PA to avoid certain extant Oregon and Mormon Trail ruts at O'Fallon's Bluff and the site identified as RPKB-3 by Bedingfield and Webb (2015). The Museum also cited its concern regarding adverse visual effects from the project, stating that "A two mile [sic] shift of the line to the east in this area would settle the issue with the museum as long as the appropriate surveys were completed as part of the section [sic] 106 process" (Griffin 2018). In two separate letters dated July 16, 2018, both the OCTA Nebraska Chapter and national organization provided responses to the Service's correspondence that included concerns regarding impacts on cultural resources and the contents of the PA. Allen Fugate, Attorney at Law, on behalf of Hanging H Real Estate Company, LLC, also provided comments to the Service regarding the draft PA, stating that the approach in the draft PA violated both NEPA and NHPA. Mr. Fugate also provided specific comments on several portions of the PA. In a letter dated July 16, 2018, the Sutherland Historical Society stated that the route will have devastating consequences to the wildlife habitat and cultural historic sites. They also stated that the PA should be followed and completed before NPPD is allowed to start construction. The LDS Church History Department also submitted a letter on July 16, 2018; however, it is unclear the date they were initially notified by the Service. The letter indicates that they were informed of the project sometime after the comment period for the DEIS had closed. The LDS Church History Department stated that the proposed route will have a significant adverse effect on the Sand Hill ruts of the Mormon Pioneer Trail as well as the Oregon Trail.

In a February 21, 2019, email, the SHPO provided a list of potential mitigation measures as potential options to address adverse effects on historic properties to the Service, ACHP, and NPPD. The ACHP also provided substantial PA revisions to the SHPO, Service, and NPPD on February 21, 2019. The ACHP and NPPD exchanged additional emails regarding these changes from February 26 to March 6, 2019. This communication resulted in the expansion of the PA's original content and changes to the PA format to, in the words of the ACHP "make the PA as strong and realistic as possible," (Kerr

2019). Disagreements concerning whereas clauses, duration, and dispute resolution stipulations, amongst other items, were negotiated between the Service, the NPPD, and the ACHP during this time.

After resolution of these issues, the Service submitted this updated version of the PA for concurring party signature via email on March 6, 2019. The Service sent the PA to the following parties: the Cherokee Nation, the Church of Jesus Christ of Latter-day Saints, the Lincoln County Historical Society, the NPS, the North Platte/Lincoln County Visitors Bureau, the OCTA, the Sutherland History Center, and three private individuals (Mr. James Fleecs, Mr. Jim Haugland, and Mr. Michael Kelly) for concurring party signature. Signatories consisted of the Service, the SHPO, the ACHP, and NPPD, with the PA successfully executed on April 10, 2019, with the signature of the ACHP executive director. Of the invited concurring parties, only the NPS signed the PA, on July 17, 2019.

5.3 Consultation After Permit Issuance to Court Remand (2019 to 2020)

After the ITP was issued in June 2019, consultation efforts continued until the court decision in June 2020. During this period, the Service sent a copy of the 2019 Cultural Resources Survey Final Report to the Cherokee Nation. In 2019, the Service and NPPD continued correspondence with the Cherokee Nation regarding potentially sensitive cultural sites within the project area. In spring of 2020, the Service, NPPD, and the Cherokee Nation were drafting a proposed agreement regarding culturally sensitive sites. Ongoing consultation included an effort to develop mitigation for project impacts in collaboration with the Cherokee Nation. Consultation also occurred between NPPD, SHPO, NPS, and ACHP regarding an amendment to the PA detailing additional mitigation measures, including archaeological documentation of the Oregon and Mormon trails in the area, installation or revision of interpretive signs, and establishment of building maintenance funds for LO00-001 (a historic ranch in Logan County) and BL00-008 (St. John's Lutheran Church in Blaine County). Discussions occurred with NPPD, the Cherokee Nation, SHPO, NPS, and ACHP regarding these additional mitigation measures but were halted due to the court decision in June 2020.

5.4 Consultation After Court Remand to Reinitiation of the Permit Process (2020 to 2022)

Between the court remand in June 2020 and the reinitiation of the permitting process in 2022, the Service received additional correspondence from consulting parties. On September 21, 2020, Linda Tacey, Nebraska Chapter Preservation Officer for the OCTA, wrote a letter to the Service about the "devastating consequences" NPPD's proposed route would have on wildlife habitat and cultural historic sites. Her letter outlined several historic resources that would be impacted by the project, including O'Fallon's Bluff, Fremont Slough, Pony Express, Native American villages, Fort Heath, Overland Telegraph, Old Ford Road/Lower Platte Crossing, the Mormon Trail, and Birdwood Creek. The Service did not respond.

On September 17, 2021, Ione Quigley, THPO of the Rosebud Sioux Tribe, wrote a letter to Deb Haaland, U.S. Secretary of the Interior, stating that the R-Project fell within the 1851 Fort Laramie Treaty area within Article 11 of the 1868 Treaty area. In the letter, Ms. Quigley noted that the project

would have an adverse effect on the cultural landscape, and that it was not considered during the project review process. Further, she noted that the FEIS was "woefully inadequate," had several omissions, and was undertaken in a way "that neither follows the purpose nor the spirit" of the NHPA or NEPA. Ms. Quigley also included that the cultural resource survey from 2015 did not meet NHPA requirements, that the Rosebud Sioux THPO was not consulted, and traditional cultural properties were not addressed within that report. Finally, she explained the importance of the Ogallala Aquifer, which underlies the entire project area. On December 13, 2021, Matthew Hogan, Acting Regional Director for the Service, responded to Ms. Quigley. He noted that on June 17, 2020, the court had issued a ruling on the project that vacated the ITP. He explained that NPPD had asked the Service to begin coordination on next steps for developing a new ITP application and HCP for the proposed project. The letter stated that the Service recognized the status of the Rosebud Sioux Tribe as a sovereign nation and that the Service would work diligently to ensure timely communication of opportunities for engagement in the future.

5.5 Ongoing Consultation Efforts Since Reinitiation of the Permit Process (2022 to Present)

In a letter dated August 25, 2022, the Service notified consulting parties listed in Table 3 of their intent to prepare a SEIS pursuant to NEPA. In accordance with Executive Order 13175 and Department of Interior Secretarial Order 3206, the Service also formally invited Tribal Nations to consult on a government-to-government basis in said letter.[3] Table 3 provides a summary of responses received from consulting parties since reinitiation of the permit process in 2022. The ACHP responded on October 19, 2022, with no comments pursuant to NEPA; however, to ensure compliance with Section 106, the ACHP encouraged the Service to consider the process at the Service's earliest opportunity. The ACHP asked for clarification on how the Section 106 process would be addressed, as well as additional details about the project. The Nebraska SHPO confirmed interest to serve as a cooperating agency via email on August 26, 2022.

The Notice of Intent for the SEIS was published on November 18, 2022, and in November 2022, the Service also sent letters inviting Tribal Nations to consult on a government-to-government basis. In early December 2022, the Service held two virtual public scoping meetings. After reviewing comments from these meetings, the Service began preparing the SEIS and developed a plan for Section 106 consultation to aid in addressing some of the issues identified in the 2020 court decision. In December 2022, the OCTA and Sutherland History Center confirmed their consulting party status via email.

Though the formal Section 106 consultation process had not been initiated at this time, around January 5, 2023, the Service received a note from James Fleecs, a private landholder, along with an electronic copy of a PowerPoint presentation created in 2016 by the Nebraska State Historical Society (now History Nebraska) outlining the history and archaeology of Birdwood Creek. The PowerPoint details cultural resource survey and assessment on property owned by Mr. Fleecs and his brother Dan Fleecs. James requested that the Service add the PowerPoint to his previous comment submitted during the scoping period.

[3] The Otoe-Missouria Tribe and the Iowa Tribe of Kansas and Nebraska were identified as potential consulting parties in 2023, after the initial government-to-government invitations were sent by the Service in August and November 2022.

On January 17, 2023, the Service met with the Nebraska SHPO and ACHP to discuss the Section 106 process and amending the PA. The Rosebud Sioux Tribe formally requested government-to-government consultation with the Service on February 16, 2023.

The Service formally reinitiated Section 106 consultation efforts for the SEIS on July 10, 2023, with a mailed letter regarding the initiation of the Section 106 process, requesting input on the APE and assistance in the identification of historic properties and traditional cultural properties in the APE, as well as an invitation to join the project as a formal consulting party.[4] The letter incorrectly noted the APE for Physical Effects as 0.5 miles on the Thedford to Holt County segment of the proposed R-Project transmission line. The list of recipients for initial outreach was determined based on recipients from previous consultation efforts, review of the current APE to include additional interested parties, and parties that expressed interest during the NEPA scoping period. All 31 Tribal Nations included in the recipients list were also invited to participate in government-to-government consultation. The Service continues to consult with Tribal Nations that have deferred comment to Nebraska Tribes or have identified no impacts on cultural resources. Several of these Tribes have been active participants in public meetings and have provided important insights about the historical setting.

Table 3. Record of Responses from Consulting Parties Since Reinitiation of the Permit Process through December 2023.

Organization	Date(s) Received	Method	Content
Federal/State Agencies			
Advisory Council on Historic Preservation	10/19/2022	Letter	Requested clarification on how Section 106 process would be addressed
National Park Service, National Trails Office	12/8/2022	Memo	Requested the Service explore additional alternatives in the SEIS to avoid or reduce adverse effects to O'Fallon's Bluff, or the Sand Hill Ruts, or both
Nebraska Public Power District	8/8/2023	Mail	Accepted invitation as a consulting party. Requested to remain an invited signatory for the PA amendment
Nebraska State Historic Preservation Office	8/26/2022	Email	Confirmed interest to serve as a cooperating agency
	7/21/2023	Letter	Provided concurrence on the APE
Tribal Nations			
Apache Tribe of Oklahoma	None		
Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation, Montana	9/8/2022	Email attachment	Deferred to the Nebraska Sioux Tribes for comment

[4] It should be noted that there was an error in the letter to reinitiate the Section 106 consultation effort. The initiation letter from the Service indicated that the Service conducted outreach to consulting parties in 2020 to notify them of the court's decision and that additional communication would follow. This did not occur.

Organization	Date(s) Received	Method	Content
Cherokee Nation	12/13/2022	Email	Requested continuing consultation from previous discussions prior to the court remand
Cheyenne and Arapaho Tribes, Oklahoma	None		
Cheyenne River Sioux Tribe of the Cheyenne River Reservation, South Dakota	7/13/2023	Email	No comment or concern at this time; deferred to Native Nation closer to the project; provided updates to tribal contact; requested notification of any changes to the proposed project
Crow Creek Sioux Tribe of the Crow Creek Reservation	None		
Flandreau Santee Sioux Tribe of South Dakota	7/17/2023	Email	Does not have an issue with the project as designed; requested immediate contact if the project inadvertently disturbs any human remains and or cultural material
Iowa Tribe Of Kansas and Nebraska	11/20/2023	Phone Call	The project is outside of the historic range of the Iowa Tribe
Lower Brule Sioux Tribe	11/17/2022	Email	Requested clarification concerning the ITP
Lower Sioux Indian Community in the State of Minnesota	None		
Meskwaki Nation	None		
Northern Arapaho Tribe	None		
Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation, Montana	1/13/2023	Email	Requested involvement with the project
Oglala Sioux Tribe	None		
Omaha Tribe of Nebraska	None		
Otoe-Missouria Tribe	None		
Pawnee Nation of Oklahoma	8/3/2023, 12/6 – 12/12/2023	Email attachment	Proposed project should not adversely affect the cultural landscape of the Pawnee Nation; requested the reporting of undiscovered properties encountered Recommended use of certain references to expand the cultural context for the project. Provided list of following sites that are of concern to the Pawnee Nation: 25BL1, 25BL4, 25BL10, 25BL34, 25BL36, 25LK72, 25LN95, 25LN100, 25LN103, 25LN104, 25LN107, 25LN108,

Organization	Date(s) Received	Method	Content
			25LN111, 25LN112, 25LN113, 25LP49, and 25WH3
Ponca Tribe of Nebraska	None		
Ponca Tribe of Oklahoma	None		
Prairie Island Indian Community in the State of Minnesota	None		
Rosebud Sioux Tribe	2/16/2023		Requested government-to-government consultation
Sac and Fox Nation of Missouri in Kansas and Nebraska	None		
Sac and Fox Nation of Oklahoma	None		
Santee Sioux Nation of Nebraska	None		
Shakopee Mdewakanton Sioux Community of Minnesota	11/30/2022	Email	Deferred to local area Federally Recognized Tribes of the State of Nebraska and any other Federally Recognized Tribe with interest and with historical ties; would like to receive updates
	7/13/2023		
Sisseton-Wahpeton Oyate of the Lake Traverse Reservation, South Dakota	None		
Spirit Lake Tribe, North Dakota	None		
Standing Rock Sioux Tribe of North and South Dakota	None		
Upper Sioux Community, Minnesota	None		
Winnebago Tribe of Nebraska	7/19/2023	Email	Stated that project will not affect any known sites; no questions or concerns regarding the proposed undertaking
Yankton Sioux Tribe of South Dakota	None		
Organizations			
Lincoln County Historical Society	11/30/2022	Email	Requested Notice of Intent and additional project information
	7/19/2023	Letter	Requested interest in consulting party status
Oregon-California Trails Association	12/13/2022	Email	Requested consulting party status
Sutherland Historical Society	12/17/2022	Email	Confirmed consulting party status

Organization	Date(s) Received	Method	Content
The Church of Jesus Christ of Latter-Day Saints, Church History Department	None		
Visit North Platte (Formerly North Platte/Lincoln County Visitors Bureau)	None		
Individuals			
James Fleecs	1/5/2023		Provided information concerning Birdwood Creek and requested the PowerPoint to be added to his previous comments submitted during NEPA scoping period
James Haugland	8/7/2023		Expressed concerns with consultation process
Michael Kelly	None		

5.5.1 Consulting Party Meetings

The Service hosted two consultation meetings for the revised undertaking on August 17 and August 18, 2023. The meetings were held virtually via Zoom, and the meeting invitation was extended to the parties listed in Table 4. The purpose of these meetings was to discuss the proposed APE and solicit input on known historic properties and traditional cultural properties within that boundary.

The meeting on August 17, 2023, was opened to all Section 106 consulting parties, project team members, and additional interested parties. Attendees are listed in Table 5.

Table 4. Section 106 Consulting Party Meeting 1 Attendees (August 17, 2023)

Name	Agency/Group	Title
Alexis Clark	ACHP	Historic Preservation Specialist
John Swigart	Nebraska SHPO	Section 106 Archaeology Review and Compliance
Betty Gillespie	Nebraska SHPO	Interim Deputy SHPO
James Griffin	Lincoln County Historical Museum	Director
Bonnie Hostetler	Nebraska Public Power District	Attorney
James Jenniges	Nebraska Public Power District	Senior Environmental Specialist
Larry Linder	Nebraska Public Power District	Senior Environmental Specialist
Jordan Jarrett	National Park Service, National Trails Office	Archaeologist
John Winner	Oregon-California Trails Association	National Preservation Officer
Ken Bedingfield	POWER Engineers	Archaeologist
Ben Bainbridge	POWER Engineers	Biologist
Sandi Snodgrass	Holland and Hart	Attorney
Linda Tacey	Sutherland Historical Society	Historian
James Fleecs	Private Landowner	Landowner

Name	Agency/Group	Title
Angela Burgess	U.S. Fish and Wildlife Service	Habitat Conservation Plan Regional Coordinator
Jeff Runge	U.S. Fish and Wildlife Service	Fish and Wildlife Biologist
Mark Porath	U.S. Fish and Wildlife Service	Project Leader, Nebraska Field Office
Jen Kolise	U.S. Fish and Wildlife Service	Regional Historic Preservation Officer
Jennifer Piggott	ICF	Managing Director, Communications
Jessica Feldman	ICF	Senior Manager, Historic Preservation
Lucas Bare	ICF	Managing Director, Conservation Planning
Mikayla Brown	ICF	Historic Preservation Specialist

The primary issues raised by meeting participants were related to the effects of the R-Project on O'Fallon's Bluff and Mormon Trail ruts from the revised transmission line alignment and, in particular, the distance from the centerline to the Mormon Trail ruts. The participants voiced concerns that the realignment of the project east of the Sutherland Rest Area will still adversely affect these historic properties, and they asked why the project could not be moved several miles away to avoid potential effects. Other questions from the participants were associated with the CRIR and whether it would be comprehensive and address both the file search results from the previous survey reports as well as those completed since the revised APE was delineated. No new historic properties were identified by the participants during the call.

The meeting on August 18, 2023, was a closed meeting for tribal representatives, intended to create a platform where tribal representatives could feel comfortable sharing sensitive information, should they so choose. Attendees are listed in Table 5.

Table 5. Section 106 Consulting Party Meeting 2 Tribal Representative Attendees (August 18, 2023)

Name	Agency/Group	Title
Elizabeth Toombs	Cherokee Nation	Tribal Historic Preservation Officer
Benjamin (Ben) Young	Rosebud Sioux Tribe	Sec. 106 Compliance Coordinator for THPO
Ione Quigley	Rosebud Sioux Tribe	Tribal Historic Preservation Officer
Tyrel Iron Eyes	Standing Rock Sioux Tribe	Tribal Archeologist
Angela Burgess	U.S. Fish and Wildlife Service	Habitat Conservation Plan Regional Coordinator
Jeff Runge	U.S. Fish and Wildlife Service	Fish and Wildlife Biologist
Mark Porath	U.S. Fish and Wildlife Service	Project Leader, Nebraska Field Office
Jen Kolise	U.S. Fish and Wildlife Service	Regional Historic Preservation Officer
Jennifer Piggott	ICF	Managing Director, Communications
Jessica Feldman	ICF	Senior Manager, Historic Preservation
Lucas Bare	ICF	Managing Director, Conservation Planning
Mikayla Brown	ICF	Historic Preservation Specialist

Meeting attendees expressed the following concerns: a need to inventory the entirety of the APE (both physical and visual) by tribal cultural specialists trained to identify Traditional Cultural Properties; dissatisfaction with government-to-government consultation with tribal representatives

during the project efforts; concern that all/enough Tribal Nations were contacted regarding the Section 106 consultation meeting; how tribal input will be addressed in this second round of Section 106; timelines for when tribal representatives could review the Cultural Resources Inventory Report, and what effort has been done to this point; how tribal representatives can review previous surveys conducted for this project; and how to improve communication through emails, follow-up phone calls, and in-person meetings. Participants also noted the importance of the Ogallala Aquifer as to some tribes this would be considered a Traditional Cultural Property. Participants also expressed concerns that the APE does not extend below the surface or skyward.

On October 16, 2023, the Service met with the Northern Cheyenne Tribe regarding the proposed R-Project. During the meeting, the tribal representative noted their extensive history throughout the state of Nebraska and requested a Class III survey effort with tribal cultural specialists for the proposed project. If that survey effort is not feasible, the tribal representative requested that a tribal cultural specialist be present for monitoring during project construction.

The Service provided the Draft CRIR to Section 106 consulting parties on November 17, 2023. On December 8, 2023, the Service hosted a virtual Section 106 meeting to discuss the Draft CRIR. The meeting invitation was extended to all consulting parties. Meeting attendees expressed concerns regarding the field methodology and lack of opportunity for Tribal input and participation in the 2015–2019 cultural resources surveys and eligibility recommendations. Attendees also requested clarity regarding how Tribal Nations can be included as cooperating agencies under NEPA; if prior agreements and comments are still valid; where the potential effects on wildlife, plants, sensitive species, and water resources will be addressed; and how the Service plans to mitigate adverse effects on historic properties. Participants indicated that the Nebraska SHPO cultural resources data may not include all cultural resources known to Tribal Nations. Participants also noted the cultural significance of rocks, plants, communities, and landscapes and that confluences of rivers and streams are important places to Tribal Nations for trade, ceremonies, and meetings.

The Service will hold additional consulting parties meeting to discuss the results of the historic resource identification process, the results of the effects analysis, and the finding of effects on historic properties. After that, the Service will work with consulting parties to develop an addendum to the existing programmatic agreement. The dates and locations of these meetings will be determined later.

Chapter 6
Summary of Survey Efforts

From 2015 to 2023 POWER Engineers, NPPD's cultural resources consultant, conducted cultural resource surveys where access was available to the public or where access to private land within the APE was obtained. These 2015–2023 surveys covered most of the current APE for direct physical effects, accounting for a total of 12,865 acres (**Figure 10**). A total of approximately 93% of the APE for physical effects has so far been covered by intensive pedestrian survey, augmented by judgmental and some systematic subsurface testing. In addition to archaeological investigations, POWER Engineers revisited previously recorded above-ground structures within 0.5 miles of the original proposed transmission line route, the equivalent of the current APE for audible effects (except for the route modification east to avoid direct impacts and minimize visual impacts on National Historic Trail ruts).

Regarding NRHP eligibility status, this report primarily utilizes standard cultural resource terminology. These standard terms include the following.

- **Listed** means a given resource is listed in the NRHP.
- **Eligible** means a resource is eligible for inclusion in the NRHP.
- **Not eligible** means a resource is ineligible for inclusion in the NRHP.

For resources that have been recorded but not yet been evaluated for the NRHP, the terms "Potentially Eligible," "Unevaluated," "Not Evaluated," "More Information Needed," and "Indeterminate" eligibility were used interchangeably within source documentation (such as reports, SHPO letters, and the Nebraska Cultural Resources Geographic Information System [NCRGIS] data) at different times to describe eligibility status. For clarity's sake, this report will utilize a single term, **Unevaluated**, for these resources, which will denote a resource that has not yet been formally evaluated for the NRHP, and therefore should be treated as an NRHP-eligible resource for planning purposes.

Some resources' NRHP eligibility status is listed as "**Inconclusive."** This is not a standard NRHP term. ICF is using it in this instance to denote an evaluated resource with a conflict or ambiguity within or between source documents supporting an NRHP evaluation. Resources with "Inconclusive" NRHP eligibility status should be considered NRHP-eligible for planning purposes; however, clarification should be sought with the SHPO in terms of finalizing the evaluation.

This section provides abridged results of the cultural resource surveys, including identification of all cultural resources within the APE that are NRHP-listed, NRHP eligible, unevaluated for the NRHP, or those with an inconclusive NRHP evaluation.

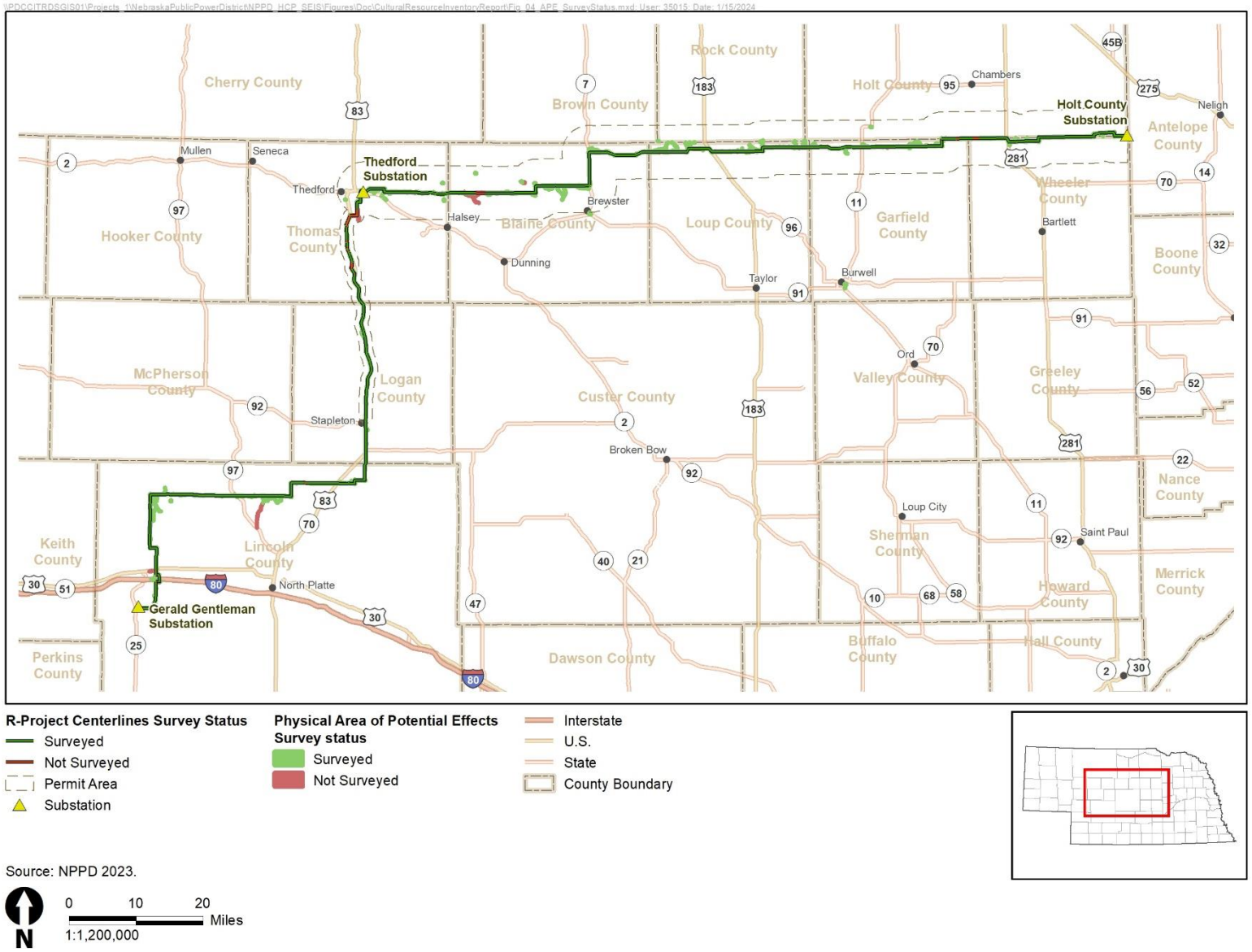


Figure 10. Areas Surveyed to Date

6.1 2015 Cultural Resources Survey

Fieldwork took place within the APE for physical effects from July 27 to September 2, 2015. The survey was completed for 130 miles of the proposed transmission line corridor, the 25-acre NPPD substation location near Thedford, and 20 miles of preliminary access to structures; pedestrian survey in the APE occurred only where right of entry was granted (Bedingfield and Webb 2015:18). The 2015 Cultural Resources Survey of the R-Project 345 kV Transmission Line report includes a detailed discussion of the survey and laboratory methods (Bedingfield and Webb 2015). Five sites and two isolated finds were recorded during this survey, including two historic trail/wagon road segments, one historic road segment, and two historic artifact concentrations (Table 6). Isolated finds were of Historic Period origin and included farm machinery and wagon parts; please refer to the 2015 survey report for detailed site descriptions and historical background information (Bedingfield and Webb 2015). State site file numbers for these resources have not been assigned.

The surveyors also attempted to revisit three previously located archaeological sites within the APE that have not been evaluated for the NRHP: 25BL4, 25BL10, and 25LN72. The documented location of site 25BL4 is unknown and the documented locations of sites 25BL10 and 25LN72 were beyond the APE for physical effects. None of these sites were located within the APE during fieldwork, and the NRHP eligibility of these sites remains unevaluated (Bedingfield and Webb 2015). All three of these sites are of concern to Pawnee Nation (Reed 2023).

In letters dated July 21, 2016, and September 19, 2018, the Nebraska SHPO concurred that RPTW-1 and RPTW-2 are not eligible for the NRHP. In the July 21, 2016, letter, the Nebraska SHPO stated that, “while site RPKB-1…may be eligible for the NRHP under Criterion A, I concur with the recommendation that there will be no adverse effect to the resource since any physical disturbance to the north or south road segments will be consistent with their historic function as transportation corridors.” Regarding site RPKB-2, this resource is listed in the NRHP; however, Bedingfield and Webb (2015:41) recommended the site as ineligible. In the same letter dated July 21, 2016, the Nebraska SHPO indicated that the site is not limited to the acreage that was originally documented in the 1974 NRHP Nomination Form, and an expanded boundary must be identified. The Nebraska SHPO further stated that the undertaking will cause an adverse effect to Site RPKB-2, and it was strongly recommended that an alternative route be suggested. The Nebraska SHPO also stated that the site, “should be considered part of a larger grouping of highly visible and less deteriorated trail ruts present on private property west of the surveyed project area.” The Nebraska SHPO reiterated these concerns in the letter dated September 19, 2018. In the July 21, 2016, letter, the Nebraska SHPO concurred with the recommendation that RPKB-3 is eligible for the NRHP under Criterion A but that the undertaking will cause an adverse effect to this site. A similar response was also provided in the September 19, 2018, letter. In the July 21, 2016, letter, the Nebraska SHPO also provided a proposed realignment of the route in order to minimize or eliminate adverse effects on sites RPKB-2 and RPKB-3. Furthermore, the Nebraska SHPO recommended that representatives from the Mormon Trail Association, Oregon-California Trails Association, National Park Service National Historic Trails System, and the Lincoln County Historical Museum be included in the consultation process, if this had not already been done. In the letter dated September 19, 2018, the SHPO concurred that isolated finds RP-IF-KB1 and RP-IF-KB2 are not eligible for listing to the NRHP.

Table 6. 2015 Survey Results and Eligibility Recommendations

Resource Number	Revisit? (Y/N)	Name	Address/Location	Resource Type	NRHP Eligibility
25BL4	Y			Prehistoric artifact scatter	Unevaluated (location unknown, but listed as site of concern for Pawnee Nation [Reed 2023])
25BL10	Y	Elfgren Site		Mixed component artifact scatter	Unevaluated (not within APE for physical effects, listed as site of concern for Pawnee Nation [Reed 2023])
25LN72	Y			Protohistoric site	Unevaluated (not within APE for physical effects, listed as site of concern for Pawnee Nation [Reed 2023])
LN00-028 [RPKB-2]	Y	O'Fallon's Bluff, Segment of Oregon-California NHT	I-80, Eastbound Rest Area, Sutherland vicinity, Lincoln County.	Linear wagon road traces, segment(s), interpretive signage, concrete footpath	Listed
RPKB-1	N	Old U.S. Highway 83	Thomas and Logan Counties	18-mile abandoned road segment	Inconclusive
RPKB-3	N	Possible Mormon Pioneer NHT [Sand Hill Ruts] (segment)	East of N. Prairie Trace Road and north of Platte River, Lincoln County	Linear road traces (4 in total)	Eligible
RPTW-1	N	N/A	Holt County	Historic artifact scatter	Not Eligible
RPTW-2	N	N/A	Holt County	Historic artifact scatter	Not Eligible
RP-IF-KB1	N	Historic Isolated Find	Holt County	Articulated metal shaft, metal axle and metal wheels of a historic farm machine	Not Eligible

Resource Number	Revisit? (Y/N)	Name	Address/Location	Resource Type	NRHP Eligibility
RP-IF-KB2	N	Historic Isolated Find	Lincoln County	2 historic metal wheels affixed to a modern fence (material not identified)	Not Eligible

Sources: Bedingfield and Webb 2015; Dolberg 2018

6.2 2016 Cultural Resources Survey

For this investigation, POWER Engineers conducted archaeological survey within APE for direct physical effects And also conducted site revisits for architectural resources within what became the current APE for audible effects. Fieldwork took place between April 5 and August 18, 2016. Fieldwork consisted of both archaeological survey and reconnaissance level survey and evaluation of 22 previously recorded historic built environment resources and one previously recorded cemetery, the Good Hope Cemetery (LN00-203, while this resource had been previously recorded in 1993, POWER Engineers recorded this as new site RPKB-6 because it was not in the SHPO database until 2019) (Table 7). Please refer to Bedingfield and Tucker (2016) for a detailed discussion of the survey and laboratory methods.

Two new cultural resources were documented in the APE for direct physical effects, two segments of historic irrigation ditches (Table 7). The documented segment of the North Platte Canal (RPKB-4) was recommended not eligible for the NRHP and/or as non-contributing to the NRHP eligibility of the larger resources of which it is a part. The documented segment of the Paxton-Hershey Canal (RPKB-5) was recommended potentially contributing to the NRHP eligibility of the larger resource of which it is a part, provided that the canal as a whole was determined eligible for the NRHP (in terms of this report, eligibility status of RPKB-5 is Inconclusive) (Bedingfield and Tucker 2016,). State site file numbers for these resources have not been assigned. The Nebraska SHPO concurred with these findings on September 19, 2018.

The survey team also noted 22 previously identified built environment resources and 1 cemetery within 0.5 miles of the R-Project centerline (Table 7). The data for these resources and associated attributes were provided by the Nebraska SHPO and supplemented by POWER Engineers eligibility recommendations. Nineteen of those resources were recommended not eligible for listing in the NRHP, are no longer extant, or were left unevaluated under the NRHP criterion because the consultant recommended that their viewshed would not be affected by the R-Project.[5] Of the remaining three resources, St. John's Lutheran Church (BL00-008) was recommended not eligible by POWER Engineers; the Nebraska SHPO disagreed with this recommendation and responded that the property is eligible for listing in the NRHP in letter dated September 19, 2018. The Nebraska SHPO also requested a reassessment of the effects of the project on BL00-008. The Nebraska SHPO confirmed the Sutherland State Aid Bridge (LN00-032) as NRHP-listed and concurred that LO00-001, a ranch property in Logan County, as "potentially eligible" (i.e., unevaluated) for listing in the NRHP.

[5] Resources in the APE should be evaluated for NRHP-eligibility before an effects determination is made. The existing documentation does not indicate if the Nebraska SHPO approved this methodology.

Table 7. 2016 Survey Results and Eligibility Recommendations

Resource #	Revisit? (Y/N)	Name	Address/ Location	Resource Type	NRHP Eligibility
AP00-126	Y	N/A	Non-extant	Farmstead	Not Eligible (non-extant)
BL00-007	Y	N/A	West side of Route 7, north of County Road 1-24, Blaine County (not abandoned)	Abandoned Ranch	Not Eligible
BL00-008	Y	St. John's Lutheran Church-Western Synod	Route 7 and County Road 4-24, Blaine County	Church and parsonage	Eligible
BL00-026	Y	Hawley Flats School District #13/Schoolhouse	W. North Loup Road, 0.5 miles north of Project centerline, Blaine County	School	Not Eligible
HT00-237	Y	N/A	846th Road and 847th Road, Holt County	Abandoned Farmstead	Not Eligible
HT00-238	Y	N/A	506th Avenue, 2200 feet north of Project centerline, Holt County	Farmstead	Unevaluated
LN00-032	Y	Sutherland State Aid Bridge (Birdwood Bridge)	N. Prairie Trace Road over North Platte River, Lincoln County	Bridge	Listed (This resource has since been demolished)
LN00-206	Y	N/A	West side of N. Classen Road, between E. Auble and E. Garfield Table Roads, Lincoln County	Abandoned Farmhouse	Not Eligible
LO00-001	Y	N/A	1.75 miles north of Stapleton, Logan County	Ranch	Unevaluated
LO00-002	Y	N/A	West side, U.S. Route 83, 3.5 miles south of Route 160, Logan County	Farmhouse	Not Eligible

Resource #	Revisit? (Y/N)	Name	Address/ Location	Resource Type	NRHP Eligibility
LO03-012	Y	Albam Lumber Company	2nd Street/F Street, Stapleton, Logan County	Not extant	Not Eligible (non-extant)
LO03-016	Y	N/A	4th Street/E Street, Stapleton, Logan County	Not extant	Not Eligible (non-extant)
LO03-017	Y	N/A	4th Street/C Street, Stapleton, Logan County	House	Unevaluated[a]
LO03-018	Y	N/A	C Street between 5th and 6th Streets, Stapleton, Logan County	House	Unevaluated[a]
RPKB-4	N	North Platte Canal (segment)	Lincoln County	Agricultural canal, two bridges and head gate	Not Eligible. Canal may be is eligible under Criterion A but documented segment is considered non-contributing.
RPKB-5	N	Paxton-Hershey Canal (segment)	Intersects with Bubble Road north of UPRR tracks in Lincoln County	Agricultural canal, two bridges, two pump houses and two head gate features.	Inconclusive: authors suggest entire canal could be eligible under Criterion A and that this segment would be a contributing element.
LN00-203 [RPKB-6]	Y	Good Hope Cemetery	North Vierson Road, North Platte, Lincoln County	Cemetery with 132 individual interments, chain-link fence, entrance gate and sign, and privy.	Not Eligible
TM00-031	Y	Rodocker Ranch	Not extant	Ranch	Not Eligible (non-extant)
TM00-040	Y	Blue Star Highway Rest Area	East side U.S. Highway 83, 440 feet south of the Dismal River, Thomas County	Rest Area	Unevaluateda

Resource #	Revisit? (Y/N)	Name	Address/ Location	Resource Type	NRHP Eligibility
TM00-041	Y	Figard House	North side, Scenic River Road/south of Dismal River, Thomas County	House	Inconclusive[a]
TM00-043	Y	N/A	West side U.S. Highway 83, Thomas County	Corral and Loading Chute	Not Eligible
WH00-001	Y	N/A	Wheeler County	Abandoned School	Not Eligible
WH00-003	Y	N/A	West side 499th Avenue/ 1500 feet south of 846th Road, Wheeler County	Abandoned Farmstead	Not Eligible
WH00-004	Y	Theo Pofahl Farmstead	504th Avenue, south of 846th Road, Wheeler County	Farmstead	Unevaluated
WH00-007	Y	N/A	Not available (not extant)	Abandoned Farmstead	Not Eligible (non-extant)

Sources: Bedingfield and Tucker 2016; Dolberg 2018

[a] POWER Engineers did not make an eligibility recommendation on this resource, as no project-related effects were anticipated.

6.3 2016 Desktop Analysis of Potential Visual Effects

On December 15, 2016, POWER Engineers conducted a desktop analysis of potential visual effects on cultural resources located within 10 miles of the proposed transmission line. The purpose of the analysis was to aid in the determination of which known cultural resources may require additional analysis and photo documentation to consider potential visual effects that could be associated with the proposed project. A file search of the Nebraska SHPO archaeological and structural databases was conducted on November 8, 2016, for this effort. The analysis identified 543 cultural resources within the 10-mile visual analysis buffer. Of these resources, based on the GIS analysis, the project was potentially visible from 437 properties. Further analysis determined that of these 437 properties, a total of only 130 possessed relatively unobstructed views of the project area. (POWER Engineers 2016). In a letter dated October 5, 2018, the Nebraska SHPO concurred, as reported in previous Nebraska SHPO response letters, that the proposed project would have a direct visual impact on sites LN000-0028 [RPKB-2] (O'Fallon's Bluff Segment of the Oregon-California Trail) and RPKB-3 (Mormon Pioneer Trail Segment, or possible Sand Hills Ruts or California National Historic Trail). The Nebraska SHPO also concurred that the proposed project would have no direct or indirect effect on standing structures or archeological sites located more than 0.5 miles from the project area, and that Section 106 review for those resources outside of that range was complete. The SHPO did note, however, that "this determination does not necessarily reflect the opinion of Native American Tribes that may have an interest in the area or resources, nor does it…pertain to Traditional Cultural Properties, if they exist in the area" (Rissetto and Dolberg 2018).

6.4 2017 Cultural Resources Survey

Fieldwork by POWER Engineers took place between July 19 to August 10, 2017, and consisted of both archaeological and architectural survey. Please refer to Bedingfield (2017) for a detailed discussion of the survey and laboratory methods.

During the 2017 survey, two newly recorded historic archaeological sites, a mid-twentieth century ranching complex (RPKB-7) and a concrete foundation with associated artifacts (RPKB-8), were documented. Both sites were recommended not eligible for the NRHP (Table 8). State site file numbers for these resources have not been assigned. In a letter to the Service on September 19, 2018, the Nebraska SHPO concurred that RPKB-7 and RKPB-8 were not NRHP-eligible.

Table 8. 2017 Results and Eligibility Recommendations

Resource Number	Revisit? (Y/N)	Name	Address/Location	Resource Type	NRHP Eligibility
RPKB-7	N	N/A	Lincoln County	Ranching Complex	Not Eligible
RRKB-8	N	N/A	Holt County	Concrete Foundations	Not Eligible

Sources: Bedingfield 2017; Dolberg 2018

6.5 2018 Cultural Resources Survey

According to Bedingfield and McKenzie (2018:19), two additional file searches were completed and results provided on November 15, 2016, and June 27, 2018, resulting in the documentation of three previously located archaeological sites (25LN94, 25LN105, and 25LN113) within the APE. Fieldwork was conducted between June 20 and August 30, 2018. Please refer to the 2018 report for detailed discussion of the survey and laboratory methods (Bedingfield and McKenzie 2018). Note that the Pawnee Nation has also identified site 25LN113 as a site of concern (Reed 2023).

Three previously identified archaeological sites and seven newly identified cultural resources were identified within the APE (Table 9). State site file numbers for the newly identified resources have not been assigned. Archaeological site 25LN113, a previously recorded prehistoric open camp, was recommended NRHP-eligible by Bedingfield and McKenzie (2018). The consultant also recommended combining sites 25LN94 and 25LN113, since subsurface testing indicated 25LN94 was within 25LN113. NPPD modified the proposed transmission line route to avoid 25LLN113, shifting a transmission line support structure location approximately 100 feet to the east. Bedingfield and McKenzie (2018:37) recommended that the newly proposed structure location be subjected to archaeological testing and recommended monitoring of construction activity on the surrounding landform. The Nebraska SHPO sent a letter dated January 28, 2019, in response to the Bedingfield and McKenzie (2018) report. The Nebraska SHPO concurred with the recommendations that sites 25LN94, 25LN105, RPCM-1, RPCM-2, RPCM-3, and isolated finds RP-IF-KB5 and RP-IF-KB6 are not eligible for listing to the NRHP.

The Nebraska SHPO concurred with the recommendation of NRHP-eligible for site 25LN113 and assessment of no adverse effect; however, the SHPO added conditions to the no adverse effect determination. The SHPO also concurred with the recommendation regarding testing and construction monitoring at the newly proposed structure location. The SHPO included a conditional action that NPPD submit a report detailing the results of both the archaeological survey and

construction monitoring activities and further requested a map detailing the survey corridor for the new structure location for review. The map should include the defined boundaries for sites 25LN94 and 25LN113 in relation to the placement of the support structure and the location of proposed maintenance/two-track roads, support structures, or additional ground disturbing activities. The requested maps were provided to SHPO following additional subsurface testing in the area conducted in 2019.

Site RPKB-12, the Ballagh Schoolhouse Site, was recommended as unevaluated because subsurface testing could not be conducted at the time of recording. Archaeological testing was recommended at the relocated transmission line support structure east of the site prior to construction. The Nebraska SHPO concurred with the recommendation of no adverse effect and further stated that the site does meet the evaluative criteria for potential listing to the NRHP under Criterion D. The Nebraska SHPO also concurred that prior to construction of the transmission line support structure, project disturbance areas in proximity to the site would be subsurface tested for cultural resources. In addition, the Nebraska SHPO included a conditional action that "no transmission line support structure, vehicle two-track, or any other ground disturbing activity take place within the established boundary of site RPKB-12 or within a buffer of 100-feet of said boundary." If ground-disturbing actions were required, the Nebraska SHPO noted that NPPD would be required to consult with SHPO staff prior to construction, and a report documenting the findings of subsurface testing would be submitted to the SHPO for review. According to NPPD, they subsequently engaged in micrositing to avoid placing the line within a 100-foot buffer area. Evaluative testing is planned to occur prior to construction. A specific date for this testing effort remains to be determined.

Site RPKB-13, a segment of the Oregon-California National Historic Trail and identified as western continuation of the previously documented O'Fallon's Bluff site, was recommended eligible as contributing to the eligibility status of the larger Oregon-California National Historic Trail under Criterion A. The Nebraska SHPO concurred with the recommendation of an adverse effect. The Nebraska SHPO also concurred with the NRHP-eligibility under Criterion A and stated that the site is eligible under Criterion D. The Nebraska SHPO concurred with the recommendation that the superposition of the R-Project will create an adverse visual, auditory, and atmospheric effect and recommended that this section of the proposed transmission line be relocated at least 5.0 miles east or west of its proposed location. The Nebraska SHPO also stated they did not acknowledge that avoidance is not currently considered an option (Bedingfield and McKenzie 2018:73), and avoidance should not be preemptively removed from the Section 106 process due to perceived inconvenience.

Table 9. 2018 Results and Eligibility Recommendations

Resource #	Revisit? (Y/N)	Name	Address/ Location	Resource Type	NRHP Eligibility
25LN94	Y	N/A	Lincoln County	Historic artifact scatter	Not Eligible
25LN105	Y	N/A	Lincoln County	Historic artifact scatter	Not Eligible
25LN113	Y	Birdwood Creek	Lincoln County	Prehistoric open camp site	Recommended Eligible (with testing, construction monitoring, and conditional action, also listed as a site of concern for the Pawnee Nation [Reed 2023])

Resource #	Revisit? (Y/N)	Name	Address/ Location	Resource Type	NRHP Eligibility
RPCM-1	N	N/A	Thomas County	Historic artifact scatter	Not Eligible
RPCM-2	N	N/A	Lincoln County	Historic Farmstead	Not Eligible
RPCM-3	N	N/A	Blaine County	Historic Farmstead	Not Eligible
RP-IF-KB-5	N	Isolated Find	Lincoln County	N/A	Not Eligible
RP-IF-KB-6	N	Isolated Find	Lincoln County	N/A	Not Eligible
RPKB-12	N	Ballagh Schoolhouse	Garfield County	Site, Historic School	Unevaluated (with conditional action)
RPKB-13	N	Oregon-California National Historic Trail (segment)	Lincoln County	Historic trail	Recommended Eligible under Criteria A and D

Source: Bedingfield and McKenzie 2018

6.6 2019 Cultural Resources Survey

Although the Service published the FEIS in November 2018, NPPD continued to conduct cultural resources surveys in the APE in 2019. No new files searches of the Nebraska SHPO archaeological and structural databases were conducted for this report.

Fieldwork was conducted between May 15 and May 19, 2019, and again between October 23 and October 25, 2019. Please refer to the 2019 Cultural Resources Survey of the R-Project 345 kV Transmission Line report for detailed discussion of the survey and laboratory methods (Bedingfield 2019).

No new cultural resources were recorded during the surveys, and the team revisited two previously recorded sites to conduct additional subsurface tests: 25LN94 and 25LN113. This effort addressed one of the conditional actions in the SHPO's January 28, 2019, letter described in Section 6.5 above. As a result of new surface testing, the team recommended that both sites be combined into a "single multi-component site for management purposes," and to avoid potential disturbance to 25LN113, it was recommended that the boundary of the site be clearly fenced during construction activity (Bedingfield 2019:27). The Nebraska SHPO concurred with the recommendation that site 25LN113 maintained NRHP eligibility in a letter dated January 9, 2020. In a meeting on October 21, 2019, between NPPD and Mr. John Rissetto of History Nebraska, a discussion was held regarding the placement of transmission structures and consideration of engineering factors and constraints, particularly of Structure #99 near site 25LN113. During this meeting, NPPD committed to monitor potential erosion at Structure #99 following construction as part of routine inspections and submit photographs to History Nebraska each year to demonstrate if erosion was or was not occurring at this structure location. If there is evidence of erosion occurring, NPPD committed to take action to control the erosion.

6.7 2020 Cultural Resources Survey

For this investigation, POWER Engineers surveyed on 125 acres of project-related temporary use areas, including minor access routes and fly yards, within Blaine, Garfield, Loup, and Thomas Counties. The surveyors also conducted revisits of two previously recorded sites within a proposed fly yard in Thomas County near the Thomas County Airport near Thedford. Both sites had been disturbed and previously determined not eligible. POWER Engineers also recommended these sites as not eligible (Table 10). A draft report was submitted to NPPD and the Service for review on February 1, 2024 (Bedingfield 2024).

Table 10. 2020 Results and Eligibility Recommendations

Resource #	Revisit? (Y/N)	Name	Address/ Location	Resource Type	NRHP Eligibility
25TM6	Y	N/A	Thomas County	Stock tank and windmill	Not Eligible (SHPO review pending)
25TM8	Y	N/A	Thomas County	Abandoned road segment	Not Eligible (SHPO review pending)

6.8 2023 Cultural Resources Survey

A records review for archaeological and historic architectural resources in the NCRGIS within the APE was conducted on February 2, 2023. The data provided by the SHPO *did not* include the resources initially located by this project but appears to primarily consist of those resources inventoried prior to 2015. The data provided by the SHPO also did not include archaeological resources beyond a 1-mile radius of the proposed alignment. Table 11 contains the list of resources identified in the 2023 site file search that have not yet been revisited by POWER Engineers.

In October 2023, POWER Engineers surveyed within the current APE for physical effects. This survey focused exclusively on 69 acres of proposed realignment of the R-Project transmission line to avoid having the line span trail ruts and minimize the viewshed impacts on the area of the O'Fallon's Bluff Oregon-California Trail site (LN00-028). Archaeological survey was conducted both within the proposed transmission line route and associated pulling and tensioning areas. POWER Engineers surveyed most of this realignment route except in areas not accessible due to landowner restrictions. Fieldwork located two resources. The first resource is an abandoned irrigation ditch that will be recommended as not eligible, and the second resource consists of four previously undocumented emigrant trails traces adjacent to the southwest corner of the LN00-028 SHPO boundary, assigned a field number of RPKB-15 (Table 11). This resource is partially within the current APE for physical effects. A draft report was submitted to NPPD and the Service for review on February 1, 2024 (Bedingfield 2024).

Table 11. 2023 Results and Eligibility Recommendations

Resource #	Revisit? (Y/N)	Name	Address/ Location	Resource Type	NRHP Eligibility
RPKB-14	N	N/A	Lincoln County	Abandoned irrigation ditch	Not Eligible (SHPO review pending)
RPKB-15 (LN00-028)	Y	N/A	Lincoln County	Four immigrant trail traces southwest of SHPO LN00-028 boundary	Contributing to Eligibility of LN00-028 (SHPO review pending)

6.9 Summary of Cultural Resource Survey Results

The cultural resource surveys conducted for this project have inventoried approximately 93% of the current APE for physical effects. The results of these surveys include:

- **Location of 13 newly recorded archaeological sites and isolated finds (archaeological sites include trails, in accordance with *National Register Bulletin [15]: How to Apply the National Register Criteria for Evaluation* [NPS 1997:5])**. Of these resources, 10 were determined not eligible, one was unevaluated, and two were determined eligible for the NRHP. One additional site is recommended as eligible for the NRHP, but this recommendation is still pending SHPO concurrence.
- **Revisitation of nine previously recorded archaeological sites**. Of these sites, two were determined not eligible, one was determined eligible, and one was previously listed on the NRHP. POWER Engineers could not locate three previously recorded sites within the APE, and these remain unevaluated for the NRHP. Two additional revisited sites are recommended as not eligible for the NRHP, but this recommendation is pending SHPO concurrence.
- **Revisitation of one previously recorded cemetery.** The cemetery is not eligible for the NRHP.
- **Location of four new above-ground buildings and structures (this category includes roads, bridges, canals, and irrigation systems, in accordance with *National Register Bulletin [15]* [NPS 1997:4]).** Of these resources, two were determined not eligible for the NRHP, and two resources have inconclusive NRHP eligibility. One additional site is recommended as not eligible for the NRHP, but this recommendation is still pending SHPO concurrence.
- **Revisitation of 22 above-ground buildings and structures.** Of these resources, 13 were determined not eligible for the NRHP, 7 were unevaluated for the NRHP, 1 was determined eligible for the NRHP, 1 was listed on the NRHP, and 1 had inconclusive eligibility.

Of the resources either located or revisited by POWER Engineers during their cultural resource investigations, 2 are listed on the NRHP (one of which, LN0-0032 Sutherland State Aid Bridge, has been demolished), 5 are eligible for the NRHP, 3 have inconclusive NRHP evaluations, and 10 remain unevaluated for the NRHP (**Figure 11;** Table 12). For a full description of each of the following NRHP-listed and eligible properties, please refer to the 2015, 2016, 2017, 2018, and 2019 Cultural Resources Survey Reports prepared by POWER Engineers and the subsequent Nebraska SHPO responses discussed above.

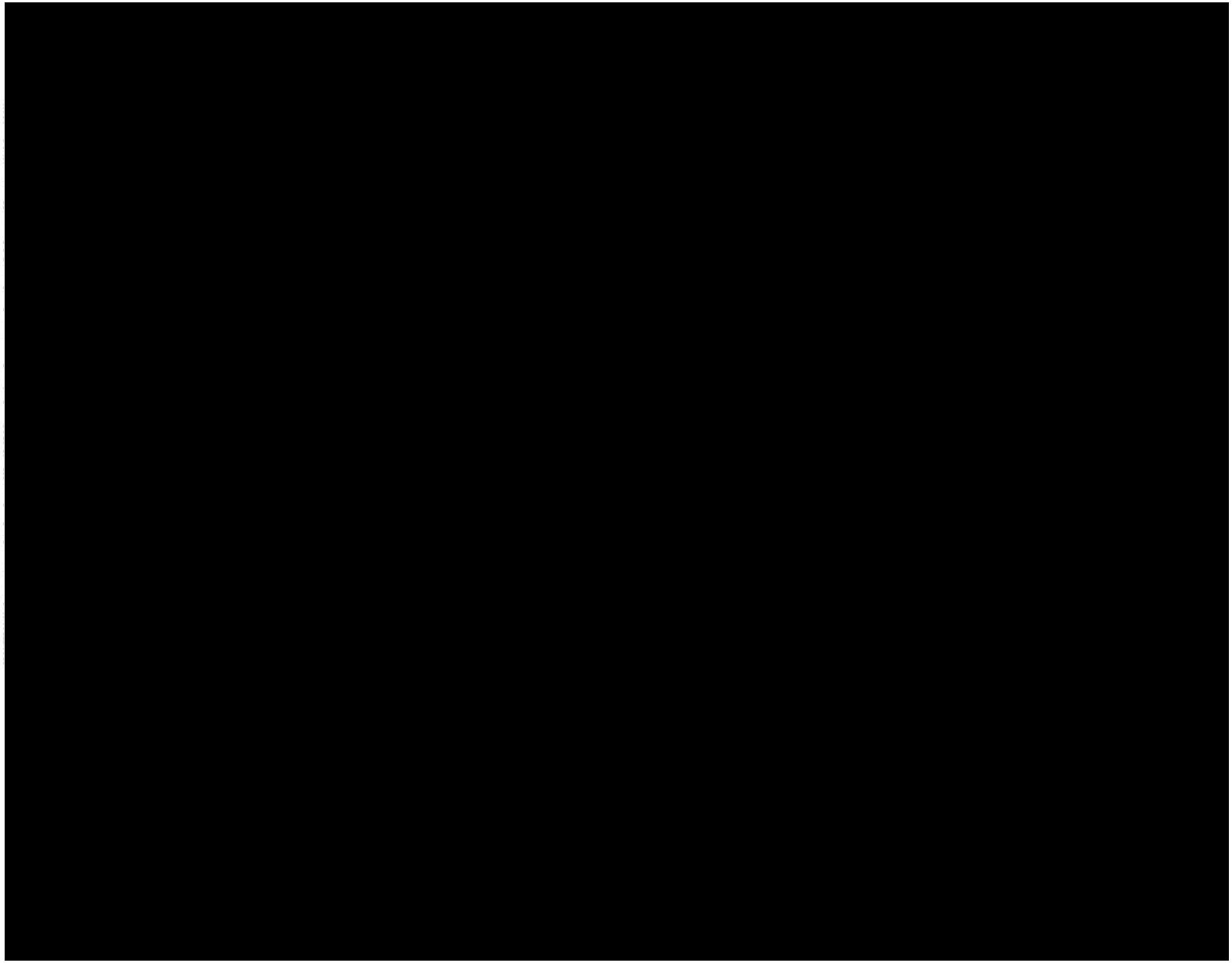


Table 12. Extant NRHP-Listed, Eligible, and Unevaluated Properties located or revisited by POWER Engineers, 2015–2023

Resource #	Name	Address/ Location	Resource Type	Description	NRHP Eligibility
25BL4	N/A	Blaine County	Site	Prehistoric artifact scatter	Unevaluated (location unknown, listed as site of concern for Pawnee Nation [Reed 2023])
25BL10	Elfgren Site	Blaine County	Site	Mixed component artifact scatter	Unevaluated (not within APE for physical effects, listed as site of concern for Pawnee Nation [Reed 2023])
25LN72	N/A	Lincoln County	Site	Protohistoric site	Unevaluated (not within APE for physical effects, listed as site of concern for Pawnee Nation [Reed 2023])
25LN94/ 25LN113	Archaeological Site	Lincoln County	Site	Prehistoric artifact scatter. Subsurface testing expanded site boundaries which now encompass 25LN94, a previously recorded, ineligible historic trash scatter also revisited by POWER Engineers, who recommended 25LN94 be combined with 25LN113.	Eligible (with construction monitoring conditional action, 25LN113 is also listed as a site of concern for Pawnee Nation [Reed 2023])
BL00-008	St. John's Lutheran Church	Route 7 and County Road 4-24, Blaine County	Church	1947 church and associated parsonage	Eligible
HT00-238	N/A	506th Avenue, 2200 feet north of Project centerline, Holt County	House	Historic period frame house	Unevaluated
LN00-028	O'Fallon's Bluff, Oregon-California National Historic Trail[a]	Along the South Platte River, near Sutherland, Lincoln County	Trail	A 20-acre site with portion of historic trail within boundaries.	Listed

Resource #	Name	Address/ Location	Resource Type	Description	NRHP Eligibility
LN00-032	Sutherland State Aid Bridge	Spanning the North Platte River, 2.5 miles north of Sutherland, Lincoln County	Bridge	1914/1915 14 span, concrete spandrel-arch bridge, measuring 7,950 feet long and 16 feet wide.	Listed (This resource has since been demolished)
LO00-001	N/A	U.S. Highway 83, 1.75 miles north of Stapleton, Logan County	Ranch Complex	Circa 1905 ranch with a frame house, small brick house, garage, workshop, barn, shop/garage, small outbuildings and corral	Unevaluated
LO03-017	N/A	4th Street/C Street, Stapleton, Logan County	House	Circa 1901 frame house	Unevaluated
LO03-018	N/A	C Street between 5th and 6th Streets, Stapleton, Logan County	House	Circa 1901 frame house	Unevaluated
RPKB-1	Old Highway 83/U.S. Route 183 (segment)	3 miles south of Thedford and 0.5 miles north where the Project would parallel the road in both Thomas and Logan Counties	Transportation Corridor	18-mile abandoned segment of former highway alignment.	Inconclusive
RPKB-3	Sand Hill Ruts, Mormon Pioneer National Historic Trail	Near Sutherland, Lincoln County	Trail	Four linear wagon road traces.	Eligible
RPKB-5	Paxton-Hershey Canal (segment)	Bubble Road vicinity, along the Project centerline, 2 miles northeast of Sutherland, Lincoln County	Canal	1-mile segment of the approximately 20-mile-long canal that irrigates cropland between the North and South Platte rivers. Associated features include two bridges, two pump houses, a historic artifact scatter and side gates.	Inconclusive
RPKB-12	Ballagh Schoolhouse	Garfield County	Site	Historic school	Unevaluated (with conditional action)

Resource #	Name	Address/ Location	Resource Type	Description	NRHP Eligibility
RPKB-13	Oregon-California National Historic Trail (segment)	Lincoln County	Trail	14 linear wagon traces	Eligible
RPKB-15	Oregon-California National Historic Trail (segment)	Lincoln County	Trail	Four immigrant trail traces southwest of the NRHP-listed LN00-028 boundary and within and southwest of the SHPO boundary	Eligible
TM00-040	Blue Star Highway Rest Area	East side U.S. Highway 83, 440 feet south of the Dismal River, Thomas County	Site	Rest Area	Unevaluated
TM00-041	Figard Sod House	North side, Scenic River Road/south of Dismal River, Thomas County	District	Remains of a sod house, along with a cellar, privy, frame barn, and hay shed	Inconclusive
WH00-004	Theo Pofahl Farmstead	504th Avenue, south of 846th Road, Wheeler County	Building	Farmstead	Unevaluated

Source: Bedingfield and Webb 2015; Bedingfield and McKenzie 2018; Bedingfield and Tucker 2016.

[a] O'Fallon's Bluff is listed on the NRHP; in 2018, POWER Engineers, delineated 14 trail traces immediately west of the listed historic property and recommended to the Nebraska SHPO that they were also NRHP-eligible. Traces designated as RPKB-2 are within the boundaries of the NHRP-listed LN00-028. The Nebraska SHPO boundary for LN00-028 is not consistent with the NRHP listing site boundary, as it incorporates the southern portion of the designated historic property as well as an additional area of approximately 77 acres located south and west of the NRHP-listed property.

Chapter 7
Conclusion

This report was prepared to summarize the Section 106 consultation process and survey efforts associated with the R-Project from 2014 to present. This extensive data from previous survey reports, correspondence, record search results and additional background research, as well as ongoing consultation efforts, provides a record of the past ten years of Section 106 consultation, legal agreements, and cultural resources investigations and evaluations for the R-Project. It also provides documentation of the ongoing Section 106 efforts since the court remand.

This conclusion lays out the results of cultural resource investigations pursuant to the R-Project. This includes the following.

- Identification of all known cultural resources that are NRHP-eligible, NRHP-listed, unevaluated for the NRHP, or have Inconclusive NRHP eligibility status, within the current physical, audible, and visual APEs.
- Identification of any unaddressed Section 106 requirements.

Ultimately, this CRIR helps inform the next phase of the Section 106 process, assessing adverse effects, which will be documented in a Finding of Effect report.

7.1 Eligible, Listed, and Unevaluated Resources in the APE

7.1.1 Eligible, Listed, and Unevaluated Resources in the Physical APE

The APE for direct, physical effects is currently defined as 150 feet on either side of the proposed R-Project centerline, 50 feet on either side of access routes, and 50 feet around the perimeter of work areas (e.g., pulling and tensioning sites, fly yards/assembly areas, and construction yard/staging areas). There are a total of seven cultural resources within the direct APE that are either NRHP-eligible, unevaluated, or are of inconclusive eligibility (Table 13).

Of these resources, four are archaeological sites, two of them historic wagon traces. Three sites are NRHP-eligible and one, RPKB-12 (Ballagh Schoolhouse) is unevaluated for the NRHP. POWER Engineers will be conducting testing of RPKB-12 prior to construction to determine NRHP eligibility.

Three above-ground resources are within the physical APE. One of these (BL00-037, District 14 Schoolhouse) was last surveyed in 1989 and was not revisited by POWER Engineers in 2015–2023 because NPPD did not have (and still does not have) access rights to this property. Two of these are linear resources (RPKB-1, a road segment, and RPKB-5, a canal segment) and are of inconclusive eligibility. It is recommended that the eligibility status of these resources be confirmed in consultation with the SHPO.

Table 13. NRHP Eligible, Listed, and Unevaluated Resources in Physical APE

Resource #	Name	Address/ Location	Resource Type	Description	NRHP Eligibility
25BL4	N/A		Site	Prehistoric artifact scatter	Unevaluated (location unknown, listed as a site of concern for Pawnee Nation [Reed 2023])
25LN94/ 25LN113	Archaeological Site	Lincoln County	Site	Prehistoric artifact scatter. Subsurface testing expanded site boundaries which now encompass 25LN94, a previously recorded, ineligible historic trash scatter also revisited by POWER Engineers, who recommended 25LN94 be combined with 25LN113.	Eligible (with construction monitoring conditional action, 25LN113 is listed as a site of concern for Pawnee Nation [Reed 2023])
BL00-037*	District #14 School House	Blaine County	School	Historic school	Eligible (date of last survey 1989, not revisited by POWER Engineers)
RPKB-1	Old Highway 83/U.S. Route 183 (segment)	3 miles south of Thedford and 0.5 miles north where the Project would parallel the road in both Thomas and Logan Counties	Transportation Corridor	18-mile abandoned segment of former highway alignment.	Inconclusive
RPKB-3	Sand Hill Ruts, Mormon Pioneer National Historic Trail	Near Sutherland, Lincoln County	Trail	Four linear wagon road traces.	Eligible
RPKB-5	Paxton-Hershey Canal (segment)	Bubble Road vicinity, along the Project centerline, 2 miles northeast of Sutherland, Lincoln County	Canal	1-mile segment of the approximately 20-mile-long canal that irrigates cropland between the North and South Platte rivers. Associated features include two bridges, two pump houses, a historic artifact scatter and side gates.	Inconclusive

Resource #	Name	Address/ Location	Resource Type	Description	NRHP Eligibility
RPKB-12	Ballagh Schoolhouse	Garfield County	Site	Historic school	Unevaluated (with conditional action)
RPKB-15	Oregon-California National Historic Trail (segment)	Lincoln County	Trail	Four immigrant trail traces southwest of SHPO LN00-028 boundary	Eligible

*Resource NOT surveyed by POWER Engineers (2015–2023) due to lack of access rights; derived from 2023 NCRGIS records search.

7.1.2 Eligible, Listed, and Unevaluated Resources in the Audible APE

The APE for direct, audible effects is currently defined as 0.5 miles around the proposed R-Project centerline, access routes, and work areas. To have an adverse effect on a historic property, an audible effect must alter the characteristics of a property that could qualify it for listing in the NRHP. Audible effects on different types of cultural resources for the R-Project will be analyzed in the upcoming FOE report for the project and may include noise from construction (e.g., equipment and vehicle use, transmission line wire splicing), operations (e.g., humming noise from the transmission line), and maintenance and emergency repairs.

Resources located within the APE for physical effects listed in Table 13 are also located within the Audible effects APE. ***Exclusive of those resources also within the APE for physical effects,*** within the APE for audible effects there are a total of 41 known NRHP-listed, eligible, or unevaluated cultural resources, including 10 archaeological sites and 31 historic buildings and structures (Table 14). Of the archaeological sites, eight are unevaluated for the NRHP, two are eligible, and one is listed on the NRHP. Of the historic buildings and structures, 23 are unevaluated for the NRHP, 7 are eligible, and 1 has inconclusive eligibility status.

One important note, most resources recorded within the APE for audible effects (29 out of 45 resources) are derived from the 2023 NCRGIS record search. In Table 15, these are denoted by an asterisk by their resource number. Only 16 NRHP-listed, eligible, unevaluated, or inconclusive resources were located or revisited by POWER Engineers in 2015–2023. Most of the resources recorded in NCRGIS were last surveyed in the 1980s or 1990s, and revisits are recommended to confirm integrity.

Table 14. NRHP Eligible, Listed, and Unevaluated Resources in Audible APE (Exclusive of Resources Also Within Physical APE)

Resource #	Name	Address/ Location	Resource Type	Description	NRHP Eligibility
25BL10	Elfgren Site	Blaine County	Site	Mixed component artifact scatter	Unevaluated
25LN103*	N/A	Lincoln County	Site	Prehistoric site	Unevaluated (listed as site of concern for Pawnee Nation [Reed 2023])
25LN20*	N/A	Lincoln County	Site	Site	Unevaluated
25LN37*	O'Fallon Station	Lincoln County	Site	Historic transportation route site	Unevaluated
25LN72	N/A	Lincoln County	Site	Protohistoric site	Unevaluated (listed as site of concern for Pawnee Nation [Reed 2023])
25LN95*	N/A	Lincoln County	Site	Prehistoric site	Unevaluated (listed as site of concern for Pawnee Nation [Reed 2023])
25LP49*	Bloody Buck	Loup County	Site	Prehistoric Central Plains Villagers/ Itskari Phase	Unevaluated (listed as site of concern for Pawnee Nation [Reed 2023])
25WH3*	N/A	Wheeler County	Site	Prehistoric Coalescent/ Caddoan-Pawnee site	Unevaluated (listed as site of concern for Pawnee Nation [Reed 2023])
BL00-002*	N/A	Blaine County	Ranch	1910 concrete block house	Unevaluated
BL00-008	St. John's Lutheran Church	Route 7 and County Road 4-24, Blaine County	Church	1947 church and associated parsonage	Eligible
BL00-038*	N/A	Blaine County	Abandoned Farmhouse	1912 stucco house	Unevaluated
BL01-001	Blaine County Courthouse	Brewster, Blaine County	Courthouse	1908 Courthouse	Unevaluated
BL01-002	N/A	Brewster, Blaine County	House	1893 frame house	Unevaluated
BL01-003	N/A	Brewster, Blaine County	House	1900 stucco house	Unevaluated
BL01-004	N/A	Brewster, Blaine County	House	1900 stucco house	Unevaluated
BL01-005	N/A	Brewster, Blaine County	House	1908 concrete block house	Eligible

Resource #	Name	Address/ Location	Resource Type	Description	NRHP Eligibility
HT00-178*	Swan Schoolhouse (District 233)	Holt County	Schoolhouse	Frame schoolhouse	Unevaluated
HT00-238	N/A	506th Avenue, 2200 feet north of Project centerline, Holt County	House	Historic period frame house	Unevaluated
LN00-028	O'Fallon's Bluff, Oregon-California National Historic Trail[a]	Along the South Platte River, near Sutherland, Lincoln County	Trail	A 20-acre site with portion of historic trail within boundaries.	Listed
LN00-032	Sutherland State Aid Bridge	Spanning the North Platte River, 2.5 miles north of Sutherland, Lincoln County	Bridge	1914/1915 14 span, concrete spandrel-arch bridge, measuring 7,950 feet long and 16 feet wide.	Listed (this resource has since been demolished)
LN08-001*	Wesleyan Church (Now Boutique & Fitness Center)	2nd & Maple, Sutherland, Lincoln County	Church	Church	Unevaluated
LN08-007*	N/A	201 Maple, Sutherland, Lincoln County	House	1890 frame house	Unevaluated
LN08-014*	N/A	121 Victory, Sutherland, Lincoln County	House	1920 frame and stucco house	Eligible
LN08-015*	N/A	Pine between Victory & E. County Road, Sutherland, Lincoln County	House	1917 frame house	Unevaluated
LN08-016*	N/A	431 Pine, Sutherland, Lincoln County	House	1908 frame house	Unevaluated
LN08-017*	N/A	Pine between Liberty & Walnut, Sutherland, Lincoln County	House	1900 frame house	Unevaluated
LN08-018*	N/A	700 Pine, Sutherland, Lincoln County	House	1915 frame house	Unevaluated
LN08-019*	N/A	Hwy 30 & Maple,	Filling Station &	1927 brick and stucco service station	Eligible

Resource #	Name	Address/ Location	Resource Type	Description	NRHP Eligibility
		Sutherland, Lincoln County	Service Garage		
LN08-020*	Coates, Frank House	US Hwy 30, Sutherland, Lincoln County	House	1900 frame house	Unevaluated
LN08-033*	N/A	Walnut & 2nd, Sutherland, Lincoln County	Commerce Garage/ Auto Dealership	1928 service station	Unevaluated
LN08-034*	N/A	Walnut between 1st & 2nd, Sutherland, Lincoln County	Store	1920 brick commercial building	Unevaluated
LN08-048*	Lincoln Hwy Marker	Hwy 30, Sutherland, Lincoln County	Mile marker	Lincoln Highway concrete marker	Eligible
LN08-055*	Rodeo Grounds	910 South St, Sutherland, Lincoln County	Landscape	Rodeo Grounds	Eligible
LO00-001	N/A	U.S. Highway 83, 1.75 miles north of Stapleton, Logan County	Ranch Complex	Circa 1905 ranch with a frame house, small brick house, garage, workshop, barn, shop/garage, small outbuildings and corral	Unevaluated
LO03-017	N/A	4th Street/C Street, Stapleton, Logan County	House	Circa 1901 frame house	Unevaluated
LO03-018	N/A	C Street between 5th and 6th Streets, Stapleton, Logan County	House	Circa 1901 frame house	Unevaluated
RPKB-13	Oregon-California National Historic Trail (segment)	Lincoln County	Trail	14 linear wagon traces	Eligible
TM00-029*	N/A	Thomas County	Barn	1930 Frame barn	Unevaluated
TM00-040	Blue Star Highway Rest Area	East side U.S. Highway 83, 440 feet south of the Dismal	Site	Rest Area	Unevaluated

Resource #	Name	Address/ Location	Resource Type	Description	NRHP Eligibility
		River, Thomas County			
TM00-041	Figard Sod House	North side, Scenic River Road/south of Dismal River, Thomas County	District	Remains of a sod house, along with a cellar, privy, frame barn, and hay shed	Inconclusive
WH00-004	Theo Pofahl Farmstead	504th Avenue, south of 846th Road, Wheeler County	Building	Farmstead	Unevaluated
WH00-005*	N/A	Wheeler County	House	Frame house	Eligible

*Resource was not surveyed by POWER Engineers (2015–2023) but derived from 2023 NCRGIS records search.

7.1.3 Eligible, Listed, and Unevaluated Resources in the Visual APE

The APE for direct, visual effects is currently defined as 10 miles on either side of the proposed R-Project centerline. For the 2023 NCRGIS data request, ICF only received above-ground resources within the APE for visual effects. Within the APE for visual effects, there are a total of 466 historic buildings and structures listed in the NRHP, eligible for the NRHP, or unevaluated for the NRHP. Of these resources, 2 are listed on the NRHP, 95 are individually eligible for the NRHP, 17 are contributing components to the Bessey Tree Nursery historic district within the Bessey National Forest, and 354 are unevaluated for the NRHP. A list of these resources can be found in Appendix A.

In 2017, POWER Engineers produced a 10-mile desktop visual analysis of the APE. The study found that the R-Project would have no direct or indirect effects on standing structures or archaeological sites located more than 0.5 miles from the project area. In an October 2018 letter, the SHPO agreed with this assessment but cautioned that the determination did "not necessarily reflect the opinion of Native American Tribes…nor does it pertain to Traditional Cultural Properties, if they exist in the area" (Rissetto and Dolberg 2018).

7.2 Outstanding Section 106 Requirements

Based on the review of prior cultural resource investigations, consultation, correspondence, and agreement documents, the following outstanding Section 106 requirements are noted.

- Completion of archaeological survey and evaluation of the current APE for physical effects.
- Completion of NRHP evaluation for all known archaeological sites and above-ground resources within the current APE for physical effects.
- Construction monitoring at site 25LN113.
- Monitoring of potential erosion at Transmission Structure #99 near site 25LN113 following construction as part of routine NPPD inspections. Photographs will be submitted to SHPO each

year to demonstrate if erosion was or was not occurring at this structure location. If there is evidence of erosion occurring, NPPD will take action to control the erosion.

- Continued consultation with Tribal Nations regarding survey effort and potential traditional cultural properties within the current APE.
- Submission of archaeological site forms to the Nebraska SHPO to obtain Smithsonian trinomial numbers.
- Records search data from February 2023 does not appear to have included archaeological resources within the 10-mile APE for visual effects. Request updated records search from the Nebraska SHPO. Additional desktop visual effects study to account for the shift in the transmission line route to minimize impacts on National Historic Trail ruts.
- Site revisit of 24 previously recorded above-ground architectural resources within the current APE for audible effects. These resources were not identified or revisited by POWER Engineers in 2015–2023. These previously recorded resources are listed in Table 14 with an asterisk by the resource number.
- Consultation with the SHPO and other stakeholders regarding necessity of possible built-environment survey for historic-age resources within the physical and audible APEs ***not*** recorded by previous building surveys.
- Site RPKB-15, located during the 2023 POWER Engineers cultural resource survey (currently in draft form), is partially located within the current APE for physical effects. This site consists of wagon traces and is adjacent to and is an extension of the O'Fallon's Bluff Oregon-California trail segment LN00-028 and its western extension, RPKB-13. Draft report and NRHP-eligibility determination is pending.
- Completion of FOE report. It must also be noted that the court remand stated that "to the extent the locations of [wind] turbines are known or reasonably foreseeable, the Service must also analyze the potential effect on historic resources" from these proposed wind turbines (*Oregon-California Trails Association v. Walsh,* 1:19-cv-01945-WJM, D. Colo 2020).
- Development and execution of an amendment to the PA.

Chapter 8
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Appendix A
NRHP-Listed, Eligible, and Unevaluated Cultural Resources in Visual APE, Exclusive of those Resources Within the APEs for Physical and Audible Effects[1]

[1] The data in this appendix is from the NCRGIS and is current through February 2023. This data is exclusive of resources also found within the Physical and Audible APEs. Note that none of the resources in the Visual APE were revisited by the Power Engineers cultural resource surveys of 2015-2023. Many of these resources were last inventoried in the 1980s or 1990s so many of these may no longer be extant, or the NRHP eligibility information may not be accurate. In addition to these issues, there are some gaps in the NCRGIS data due to conversion to a new database system.

Resource #	Miles from Centerline	NRHP Eligibility	County	Classification
AP00-001	5.2	Unevaluated	Antelope	Building
AP00-049	9.0	Unevaluated	Antelope	District
AP00-050	8.6	Unevaluated	Antelope	Building
AP00-051	8.4	Unevaluated	Antelope	District
AP00-062	9.9	Unevaluated	Antelope	Building
AP00-067	9.8	Unevaluated	Antelope	District
AP00-111	9.4	Unevaluated	Antelope	Building
AP00-112	8.0	Unevaluated	Antelope	District
AP00-113	7.7	Unevaluated	Antelope	District
AP00-115	7.1	Unevaluated	Antelope	Building
AP00-116	3.9	Unevaluated	Antelope	District
AP00-117	4.6	Unevaluated	Antelope	District
AP00-118	6.0	Unevaluated	Antelope	District
AP00-119	6.2	Eligible	Antelope	District
AP00-121	9.5	Unevaluated	Antelope	Building
AP00-122	7.5	Unevaluated	Antelope	District
AP00-123	5.6	Unevaluated	Antelope	District
AP00-124	1.8	Eligible	Antelope	District
AP00-125	1.4	Unevaluated	Antelope	District
AP00-127	2.3	Unevaluated	Antelope	Building
AP00-128	3.1	Unevaluated	Antelope	District
AP00-129	4.8	Eligible	Antelope	District
AP00-130	4.2	Eligible	Antelope	District
AP00-131	4.1	Unevaluated	Antelope	District
AP00-209	7.5	Unevaluated	Antelope	District
AP00-210	5.8	Unevaluated	Antelope	Building
AP00-211	4.2	Unevaluated	Antelope	District
AP00-212	3.2	Unevaluated	Antelope	District
AP00-213	6.6	Eligible	Antelope	District
AP00-248	9.5	Eligible	Antelope	Building

Resource #	Miles from Centerline	NRHP Eligibility	County	Classification
AP00-301	9.9	Unevaluated	Antelope	Unevaluated
AP02-001	8.2	Unevaluated	Antelope	Building
AP02-002	8.0	Eligible	Antelope	Building
AP02-003	7.9	Eligible	Antelope	Building
AP02-004	7.9	Unevaluated	Antelope	Building
AP02-005	8.0	Unevaluated	Antelope	Building
AP02-006	8.1	Unevaluated	Antelope	Building
AP02-007	8.1	Unevaluated	Antelope	Building
AP02-008	8.0	Unevaluated	Antelope	Building
AP02-009	8.0	Eligible	Antelope	Building
AP02-010	8.0	Eligible	Antelope	Building
AP02-011	8.0	Unevaluated	Antelope	Building
AP02-012	8.0	Unevaluated	Antelope	Structure
AP02-013	8.0	Eligible	Antelope	Building
AP02-014	8.1	Unevaluated	Antelope	Building
AP02-015	8.2	Unevaluated	Antelope	Building
AP02-016	8.1	Unevaluated	Antelope	Building
AP02-017	8.2	Eligible	Antelope	Building
AP02-018	8.4	Unevaluated	Antelope	Building
AP02-019	8.4	Unevaluated	Antelope	Building
AP02-020	8.3	Unevaluated	Antelope	Building
AP02-021	8.2	Unevaluated	Antelope	Building
AP02-022	8.2	Unevaluated	Antelope	Building
AP02-023	8.2	Unevaluated	Antelope	Building
AP02-024	8.3	Unevaluated	Antelope	Building
AP02-025	8.3	Unevaluated	Antelope	Building
AP02-026	8.3	Unevaluated	Antelope	Building
AP02-027	8.3	Unevaluated	Antelope	Building
AP02-028	8.3	Unevaluated	Antelope	Building
AP02-029	8.2	Unevaluated	Antelope	Building

Resource #	Miles from Centerline	NRHP Eligibility	County	Classification
AP02-030	8.2	Unevaluated	Antelope	Building
AP02-031	8.2	Unevaluated	Antelope	Building
AP02-032	8.0	Unevaluated	Antelope	Building
AP02-033	8.2	Unevaluated	Antelope	Building
AP02-034	8.0	Unevaluated	Antelope	Building
AP02-035	8.0	Unevaluated	Antelope	Building
AP02-036	8.0	Eligible	Antelope	Building
AP02-037	8.0	Unevaluated	Antelope	Building
AP02-038	8.1	Eligible	Antelope	Building
AP02-039	8.1	Eligible	Antelope	Building
BL00-001	5.2	Unevaluated	Blaine	District
BL00-003	4.9	Unevaluated	Blaine	District
BL00-004	9.1	Unevaluated	Blaine	Building
BL00-005	2.6	Eligible	Blaine	Building
BL00-006	0.6	Eligible	Blaine	District
BL00-009	3.5	Unevaluated	Blaine	District
BL00-010	3.8	Eligible	Blaine	District
BL00-011	5.8	Unevaluated	Blaine	District
BL00-012	1.8	Unevaluated	Blaine	District
BL00-013	1.8	Unevaluated	Blaine	District
BL00-014	5.2	Unevaluated	Blaine	Building
BL00-015	6.9	Unevaluated	Blaine	District
BL00-016	10.0	Unevaluated	Blaine	District
BL00-021	9.8	Unevaluated	Blaine	District
BL00-022	8.7	Unevaluated	Blaine	District
BL00-023	5.7	Eligible	Blaine	District
BL00-024	2.2	Unevaluated	Blaine	Building
BL00-025	1.8	Unevaluated	Blaine	Building
BL00-027	1.7	Eligible	Blaine	District
BL00-028	1.4	Unevaluated	Blaine	Building

Resource #	Miles from Centerline	NRHP Eligibility	County	Classification
BL00-029	2.4	Eligible	Blaine	District
BL00-031	5.3	Unevaluated	Blaine	District
BL00-032	5.5	Unevaluated	Blaine	District
BL00-034	5.3	Eligible	Blaine	Building
BL00-035	4.1	Unevaluated	Blaine	Object
BL00-036	2.4	Eligible	Blaine	District
BL00-039	3.9	Unevaluated	Blaine	District
BL00-040	3.7	Unevaluated	Blaine	Building
BL03-001	5.8	Unevaluated	Blaine	Building
BW00-031	9.8	Unevaluated	Brown	Building
BW00-032	9.5	Unevaluated	Brown	Building
BW00-037	7.3	Unevaluated	Brown	District
BW00-045	5.3	Eligible	Brown	Building
BW00-046	7.4	Unevaluated	Brown	District
BW00-048	9.8	Eligible	Brown	Building
BW00-049	8.5	Eligible	Brown	Building
CE00-168	9.3	Unevaluated	Cherry	District
CE00-169	9.1	Eligible	Cherry	Building
GF00-009	8.1	Unevaluated	Garfield	Building
GF00-010	2.8	Unevaluated	Garfield	Building
HT00-179	6.0	Unevaluated	Holt	Building
HT00-180	8.0	Unevaluated	Holt	Building
HT00-181	8.1	Unevaluated	Holt	Building
HT00-182	8.0	Unevaluated	Holt	Building
HT00-183	9.6	Unevaluated	Holt	Building
HT00-185	9.0	Unevaluated	Holt	Building
HT00-195	8.0	Unevaluated	Holt	Building
HT00-196	8.0	Unevaluated	Holt	Building
HT00-208	9.5	Unevaluated	Holt	Building
HT00-215	9.0	Unevaluated	Holt	Building

Resource #	Miles from Centerline	NRHP Eligibility	County	Classification
HT00-216	9.0	Unevaluated	Holt	Building
HT00-217	9.0	Unevaluated	Holt	Building
HT00-218	8.0	Unevaluated	Holt	Building
HT00-219	8.0	Unevaluated	Holt	Building
HT00-220	7.8	Unevaluated	Holt	Building
HT00-221	4.7	Unevaluated	Holt	Building
HT00-222	3.7	Unevaluated	Holt	Building
HT00-223	2.0	Unevaluated	Holt	Building
HT00-224	2.9	Unevaluated	Holt	Building
HT00-225	2.0	Eligible	Holt	Building
HT00-226	1.9	Unevaluated	Holt	Building
HT00-227	7.1	Unevaluated	Holt	Building
HT00-228	7.1	Eligible	Holt	Building
HT00-229	6.2	Unevaluated	Holt	Building
HT00-230	5.2	Unevaluated	Holt	Building
HT00-231	3.7	Unevaluated	Holt	Building
HT00-232	2.5	Unevaluated	Holt	Building
HT00-233	2.0	Unevaluated	Holt	Building
HT00-234	2.9	Unevaluated	Holt	Building
HT00-235	8.0	Eligible	Holt	Building
HT00-236	1.5	Unevaluated	Holt	Building
HT00-239	3.0	Unevaluated	Holt	Building
HT00-240	5.9	Unevaluated	Holt	Building
HT00-254	7.9	Unevaluated	Holt	Site
HT00-255	5.0	Unevaluated	Holt	Site
HT00-257	4.7	Unevaluated	Holt	Building
HT00-258	4.1	Eligible	Holt	Building
HT00-260	2.1	Unevaluated	Holt	Building
HT00-285	8.4	Unevaluated	Holt	Site
HT03-013	8.1	Unevaluated	Holt	Unevaluated

Resource #	Miles from Centerline	NRHP Eligibility	County	Classification
HT05-001	8.0	Unevaluated	Holt	Building
HT05-002	8.0	Unevaluated	Holt	Building
HT05-003	8.0	Unevaluated	Holt	Building
HT05-004	8.0	Unevaluated	Holt	Building
HT05-005	8.0	Unevaluated	Holt	Building
HT05-006	8.0	Unevaluated	Holt	Building
HT05-007	8.0	Unevaluated	Holt	Building
HT05-008	8.0	Unevaluated	Holt	Building
HT05-009	8.0	Unevaluated	Holt	Building
HT05-010	8.0	Unevaluated	Holt	Building
HT05-011	8.0	Eligible	Holt	Building
HT05-012	8.1	Unevaluated	Holt	Building
HT05-014	8.2	Unevaluated	Holt	Building
HT05-015	8.2	Unevaluated	Holt	Building
HT05-016	8.1	Unevaluated	Holt	Building
HT05-017	8.0	Unevaluated	Holt	Building
HT05-018	8.1	Unevaluated	Holt	Building
HT05-019	8.3	Unevaluated	Holt	Building
HT05-020	7.8	Unevaluated	Holt	Building
HT05-021	7.9	Unevaluated	Holt	Building
HT05-022	8.0	Unevaluated	Holt	Building
HT05-023	8.0	Unevaluated	Holt	Building
HT05-024	8.0	Unevaluated	Holt	Building
HT05-025	8.0	Unevaluated	Holt	Building
HT05-026	8.0	Unevaluated	Holt	Building
KH00-008	8.5	Unevaluated	Keith	District
KH00-009	9.2	Unevaluated	Keith	District
KH00-011	9.8	Unevaluated	Keith	District
KH00-013	7.4	Eligible	Keith	District
KH00-014	7.7	Unevaluated	Keith	District

Resource #	Miles from Centerline	NRHP Eligibility	County	Classification
KH00-015	8.5	Unevaluated	Keith	Building
LN00-003	5.4	Unevaluated	Lincoln	Building
LN00-004	4.7	Unevaluated	Lincoln	Building
LN00-005	0.9	Eligible	Lincoln	Building
LN00-011	2.8	Eligible	Lincoln	Building
LN00-021	2.6	Unevaluated	Lincoln	Site
LN00-023	1.5	Unevaluated	Lincoln	Building
LN00-038	1.4	Unevaluated	Lincoln	Site
LN00-039	2.5	Unevaluated	Lincoln	Object
LN00-040	6.6	Unevaluated	Lincoln	Building
LN00-067	8.0	Unevaluated	Lincoln	District
LN00-068	8.9	Unevaluated	Lincoln	Site
LN00-083	7.1	Unevaluated	Lincoln	Site
LN00-170	5.6	Unevaluated	Lincoln	Site
LN00-171	6.1	Unevaluated	Lincoln	District
LN00-172	4.3	Unevaluated	Lincoln	District
LN00-173	3.4	Unevaluated	Lincoln	Building
LN00-174	2.5	Unevaluated	Lincoln	District
LN00-175	3.0	Unevaluated	Lincoln	Building
LN00-176	3.1	Unevaluated	Lincoln	Building
LN00-177	4.3	Unevaluated	Lincoln	District
LN00-178	4.9	Unevaluated	Lincoln	District
LN00-179	3.4	Unevaluated	Lincoln	District
LN00-180	2.5	Unevaluated	Lincoln	District
LN00-181	1.9	Unevaluated	Lincoln	Site
LN00-182	8.4	Unevaluated	Lincoln	District
LN00-183	3.0	Unevaluated	Lincoln	Building
LN00-184	4.0	Unevaluated	Lincoln	Building
LN00-185	1.9	Unevaluated	Lincoln	District
LN00-186	2.9	Unevaluated	Lincoln	Building

Resource #	Miles from Centerline	NRHP Eligibility	County	Classification
LN00-187	2.6	Unevaluated	Lincoln	District
LN00-188	7.0	Unevaluated	Lincoln	District
LN00-189	6.7	Unevaluated	Lincoln	Building
LN00-190	6.7	Unevaluated	Lincoln	District
LN00-191	7.3	Unevaluated	Lincoln	District
LN00-193	1.0	Unevaluated	Lincoln	Building
LN00-194	2.5	Unevaluated	Lincoln	Site
LN00-195	4.2	Eligible	Lincoln	District
LN00-196	5.2	Unevaluated	Lincoln	District
LN00-197	4.9	Unevaluated	Lincoln	District
LN00-198	8.1	Unevaluated	Lincoln	Building
LN00-199	10.0	Unevaluated	Lincoln	District
LN00-202	7.6	Eligible	Lincoln	District
LN00-205	9.9	Unevaluated	Lincoln	Building
LN00-206		Unevaluated	Lincoln	Building
LN00-207	5.4	Unevaluated	Lincoln	Building
LN00-208	5.9	Unevaluated	Lincoln	Site
LN03-004	4.7	Unevaluated	Lincoln	Building
LN03-005	4.6	Unevaluated	Lincoln	Building
LN03-006	4.4	Unevaluated	Lincoln	Building
LN03-007	4.5	Unevaluated	Lincoln	Building
LN03-008	4.5	Unevaluated	Lincoln	Structure
LN03-009	4.7	Unevaluated	Lincoln	Building
LN03-010	4.8	Unevaluated	Lincoln	Building
LN03-011	4.6	Unevaluated	Lincoln	Building
LN03-012	4.7	Unevaluated	Lincoln	Building
LN03-013	4.5	Unevaluated	Lincoln	Building
LN03-014	4.3	Unevaluated	Lincoln	Building
LN03-015	4.4	Eligible	Lincoln	Building
LN03-016	4.6	Unevaluated	Lincoln	Building

Resource #	Miles from Centerline	NRHP Eligibility	County	Classification
LN03-017	4.6	Unevaluated	Lincoln	Building
LN03-018	4.7	Unevaluated	Lincoln	Building
LN03-019	4.6	Unevaluated	Lincoln	Building
LN03-021	4.8	Eligible	Lincoln	Building
LN03-022	4.8	Eligible	Lincoln	Building
LN03-023	4.8	Unevaluated	Lincoln	Building
LN03-024	4.8	Unevaluated	Lincoln	Building
LN08-003	1.5	Unevaluated	Lincoln	Building
LN08-004	1.5	Unevaluated	Lincoln	Building
LN08-006	1.5	Unevaluated	Lincoln	Building
LN08-008	1.4	Unevaluated	Lincoln	Building
LN08-010	1.4	Unevaluated	Lincoln	Building
LN08-011	1.4	Unevaluated	Lincoln	Building
LN08-012	1.5	Unevaluated	Lincoln	Building
LN08-013	1.5	Unevaluated	Lincoln	Building
LN08-021	1.6	Unevaluated	Lincoln	Building
LN08-022	1.5	Unevaluated	Lincoln	Building
LN08-023	1.5	Unevaluated	Lincoln	Building
LN08-024	1.5	Unevaluated	Lincoln	Building
LN08-025	1.7	Unevaluated	Lincoln	Building
LN08-026	2.0	Unevaluated	Lincoln	Building
LN08-027	1.7	Unevaluated	Lincoln	Building
LN08-028	1.7	Unevaluated	Lincoln	Building
LN08-029	1.5	Unevaluated	Lincoln	Building
LN08-030	1.5	Unevaluated	Lincoln	Building
LN08-031	1.5	Unevaluated	Lincoln	Building
LN08-032	1.5	Unevaluated	Lincoln	Building
LN08-035	1.5	Unevaluated	Lincoln	Building
LN08-036	1.8	Unevaluated	Lincoln	Building
LN08-037	1.8	Unevaluated	Lincoln	Building

Resource #	Miles from Centerline	NRHP Eligibility	County	Classification
LN08-038	1.8	Unevaluated	Lincoln	Building
LN08-039	1.8	Eligible	Lincoln	Building
LN08-040	1.8	Unevaluated	Lincoln	Building
LN08-041	1.9	Eligible	Lincoln	Building
LN08-042	1.8	Unevaluated	Lincoln	Building
LN08-043	1.6	Unevaluated	Lincoln	Building
LN08-044	1.6	Eligible	Lincoln	Building
LN08-045	1.5	Unevaluated	Lincoln	Building
LN08-046	1.5	Eligible	Lincoln	Building
LN08-049	1.7	Unevaluated	Lincoln	Building
LN08-050	1.8	Eligible	Lincoln	Building
LN08-051	1.7	Unevaluated	Lincoln	Building
LN08-052	1.7	Eligible	Lincoln	Building
LN08-053	1.6	Unevaluated	Lincoln	Building
LO00-003	8.1	Unevaluated	Logan	District
LO00-004	3.0	Unevaluated	Logan	District
LO00-005	2.9	Eligible	Logan	District
LO00-006	1.5	Eligible	Logan	District
LO00-008	2.1	Unevaluated	Logan	District
LO00-009	2.6	Unevaluated	Logan	District
LO00-010	6.7	Unevaluated	Logan	Building
LO00-011	7.1	Unevaluated	Logan	District
LO00-012	6.9	Eligible	Logan	District
LO00-013	7.0	Unevaluated	Logan	Building
LO00-015	4.0	Unevaluated	Logan	District
LO00-016	2.7	Unevaluated	Logan	District
LO00-017	1.0	Eligible	Logan	District
LO00-018	0.9	Eligible	Logan	District
LO00-019	4.4	Eligible	Logan	Building
LO00-020	8.9	Eligible	Logan	District

Resource #	Miles from Centerline	NRHP Eligibility	County	Classification
LO00-021	3.0	Unevaluated	Logan	District
LO00-022	3.5	Eligible	Logan	District
LO00-023	2.5	Eligible	Logan	Building
LO00-027	9.7	Unevaluated	Logan	Unevaluated
LO01-001	2.3	Eligible	Logan	Building
LO01-002	2.3	Eligible	Logan	Building
LO01-003	2.3	Unevaluated	Logan	Building
LO01-004	2.2	Eligible	Logan	Building
LO01-005	2.2	Unevaluated	Logan	Building
LO01-006	2.3	Eligible	Logan	Building
LO03-001	0.7	Unevaluated	Logan	Building
LO03-002	0.7	Unevaluated	Logan	Building
LO03-003	0.7	Unevaluated	Logan	Building
LO03-004	0.7	Unevaluated	Logan	Building
LO03-005	0.7	Eligible	Logan	Building
LO03-006	0.7	Eligible	Logan	Building
LO03-007	0.7	Unevaluated	Logan	Building
LO03-008	0.6	Unevaluated	Logan	Building
LO03-009	0.6	Unevaluated	Logan	Building
LO03-010	0.6	Unevaluated	Logan	Building
LO03-011	0.6	Unevaluated	Logan	Building
LO03-013	0.6	Unevaluated	Logan	Building
LO03-014	0.6	Eligible	Logan	Building
LO03-015	0.6	Eligible	Logan	Building
LO03-019	0.7	Unevaluated	Logan	Building
LO03-020	0.7	Unevaluated	Logan	Building
LO03-021	0.6	Unevaluated	Logan	Site
LP00-002	1.0	Unevaluated	Loup	Building
LP00-020	9.3	Unevaluated	Loup	District
MP00-007	9.1	Unevaluated	McPherson	Building

Resource #	Miles from Centerline	NRHP Eligibility	County	Classification
MP00-008	8.0	Unevaluated	McPherson	Building
MP00-020	6.8	Unevaluated	McPherson	District
MP00-021	8.3	Eligible	McPherson	Building
RO00-051	9.2	Unevaluated	Rock	District
RO00-052	8.3	Unevaluated	Rock	District
RO00-053	5.9	Unevaluated	Rock	Object
RO00-054	6.5	Eligible	Rock	District
RO00-055	5.4	Unevaluated	Rock	Building
RO00-056	5.5	Unevaluated	Rock	District
RO00-057	4.0	Unevaluated	Rock	Building
RO00-058	4.1	Unevaluated	Rock	Building
RO00-059	9.1	Unevaluated	Rock	Building
RO00-060	8.5	Unevaluated	Rock	District
RO00-061	8.2	Unevaluated	Rock	District
RO00-062	8.0	Unevaluated	Rock	Building
TM00-001	5.2	Unevaluated	Thomas	Site
TM00-003	3.7	Unevaluated	Thomas	Building
TM00-004	5.4	Unevaluated	Thomas	District
TM00-005	7.1	Unevaluated	Thomas	Building
TM00-006	7.4	Unevaluated	Thomas	District
TM00-007	1.6	Unevaluated	Thomas	District
TM00-008	3.8	Eligible	Thomas	Building
TM00-009	4.0	Eligible	Thomas	Building
TM00-010	3.3	Eligible	Thomas	District
TM00-011	6.6	Eligible	Thomas	District
TM00-012	5.2	Unevaluated	Thomas	Building
TM00-013	5.3	Unevaluated	Thomas	District
TM00-014	5.0	Unevaluated	Thomas	District
TM00-015	7.6	Unevaluated	Thomas	District
TM00-017	7.6	Eligible	Thomas	District

Resource #	Miles from Centerline	NRHP Eligibility	County	Classification
TM00-018	5.4	Eligible	Thomas	Building
TM00-019	5.1	Unevaluated	Thomas	Building
TM00-020	5.1	Unevaluated	Thomas	District
TM00-021	5.0	Unevaluated	Thomas	District
TM00-023	5.3	Unevaluated	Thomas	District
TM00-024	0.5	Unevaluated	Thomas	Building
TM00-025	2.1	Unevaluated	Thomas	District
TM00-026	7.9	Unevaluated	Thomas	Object
TM00-027	6.2	Eligible	Thomas	Building
TM00-028	4.9	Unevaluated	Thomas	District
TM00-030	2.1	Unevaluated	Thomas	District
TM00-032	0.6	Eligible	Thomas	District
TM00-033	3.5	Eligible	Thomas	District
TM00-034	4.4	Unevaluated	Thomas	Object
TM00-035	3.4	Unevaluated	Thomas	Building
TM00-036	9.7	Unevaluated	Thomas	District
TM00-039	2.2	Unevaluated	Thomas	District
TM00-042	0.7	Eligible	Thomas	Building
TM00-044	2.1	Unevaluated	Thomas	Building
TM00-045	2.1	Unevaluated	Thomas	Building
TM00-046	2.0	Unevaluated	Thomas	Building
TM00-049	5.1	Contributing Resource to Listed District	Thomas	District
TM00-050	5.1	Unevaluated	Thomas	Structure
TM00-051	5.1	Contributing Resource to Listed District	Thomas	Site
TM00-052	5.1	Contributing Resource to Eligible District	Thomas	Structure
TM00-053	5.2	Contributing Resource to Listed District	Thomas	Building
TM00-055	5.1	Contributing Resource to Eligible District	Thomas	Structure
TM00-056	5.2	Contributing Resource to Listed District	Thomas	Structure
TM00-057	5.3	Contributing Resource to Eligible District	Thomas	Structure
TM00-058	5.2	Unevaluated	Thomas	Building

Resource #	Miles from Centerline	NRHP Eligibility	County	Classification
TM00-059	5.2	Unevaluated	Thomas	Building
TM00-060	5.1	Contributing Resource to Listed District	Thomas	Building
TM00-061	5.1	Contributing Resource to Listed District	Thomas	Building
TM00-062	5.1	Unevaluated	Thomas	Building
TM00-063	5.2	Unevaluated	Thomas	Building
TM00-064	5.2	Unevaluated	Thomas	Building
TM00-065	5.1	Unevaluated	Thomas	Structure
TM00-066	5.1	Contributing Resource to Listed District	Thomas	Building
TM00-067	5.2	Unevaluated	Thomas	Building
TM00-068	5.2	Unevaluated	Thomas	Building
TM00-070	5.2	Unevaluated	Thomas	Structure
TM00-071	5.2	Unevaluated	Thomas	Building
TM00-072	5.1	Contributing Resource to Listed District	Thomas	Building
TM00-073	5.1	Unevaluated	Thomas	Building
TM00-074	5.1	Contributing Resource to Listed District	Thomas	Building
TM00-075	5.1	Unevaluated	Thomas	Building
TM00-076	5.1	Unevaluated	Thomas	Building
TM00-077	5.1	Unevaluated	Thomas	Building
TM00-078	5.1	Unevaluated	Thomas	Building
TM00-079	5.1	Contributing Resource to Listed District	Thomas	Building
TM00-080	5.1	Contributing Resource to Listed District	Thomas	Building
TM00-081	5.1	Unevaluated	Thomas	Building
TM00-082	5.1	Unevaluated	Thomas	Building
TM00-083	5.2	Unevaluated	Thomas	Building
TM00-084	5.1	Contributing Resource to Listed District	Thomas	Building
TM00-085	5.1	Contributing Resource to Listed District	Thomas	Building
TM00-086	4.9	Unevaluated	Thomas	Structure
TM01-001	4.9	Unevaluated	Thomas	Building
TM01-002	4.9	Unevaluated	Thomas	Building
TM01-003	4.9	Eligible	Thomas	Building

Resource #	Miles from Centerline	NRHP Eligibility	County	Classification
TM01-004	5.0	Unevaluated	Thomas	Building
TM01-006	5.0	Eligible	Thomas	Building
TM01-007	5.0	Unevaluated	Thomas	Building
TM01-008	5.0	Unevaluated	Thomas	Building
TM01-009	5.0	Unevaluated	Thomas	Building
TM01-010	5.1	Unevaluated	Thomas	Building
TM01-011	5.0	Unevaluated	Thomas	Building
TM01-012	5.0	Eligible	Thomas	Building
TM01-013	5.0	Eligible	Thomas	Building
TM01-014	5.0	Eligible	Thomas	Building
TM01-015	5.1	Eligible	Thomas	Building
TM01-016	5.1	Eligible	Thomas	Building
TM01-017	5.0	Eligible	Thomas	Building
TM01-018	5.0	Unevaluated	Thomas	District
TM01-019	5.1	Unevaluated	Thomas	Building
TM05-001	2.9	Unevaluated	Thomas	Unevaluated
TM05-002	2.8	Unevaluated	Thomas	Building
TM05-003	2.8	Unevaluated	Thomas	Building
TM05-004	2.8	Unevaluated	Thomas	Building
TM05-005	2.7	Unevaluated	Thomas	Building
TM05-006	2.7	Unevaluated	Thomas	Building
TM05-007	2.8	Unevaluated	Thomas	Building
TM05-008	2.7	Unevaluated	Thomas	Building
TM05-009	2.6	Eligible	Thomas	Building
TM05-010	2.7	Unevaluated	Thomas	Building
TM05-011	2.7	Unevaluated	Thomas	Building
TM05-012	2.7	Unevaluated	Thomas	Building
TM05-013	2.7	Unevaluated	Thomas	Building
TM05-014	2.6	Unevaluated	Thomas	Building
TM05-015	2.5	Eligible	Thomas	Building

Resource #	Miles from Centerline	NRHP Eligibility	County	Classification
TM05-016	2.5	Unevaluated	Thomas	Building
TM05-017	2.5	Unevaluated	Thomas	Building
TM05-018	2.5	Unevaluated	Thomas	Building
TM05-020	2.7	Eligible	Thomas	Building
TM05-021	2.9	Eligible	Thomas	Site
TM05-022	2.7	Unevaluated	Thomas	Building
TM05-024	2.8	Unevaluated	Thomas	Building
WH00-002	7.0	Eligible	Wheeler	Building
WH00-006	1.0	Eligible	Wheeler	Building
WH00-008	6.5	Eligible	Wheeler	Building
WH00-017	7.6	Eligible	Wheeler	Building
WH00-018	7.9	Eligible	Wheeler	Building
WH00-019	9.7	Contributing Resource to Listed District	Wheeler	District
WH00-021	9.0	Eligible	Wheeler	Building
WH00-024	7.0	Eligible	Wheeler	Building
WH00-025	7.0	Eligible	Wheeler	Building

Attachment 3: Table of Known Historic Properties and Unevaluated Cultural Resources in the Area of Potential Effects

1. This enclosure contains a table of resources for all known unevaluated, NRHP-eligible, and NRHP-listed cultural resources within the APE.
2. The table provides each resource's number, name, eligibility, type, brief description, and location within the R-Project's APEs for Physical, Audible, and Visual Effects.
3. The table also indicates if a resource is within 0.5 miles of the proposed transmission line; provides a summary of the results of a 2024/2025 viewshed analysis; and lists the anticipated effects of the undertaking to each of the resources.
4. The anticipated effects to the resources in this table are predicated on the following stipulations:
    a. Effects of the undertaking on historic properties will vary depending upon the resource and its characteristics that qualify the property for inclusion in the NRHP.
    b. Non-indigenous, historic-period resources greater than 0.5 mile from the R-Project transmission line should not incur adverse visual effects from the proposed transmission line, in accordance with USFWS consultation with the SHPO in October 2018.
    c. Resources that do not have an unobstructed view of the R-Project transmission line (as indicated by the 2024 Viewshed Analysis field) should not incur adverse visual effects from the proposed transmission line.

Table 1. Known Historic Properties and Unevaluated Cultural Resources in the Area of Potential Effects

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25AP11	N/A	Unevaluated	Site	Non-specific ceramic scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP12	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP13	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP14	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP15	N/A	Unevaluated	Site	Non-specific ceramic scatter	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25AP16	N/A	Unevaluated	Site	Non-specific ceramic scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP17	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP18	N/A	Unevaluated	Site	Non-specific ceramic scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25AP2	N/A	Unevaluated	Site	Prehistoric habitation site	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP23	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP24	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP25	N/A	Unevaluated	Site	Non-specific ceramic scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP27	Husbands	Unevaluated	Site	Prehistoric habitation site	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP3	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP505	McGee Mill	Unevaluated	Site	Historic industrial site	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP69	Van Horn-3	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25AP71	Cedar Moon	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25AP72	Switzer-2	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25BL1	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	Y	R-Project transmission line likely not visible (trees)	No anticipated effect
25BL10	Elfgren Site	Unevaluated	Site	Multicomponent artifact scatter	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of visual or audible elements that may diminish the integrity of the properties' significant historic features
25BL11	N/A	Unevaluated	Site	Historic artifact scatter	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25BL12	Fox	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25BL13	N/A	Unevaluated	Site	Historic farm/ ranch site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25BL14	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL15	N/A	Unevaluated	Site	Prehistoric extraction/ processing site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25BL16	N/A	Unevaluated	Site	Prehistoric extraction/ processing site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL17	N/A	Unevaluated	Site	Prehistoric extraction/ processing site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL18	N/A	Unevaluated	Site	Multicomponent habitation site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL19	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL2	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL20	N/A	Unevaluated	Site	Prehistoric extraction/ processing site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL21	N/A	Unevaluated	Site	Prehistoric extraction/ processing site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL22	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25BL23	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL24	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL25	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL26	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL27	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL28	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL29	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL30	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25BL31	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL32	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL33	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL34	N/A	Unevaluated	Site	Pawnee habitation site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL35	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL36	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL37	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25BL38	N/A	Unevaluated	Site	Historic transportation route site	APE for Audible and Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25BL4	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Physical, Audible, and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential physical, audible or visual effects that may diminish the integrity of the properties' significant historic features
25BW19	Torpin II	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25BW21	N/A	Unevaluated	Site	Historic habitation site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25CE138	N/A	Unevaluated	Site	Prehistoric habitation site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25CE29	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25HT23	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25HT56	N/A	Eligible	Site	Historic farm site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25KH24	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25KH25	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25LN100	N/A	Unevaluated	Site	Multicomponent site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25LN101	N/A	Unevaluated	Site	Historic farm site	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN102	N/A	Unevaluated	Site	Historic farm site	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN103	N/A	Unevaluated	Site	Prehistoric site	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN104	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN106	N/A	Unevaluated	Site	Historic farm site	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN107	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN108	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN109	N/A	Unevaluated	Site	Historic farm site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25LN110	N/A	Unevaluated	Site	Historic farm site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25LN111	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN112	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN114	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN115	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN116	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN117	N/A	Unevaluated	Site	Multicomponent site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN119	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN120	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25LN121	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN123	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN124	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN125	N/A	Unevaluated	Site	Historic farm site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25LN126	Star-Ferbrache Ranch	Unevaluated	Site	Historic farm site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25LN127	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN128	N/A	Unevaluated	Site	Multicomponent habitation site	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN129	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN130	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25LN131	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN132	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN133	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN134	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN17	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN18	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN20	N/A	Unevaluated	Site	Site (period not recorded in NCRGIS site data)	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN23	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25LN30	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25LN31	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
25LN32	N/A	Unevaluated	Site	Prehistoric artifact scatter and historic military site	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25LN33	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25LN37	O'Fallon Station	Unevaluated	Site	Historic transportation route site	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN38 (may be same resource as LN00-021)	N/A	Unevaluated	Site	Historic transportation and military site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25LN39	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN505	Eshleman Bros./ Hershey Mill	Unevaluated	Site	Historic industrial site	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25LN66	N/A	Unevaluated	Site	Historic farm site	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25LN7	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25LN72	N/A	Unevaluated, may no longer be extant	Site	Protohistoric site	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN73	N/A	Unevaluated	Site	Historic farm site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25LN83	N/A	Unevaluated	Site	Historic farm site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25LN90	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25LN91	Sherman Homestead	Unevaluated	Site	Historic farm site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25LN92	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25LN93	N/A	Unevaluated	Site	Historic farm site	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25LN94/ 25LN113	Birdwood Creek site	Eligible	Site	Multicomponent archaeological site	APE for Physical, Audible, and Visual Effects	Y	Unobstructed view of R-Project transmission line	Anticipated adverse effect
25LN95	N/A	Unevaluated	Site	Prehistoric site	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN96	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN97	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LN98	N/A	Unevaluated	Site	Historic farm site	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25LP12	N/A	Unevaluated	Site	Non-specific ceramic scatter	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25LP14	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25LP15	N/A	Unevaluated	Site	Prehistoric artifact scatter and historic religious site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25LP16	N/A	Unevaluated	Site	Historic farm site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25LP23	N/A	Unevaluated	Site	Historic religious site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25LP3	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LP30	N/A	Unevaluated	Site	Historic farm site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25LP4	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LP49	Bloody Buck	Unevaluated	Site	Prehistoric Central Plains Villagers/Itskari Phase	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
25LP58	N/A	Unevaluated	Site	Historic farm site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25RO11	N/A	Unevaluated	Site	Historic artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25TM10	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25TM11	Bessey Nursery	Listed	Site		APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25TM12	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25TM13	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25TM14	N/A	Unevaluated	Site	Multicomponent site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25TM15	N/A	Unevaluated	Site	Government/ administrative site	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25TM17	N/A	Unevaluated	Site	Habitation site	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25TM18	N/A	Eligible	Site	Historic archaeological site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25TM19	N/A	Eligible	Site	Historic archaeological site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25TM2	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
25TM20	N/A	Eligible	Site	Historic archaeological site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25TM21	N/A	Eligible	Site	Historic archaeological site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25TM22	N/A	Eligible	Site	Historic archaeological site	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25TM23	N/A	Unevaluated	Site	Historic artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25TM35	N/A	Unevaluated	Site	Government/ administrative site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25TM39	Ponderosa & Banksiana	Unevaluated	Site	Historic artifact scatter	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
25TM5	N/A	Unevaluated	Site	Prehistoric artifact scatter	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
25TM9	N/A	Unevaluated	Site	Historic transportation site	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
25WH1	N/A	Unevaluated	Site	Artifact scatter (period not recorded in NCRGIS site data)	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of visual elements that may diminish the integrity of the properties' significant historic features
25WH2	N/A	Unevaluated	Site	Historic artifact scatter	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
25WH3	N/A	Unevaluated	Site	Prehistoric Coalescent/ Caddoan-Pawnee site	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
AP00-001	Ewing Chicago & Northwestern Depot	Unevaluated	Building	Depot	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-049	N/A	Unevaluated	District	1900 abandoned farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
AP00-050	N/A	Unevaluated	Building	1895 abandoned farmhouse	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
AP00-051	N/A	Unevaluated	District	1883 farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP00-062	N/A	Unevaluated	Building	1910 abandoned school	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
AP00-067	N/A	Unevaluated	District	1910 farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
AP00-111	N/A	Unevaluated	Building	1914 abandoned farmhouse	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-112	N/A	Unevaluated	District	1909 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
AP00-113	N/A	Unevaluated	District	1897 abandoned farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
AP00-115	1913 Park Lenter School	Unevaluated	Building	School	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-116	N/A	Unevaluated	District	1906 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-117	N/A	Unevaluated	District	1887 farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line but not seen in aerial photography, building not extant?	No anticipated adverse effect
AP00-118	N/A	Unevaluated	District	1886 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-119	N/A	Eligible	District	1887 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-121	N/A	Unevaluated	Building	1890 abandoned farmhouse	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-122	N/A	Unevaluated	District	1880 abandoned farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-123	N/A	Unevaluated	District	1913 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
AP00-124	Fairview Church & Cemetery	Eligible	District	1903 Catholic church and cemetery	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
AP00-125	N/A	Unevaluated	District	1900 abandoned farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
AP00-127	N/A	Unevaluated	Building	1905 farmhouse	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
AP00-128	N/A	Unevaluated	District	1909 farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
AP00-129	N/A	Eligible	District	1908 farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
AP00-130	N/A	Eligible	District	1910 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-131	N/A	Unevaluated	District	1895 abandoned house	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
AP00-209	N/A	Unevaluated	District	1901 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
AP00-210	N/A	Unevaluated	Building	1907 abandoned farmhouse	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-211	N/A	Unevaluated	District	1897 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-212	N/A	Unevaluated	District	1911 farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
AP00-213	N/A	Eligible	District	1900 farmstead	APE for Visual Effects	N	Non-Extant? Not seen in aerial photography	No anticipated effect
AP00-248	Kallhoff Farmstead	Eligible	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP00-301	N/A	Unevaluated	?	No resource information in SHPO data	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
AP02-001	N/A	Unevaluated	Building	1902 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-002	N/A	Unevaluated	Building	1901 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP02-003	St. Theresa Catholic Church and Parsonage	Eligible	Building	1904-1913 church	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
AP02-004	N/A	Unevaluated	Building	1900 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-005	N/A	Unevaluated	Building	1897 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-006	N/A	Unevaluated	Building	1905 grain storage facility	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP02-007	N/A	Unevaluated	Building	1913 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP02-008	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-009	N/A	Eligible	Building	1895 abandoned house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-010	N/A	Eligible	Building	1911 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-011	N/A	Unevaluated	Building	1920 former filling station	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-012	N/A	Unevaluated	Structure	1920 water tower	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
AP02-013	N/A	Eligible	Building	1906 former city library	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-014	N/A	Unevaluated	Building	1908 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-015	N/A	Unevaluated	Building	1904 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-016	N/A	Unevaluated	Building	1907 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-017	N/A	Eligible	Building	1905 former Lutheran church	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-018	N/A	Unevaluated	Building	1900 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-019	N/A	Unevaluated	Building	1912 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP02-020	N/A	Unevaluated	Building	1897 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
AP02-021	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-022	N/A	Unevaluated	Building	1901 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-023	N/A	Unevaluated	Building	1918 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-024	N/A	Unevaluated	Building	1918 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-025	N/A	Unevaluated	Building	1887 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-026	N/A	Unevaluated	Building	1912 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP02-027	N/A	Unevaluated	Building	1895 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP02-028	N/A	Unevaluated	Building	1900 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP02-029	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
AP02-030	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP02-031	N/A	Unevaluated	Building	1915 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-032	N/A	Unevaluated	Building	1895 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
AP02-033	N/A	Unevaluated	Building	1880 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-034	N/A	Unevaluated	Building	1890 garage/ livery	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-035	N/A	Unevaluated	Building	1890 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-036	Contois Bros. Auto Dealership	Eligible	Building	1917 building	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-037	1890 Church of Christ	Unevaluated	Building	Church	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
AP02-038	Former Clearwater Record Building	Eligible	Building	1880 building	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
AP02-039	Citizens State Bank	Eligible	Building	1915 bank	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
BL00-001	N/A	Unevaluated	District	1910 ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
BL00-002	N/A	Unevaluated	Ranch	1910 concrete block house	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BL00-003	N/A	Unevaluated	District	1908 ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BL00-004	N/A	Unevaluated	Building	1910 school	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
BL00-005	Lister Clay House	Eligible	Building	1930 house	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
BL00-006	N/A	Eligible	District	1905 abandoned ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
BL00-008	St John's Lutheran Church-Wisconsin Synod	Eligible	Building	1948 church and parsonage	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Anticipated adverse effect
BL00-009	1915 Schneidereits Ranch	Unevaluated	District	Ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
BL00-010	Ferdinand Schneidereit Ranch	Eligible	District	1890, 1918 ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
BL00-011	N/A	Unevaluated	District	1915 ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
BL00-012	N/A	Unevaluated	District	1890 abandoned ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
BL00-013	N/A	Unevaluated	District	1895 abandoned ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
BL00-014	1910 Abandoned School #15	Unevaluated	Building	school	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BL00-015	N/A	Unevaluated	District	1920 ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
BL00-016	N/A	Unevaluated	District	1895 abandoned farmhouse	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
BL00-021	N/A	Unevaluated	District	1903 abandoned ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
BL00-022	N/A	Unevaluated	District	1900 abandoned ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
BL00-023	N/A	Eligible	District	1905 abandoned ranch with sod house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
BL00-024	N/A	Unevaluated	Building	1885 abandoned dugout	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
BL00-025	N/A	Unevaluated	Building	1910 school	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BL00-027	N/A	Eligible	District	1905 abandoned sod house	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BL00-028	N/A	Unevaluated	Building	1900 farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BL00-029	Hersh, Dean, House	Eligible	District	1940 house	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BL00-031	N/A	Unevaluated	District	1910 ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BL00-032	N/A	Unevaluated	District	1890 farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BL00-034	Harris Homestead	Eligible	Building	1901 homestead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
BL00-035	N/A	Unevaluated	Object	1910 range corral	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
BL00-036	Minister, Buck, Homestead	Eligible	District	1903 homestead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
BL00-037	Dist.#14 Schoolhouse	Eligible	District	1915 school	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
BL00-038	N/A	Unevaluated	Building	1912 stucco house	APE for Audible Effects	N	R-Project transmission line not visible	No anticipated effect
BL00-039	N/A	Unevaluated	District	1900 abandoned ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
BL00-040	N/A	Unevaluated	Building	1908 school	APE for Visual Effects	N	Unobstructed view of R-Project transmission line but not seen in aerial photography, building not extant?	No anticipated adverse effect
BL01-001	Blaine County Courthouse	Unevaluated	Building	1908 courthouse	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
BL01-002	N/A	Unevaluated	House	1893 frame house	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
BL01-003	N/A	Unevaluated	House	1900 stucco house	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
BL01-004	N/A	Unevaluated	House	1900 stucco house	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
BL01-005	N/A	Eligible	Building	1908 house	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
BL03-001	N/A	Unevaluated	Building	1908 house	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BW00-031	N/A	Unevaluated	Building	1910 school	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BW00-032	N/A	Unevaluated	Building	1910 abandoned farmhouse	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BW00-037	N/A	Unevaluated	District	1890 abandoned ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BW00-045	N/A	Eligible	Building	1910 school	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BW00-046	N/A	Unevaluated	District	1900 abandoned homestead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
BW00-048	N/A	Eligible	Building	1912 school	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
BW00-049	U.S. Post Office	Eligible	Building	1928 U.S. Post Office	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
CE00-168	1890 Johnson Ranch	Unevaluated	District	Ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
CE00-169	N/A	Eligible	Building	1895 school	APE for Visual Effects	N	Unobstructed view of R-Project transmission line but not seen in aerial photography, building not extant?	No anticipated adverse effect
GF00-009	N/A	Unevaluated	Building	House	APE for Visual Effects	N	Unobstructed view of R-Project transmission line but not seen in aerial photography, building not extant?	No anticipated adverse effect
GF00-010	N/A	Unevaluated	Building	Farmhouse	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-178	Swan Schoolhouse (District 233)	Unevaluated	Building	Frame schoolhouse	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line but not seen in aerial photography, building not extant?	No anticipated adverse effect
HT00-179	N/A	Unevaluated	Building	Abandoned farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-180	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
HT00-181	N/A	Unevaluated	Building	Church and parsonage	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
HT00-182	N/A	Unevaluated	Building	Farmhouse	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
HT00-183	N/A	Unevaluated	Building	1890 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
HT00-185	N/A	Unevaluated	Building	Abandoned Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-195	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-196	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-208	N/A	Unevaluated	Building	1885 abandoned farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
HT00-215	N/A	Unevaluated	Building	Abandoned farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-216	N/A	Unevaluated	Building	Abandoned farmhouse	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
HT00-217	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
HT00-218	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
HT00-219	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-220	N/A	Unevaluated	Building	Abandoned schoolhouse	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
HT00-221	N/A	Unevaluated	Building	Abandoned farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
HT00-222	N/A	Unevaluated	Building	Abandoned farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
HT00-223	N/A	Unevaluated	Building	Abandoned schoolhouse	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
HT00-224	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
HT00-225	Farmers Hill Cemetery	Eligible	Site	1880 cemetery	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-226	Lutheran Cemetery	Unevaluated	Building	Cemetery	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-227	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
HT00-228	N/A	Eligible	Structure	1915-1920 horse-drawn road grader	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-229	Valley View Cemetery	Unevaluated	Building	Cemetery	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-230	N/A	Unevaluated	Building	Abandoned farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-231	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-232	N/A	Unevaluated	Building	Abandoned farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
HT00-233	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-234	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
HT00-235	N/A	Eligible	Building	1915 farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-236	N/A	Unevaluated	Building	Cemetery	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
HT00-238	N/A	Unevaluated	House	Historic-period frame house	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Viewshed analysis indicates that due to vegetation and existing transmission lines, project is expected to only yield weak visual contrast, with no adverse effects anticipated (Bedingfield and Tucker 2016)"
HT00-239	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
HT00-240	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
HT00-254	1899 Vandersnick Cemetery	Unevaluated	Site	Cemetery	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
HT00-255	1886 Ziems Cemetery	Unevaluated	Site	Cemetery	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-257	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-258	N/A	Eligible	Building	1904 abandoned schoolhouse	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT00-260	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
HT00-285	Chambers Cemetery	Unevaluated	Site	Cemetery	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
HT03-013	N/A	Unevaluated	?	No resource information in NCRGIS	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-001	N/A	Unevaluated	Building	Commerce building	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-002	N/A	Unevaluated	Building	Concrete block garage	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-003	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-004	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-005	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-006	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
HT05-007	N/A	Unevaluated	Building	1890 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-008	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-009	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-010	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-011	Smith Bros. Cash Store	Eligible	Building	1890 store	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-012	N/A	Unevaluated	Building	1890 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-014	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-015	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
HT05-016	N/A	Unevaluated	Building	1890 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-017	N/A	Unevaluated	Building	1890 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-018	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-019	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-020	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-021	Chambers Public School	Unevaluated	Building	School	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-022	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
HT05-023	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
HT05-024	N/A	Unevaluated	Building	Abandoned house	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT05-025	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
HT05-026	N/A	Unevaluated	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
KH00-008	N/A	Unevaluated	District	1910 farm	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
KH00-009	1920 Lawler Farm & Ranch Co	Unevaluated	District	Ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
KH00-011	N/A	Unevaluated	District	1920 farm	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
KH00-013	N/A	Eligible	District	1890 farm	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
KH00-014	N/A	Unevaluated	District	1925 farm	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
KH00-015	N/A	Unevaluated	Building	1940 barn	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LN00-003	N/A	Unevaluated	Building	1915 barn and windmill	APE for Visual Effects	N	Unobstructed view of R-Project transmission line but not seen in aerial photography, building not extant?	No anticipated adverse effect
LN00-004	1923 Maria Lutheran Church	Unevaluated	Building	Church	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-005	N/A	Eligible	Building	1885 stone farmhouse	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-011	Millen, Peter House	Eligible	Building	1900 house	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-021 (may be same resource as 25LN38)	Adobe Fort (Site)	Unevaluated	Site	Site	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-028	O'Fallon's Bluff Oregon-California National Historic Trail	Listed	Structure	Trail ruts	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Anticipated adverse effect
LN00-028 [RPKB-13]	O'Fallon's Bluff Oregon-California National Historic Trail (segment)	Eligible	Structure	Trail ruts	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Anticipated adverse effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LN00-028 [RPKB-15]	O'Fallon's Bluff Oregon-California National Historic Trail (segment)	Eligible	Structure	Trail ruts	APE for Physical, Audible, and Visual Effects	Y	Unobstructed view of R-Project transmission line	Anticipated adverse effect
LN00-032	Sutherland State Aid Bridge	Listed (Demolished)	Bridge	1914/1915 concrete spandrel-arch bridge	N/A (Demolished)	N/A	N/A (Demolished)	No effect
LN00-038	1885 Lamont Cemetery	Unevaluated	Site	Cemetery	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-039	1932 Pony Express Memorial Marker	Unevaluated	Object	Marker	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-040	N/A	Unevaluated	Building	1920 farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LN00-067	N/A	Unevaluated	District	1900; 1940 abandoned ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LN00-068	1900 Sykes Cemetery	Unevaluated	Site	Cemetery	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
LN00-083	1885 Trinity Cemetery	Unevaluated	Site	Cemetery	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LN00-170	1882 Frontier Cemetery	Unevaluated	Site	Cemetery	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
LN00-171	N/A	Unevaluated	District	1885 abandoned farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
LN00-172	N/A	Unevaluated	District	1900; 1925 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LN00-173	N/A	Unevaluated	Building	1890 abandoned farmhouse	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LN00-174	N/A	Unevaluated	District	1920 farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect
LN00-175	N/A	Unevaluated	Building	1900 abandoned school	APE for Visual Effects	N	Unobstructed view of R-Project transmission line but not seen in aerial photography, building not extant?	No anticipated adverse effect
LN00-176	N/A	Unevaluated	Building	1915 farmhouse on non-contributing farm	APE for Visual Effects	N	R-Project transmission line likely not visible (trees, existing transmission lines)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LN00-177	N/A	Unevaluated	District	1920 abandoned farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LN00-178	N/A	Unevaluated	District	1925 farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LN00-179	N/A	Unevaluated	District	1908 farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LN00-180	N/A	Unevaluated	District	1890 abandoned farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LN00-181	1900 Sutherland Riverview Cemetery	Unevaluated	Site	Cemetery	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LN00-182	N/A	Unevaluated	District	1927 farm with non-contributing house	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-183	N/A	Unevaluated	Building	1920 farmhouse on non-contributing farm	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-184	N/A	Unevaluated	Building	1905 abandoned school	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-185	N/A	Unevaluated	District	1910 farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LN00-186	1910 Birdwood School Dist #36	Unevaluated	Building	School	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LN00-187	N/A	Unevaluated	District	1905 ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-188	N/A	Unevaluated	District	1910 abandoned farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-189	N/A	Unevaluated	Building	1885 abandoned farmhouse	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LN00-190	N/A	Unevaluated	District	1915 ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LN00-191	N/A	Unevaluated	District	1880; 1920 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LN00-193	N/A	Unevaluated	Building	1885 abandoned farmhouse	APE for Visual Effects	N	Unobstructed view of R-Project transmission line but not seen in aerial photography, building not extant?	No anticipated adverse effect
LN00-194	1890 Riverside Cemetery	Unevaluated	Site	Cemetery	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-195	N/A	Eligible	District	1905 house and barn	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LN00-196	N/A	Unevaluated	District	1915 farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-197	N/A	Unevaluated	District	1920 farmstead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN00-198	N/A	Unevaluated	Building	1920 barn on non-contributing farm	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LN00-199	N/A	Unevaluated	District	1900; 1925 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LN00-202	N/A	Eligible	District	1888 abandoned ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LN00-205	N/A	Unevaluated	Building	1910 farmhouse	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LN00-207	N/A	Unevaluated	Building	1910 ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (trees), but not seen in aerial photography, building not extant?	No anticipated effect
LN00-208	1888 Garfield Cemetery	Unevaluated	Site	Cemetery	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN03-004	N/A	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LN03-005	N/A	Unevaluated	Building	1920 commercial building	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-006	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-007	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-008	1925 Hershey Water Tower	Unevaluated	Structure	Water tower	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-009		Unevaluated	Building	1900 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-010	N/A	Unevaluated	Building	1890 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-011	N/A	Unevaluated	Building	1900 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-012	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LN03-013	N/A	Unevaluated	Building	1900 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-014	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-015	N/A	Eligible	Building	1927, 1930 abandoned motel court	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN03-016	N/A	Unevaluated	Building	1890 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-017	N/A	Unevaluated	Building	1900 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-018	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-019	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-021	N/A	Eligible	Building	1908 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LN03-022	N/A	Eligible	Building	1910 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-023	N/A	Unevaluated	Building	1915 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN03-024	N/A	Unevaluated	Building	1915 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-001	Wesleyan Church (Now Boutique & Fitness Center)	Unevaluated	Building	Church	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-004	N/A	Unevaluated	Building	1912 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-006	1890 Rodeo Office	Unevaluated	Building	Office	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN08-007	N/A	Unevaluated	House	1890 frame house	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-008	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LN08-010	N/A	Unevaluated	Building	1891 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-011	N/A	Unevaluated	Building	1915 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-012	1914 Spaulding – Aly House	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-013	N/A	Unevaluated	Building	1915 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-014	N/A	Eligible	Building	1920 house	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-015	N/A	Unevaluated	House	1917 frame house	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-016	N/A	Unevaluated	House	1908 frame house	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-017	N/A	Unevaluated	House	1900 frame house	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LN08-018	N/A	Unevaluated	House	1915 frame house	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-019	N/A	Eligible	Building	1927, 1937 filling station and service garage	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN08-020	Coates, Frank House	Unevaluated	House	1900 frame house	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN08-021	1919 Vanarskall – Paulman House	Unevaluated	Building	House	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-022	N/A	Unevaluated	Building	1915 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-023	N/A	Unevaluated	Building	1920 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-024	N/A	Unevaluated	Building	1890 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-025	N/A	Unevaluated	Building	1918 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LN08-026	N/A	Unevaluated	Building	1890; 1880 house with former house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-027	N/A	Unevaluated	Building	1917 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-028	N/A	Unevaluated	Building	1900 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-029	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-030	N/A	Unevaluated	Building	1915 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-031	N/A	Unevaluated	Building	1917 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-032	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-033	N/A	Unevaluated	Building	1928 service station	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LN08-034	N/A	Unevaluated	Building	1920 brick commercial building	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-035	1931 Former Sutherland Town Hall	Unevaluated	Building	Town hall	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-036	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-037	N/A	Unevaluated	Building	1920 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-038	N/A	Unevaluated	Building	1895 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-039	N/A	Eligible	Building	1938 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-040	N/A	Unevaluated	Building	1917 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-041	N/A	Eligible	Building	1927 former filling station	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LN08-042	N/A	Unevaluated	Building	1927 former filling station/ cafe	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-043	N/A	Unevaluated	Building	1927; 1950 park motel & service station	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-044	N/A	Eligible	Building	1927 former motel court (now apartments)	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-045	N/A	Unevaluated	Building	1950 service station/ restaurant	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-046	N/A	Eligible	Building	1930 former filling station	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-048	Lincoln Hwy Marker	Eligible	Object	1927-1930 highway marker	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LN08-049	N/A	Unevaluated	Building	1890 abandoned house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-050	N/A	Eligible	Building	1925 split log house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LN08-051	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-052	N/A	Eligible	Building	1900 adobe brick house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-053	N/A	Unevaluated	Building	1900 abandoned elevator	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LN08-055	N/A	Eligible	Site	Rodeo grounds	APE for Audible and Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO00-001	Brosius Homestead/ Neal Ranch	Eligible	District	Circa 1905 ranch with a frame house, small brick house, garage, workshop, barn, shop/garage, small outbuildings, and corral	APE for Audible and Visible Effects	Y	Unobstructed view of R-Project transmission line	Anticipated adverse effect
LO00-003	N/A	Unevaluated	District	1920 farm	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LO00-004	N/A	Unevaluated	District	1910 farm	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LO00-005	N/A	Eligible	District	1900 abandoned ranch with sod house	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LO00-006	Baker Ranch with baled hay house	Eligible	District	1923 ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LO00-008	N/A	Unevaluated	District	1907 farmstead - ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LO00-009	N/A	Unevaluated	District	1901 ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LO00-010	N/A	Unevaluated	Building	1912 sod house	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LO00-011	N/A	Unevaluated	District	1910 ?	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LO00-012	N/A	Eligible	District	1905 ranch with sod house	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LO00-013	N/A	Unevaluated	Building	1907 abandoned ranch house	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LO00-015	N/A	Unevaluated	District	1907 abandoned ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (existing transmission lines)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LO00-016	N/A	Unevaluated	District	1918 ranch house	APE for Visual Effects	N	R-Project transmission line likely not visible (trees, existing transmission lines)	No anticipated effect
LO00-017	Gross-Drake House	Eligible	District		APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LO00-018	N/A	Eligible	District	1893 abandoned ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LO00-019	N/A	Eligible	Building	1913 ranch with sod house	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LO00-020	N/A	Eligible	District	1901 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
LO00-021	N/A	Unevaluated	District	1910 ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LO00-022	N/A	Eligible	District	1925 ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
LO00-023	N/A	Eligible	Building	1914 farmhouse	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO00-027	N/A	Unevaluated	?	No resource information in SHPO data	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LO01-001	N/A	Eligible	Building	1880 abandoned commercial building	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO01-002	Former Logan County Jail	Eligible	Building	1908 jail	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO01-003	N/A	Unevaluated	Building	1895 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO01-004	Independent Order of Odd Fellows Hall and Gandy Cash Store	Eligible	Building	1890 store and club	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO01-005	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO01-006	Logan County High School	Eligible	Building	1930 school	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LO03-001	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-002	N/A	Unevaluated	Building	1917 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LO03-003	N/A	Unevaluated	Building	1920 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-004	N/A	Unevaluated	Building	1905 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-005	N/A	Eligible	Building	1921 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-006	N/A	Eligible	Building	1920 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-007	N/A	Unevaluated	Building	1895 ?	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-008	N/A	Unevaluated	Building	1915 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-009	N/A	Unevaluated	Building	1913 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-010	N/A	Unevaluated	Building	1903 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LO03-011	N/A	Unevaluated	Building	1887 abandoned commercial building	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-012	N/A	Eligible (no longer extant)	Building	1881 abandoned lumber company	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	No anticipated effect
LO03-013	1931 United Presbyterian Church	Unevaluated	Building	Church	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-014	Old City Hall	Eligible	Building	1900 municipal building	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-015	U.S. Post Office	Eligible	Building	1927 U.S. Post Office	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-017	N/A	Unevaluated	House	Circa 1901 frame house	APE for Audible and Visual Effects	Y	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-018	N/A	Unevaluated	House	Circa 1901 frame house	APE for Audible and Visual Effects	Y	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-019	N/A	Unevaluated	Building	1919 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
LO03-020	N/A	Unevaluated	Building	1923 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LO03-021	N/A	Unevaluated	Site	1939 city park	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
LP00-002	N/A	Unevaluated	Building	1895 abandoned ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
LP00-020	1890 Worth, George, Ranch	Unevaluated	District	Ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
MP00-007	N/A	Unevaluated	Building	1909 house – abandoned ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
MP00-008	1918 Barn on N.C. Ranch	Unevaluated	Building	Barn	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
MP00-020	N/A	Unevaluated	District	1910 ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
MP00-021	N/A	Eligible	Building	1913 school	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
RO00-051	1900 Rose-Hill Church, Cemetery & Parsonage	Unevaluated	District	Church complex	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
RO00-052	N/A	Unevaluated	District	1890; 1900 abandoned homestead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
RO00-053	N/A	Unevaluated	Object	1915 abandoned range corral	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
RO00-054	N/A	Eligible	District	1890 abandoned homestead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
RO00-055	N/A	Unevaluated	Building	1906 abandoned house	APE for Visual Effects	N	Unobstructed view of R-Project transmission line but not seen in aerial photography, building not extant?	No anticipated adverse effect
RO00-056	N/A	Unevaluated	District	1910 abandoned ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
RO00-057	N/A	Unevaluated	Building	1900 abandoned house	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
RO00-058	N/A	Unevaluated	Building	1915 school	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
RO00-059	N/A	Unevaluated	Building	1910 abandoned cellar	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
RO00-060	N/A	Unevaluated	District	1885; 1900 ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
RO00-061	N/A	Unevaluated	District	1910 ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
RO00-062	N/A	Unevaluated	Building	1910 school	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
RPKB-1	Old Highway 83/U.S. Route 183 (segment)	Eligible	Structure	1920s – 1980s abandoned highway	APE for Physical, Audible, and Visual Effects	Y	Unobstructed view of R-Project transmission line	Anticipated adverse effect
RPKB-12	Ballagh Schoolhouse	Unevaluated	Site	Historic school	APE for Physical, Audible, and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential physical effect that may diminish the integrity of the properties' significant historic features
RPKB-3	Sand Hill Ruts, Mormon Pioneer NHT	Eligible	Structure	Trail ruts	APE for Physical, Audible, and Visual Effects	Y	Unobstructed view of R-Project transmission line	Anticipated adverse effect
RPKB-5	Paxton-Hershey Canal	Eligible (Contributing)	Structure	Canal	APE for Physical, Audible, and Visual Effects	Y	Unobstructed view of R-Project transmission line	No adverse effect
TM00-001	Bessey Nursery	Listed	District	U.S. Forest Service facility	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
TM00-003	N/A	Unevaluated	Building	1925 barn	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-004	N/A	Unevaluated	District	1915 ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-005	N/A	Unevaluated	Building	1900 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
TM00-006	N/A	Unevaluated	District	1915 ranch	APE for Visual Effects	N	R-Project transmission line likely not visible (trees, existing transmission lines)	No anticipated effect
TM00-007	N/A	Unevaluated	District	1915 ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-008	Johnson, Charles, House	Eligible	Building	1890 house	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-009	Mowery, Clark, Homestead	Eligible	Building	1911 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-010	Albright, Edward, Homestead	Eligible	District	1907 homestead	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-011	Jameson, Frederick, House	Eligible	District	1911 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-012	N/A	Unevaluated	Building	1900 abandoned house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-013	1910 Turner Homestead	Unevaluated	District	1910 farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-014	N/A	Unevaluated	District	1910 abandoned homestead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-015	1910 Madron Ranch	Unevaluated	District	Ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
TM00-017	N/A	Eligible	District	1910 abandoned ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-018	U.S. Post Office	Eligible	Building	1900 U.S. Post Office	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-019	N/A	Unevaluated	Building	1905 school	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-020	1910 Glen Nutter Ranch	Unevaluated	District	Ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-021	N/A	Unevaluated	District	1910 abandoned ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-023	N/A	Unevaluated	District	1920 ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-024	Warner, Archie, House	Eligible	Building	1917 house	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
TM00-025	N/A	Unevaluated	District	1910 abandoned ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-026	1935 Bessey National Forest Tree Plantings/ Groves	Unevaluated	Landscape	CCC tree planting project	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
TM00-027	Charles Scott Lookout Tower, Nebraska National Forest	Eligible	Building	1930 fire tower	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-028	N/A	Unevaluated	District	1928 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-029	N/A	Unevaluated	Building	1930 frame barn	APE for Audible and Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-030	N/A	Unevaluated	District	1910 abandoned ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-032	Rodocker Ranch	Eligible	District	1925 ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-033	Jess Ewing Ranch	Eligible	District	1915-1930 ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-034	1965 Bessey Tree Planting / Halsey National Forest	Unevaluated	Landscape	Tree plantings spelling word “Bessey” on hillside	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-035	N/A	Unevaluated	Building	1920 house	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
TM00-036	N/A	Unevaluated	District	1920 abandoned ranch	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
TM00-039	N/A	Unevaluated	District	1908-1930 ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
TM00-040	Blue Star Highway Rest Area	Unevaluated	Site	Rest area	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Viewshed analysis indicates that due to topography and vegetation, project is expected to only yield weak visual contrast, with no adverse effects anticipated (Bedingfield and Tucker 2016)
TM00-041	Figard Sod House	Unevaluated	District	1938 farmstead	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Viewshed analysis indicates that due to topography and vegetation, project is expected to only yield weak visual contrast, with no adverse effects anticipated (Bedingfield and Tucker 2016)"
TM00-042	Paul, W. D., House	Eligible	Building	1916 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM00-044	1950 Arrow Café	Unevaluated	Building	Restaurant	APE for Visual Effects	N	R-Project transmission line likely not visible (highway embankment)	No anticipated effect
TM00-045	1950 Arrowhead Lodge	Unevaluated	Building	Hotel	APE for Visual Effects	N	R-Project transmission line likely not visible (highway embankment)	No anticipated effect
TM00-046	N/A	Unevaluated	Building	1950 service station & café	APE for Visual Effects	N	R-Project transmission line likely not visible (highway embankment)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
TM00-049	Nebraska National Forest - Bessey Ranger District	Listed	District	U.S. Forest Service facility	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-050	N/A	Unevaluated	Structure	1930 tornado shelter	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-051	Thedford Cemetery	Eligible	Site	1887 cemetery	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-052	N/A	Eligible	Structure	Revetment/ boardwalk	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-053	N/A	Eligible	Building	Cellar/tornado shelter	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-055	N/A	Eligible	Structure	Put-take/launch	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
TM00-056	N/A	Eligible	Structure	Retaining wall	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-057	N/A	Eligible	Structure	Stairs	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-058	1941 District Ranger Dwelling	Unevaluated	Building	USFS ranger dwelling	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-059	1941 Assistant Ranger Dwelling	Unevaluated	Building	USFS Ranger dwelling	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-060	N/A	Eligible	Building	Engineer bunkhouse	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-061	N/A	Eligible	Building	1946 lifeguard house	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-062	1939 West Shop	Unevaluated	Building	USFS shop	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
TM00-063	1941 District Ranger Garage	Unevaluated	Building	USFS garage	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-064	1941 Assistant Ranger Garage	Unevaluated	Building	USFS garage	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-065	1935 Fire Cache	Unevaluated	Structure	USFS fire cache	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-066	N/A	Eligible	Building	1935 storage garage	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-067	1937 Picnic Shelter House	Unevaluated	Building	USFS picnic shelter	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-068	1935 Pool Pump House	Unevaluated	Building	USFS pump house	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-070	Memorial Gates	Unevaluated	Structure	Gates	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
TM00-071	1941 Nurseryman Dwelling	Unevaluated	Building	USFS dwelling	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-072	N/A	Eligible	Building	1931 assistant nurseryman dwelling	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-073	1937 Seed Extractory	Unevaluated	Building	USFS seed extractor	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-074	N/A	Eligible	Building	1930 flammable storage	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-075	1937 Shop & Storage	Unevaluated	Building	USFS shop and storage	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-076	1937 Implement Shed	Unevaluated	Building	USFS shed	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-077	1930 Tree Packing Shed	Unevaluated	Building	USFS shed	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
TM00-078	1935 Cold Storage	Unevaluated	Building	USFS cold storage	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-079	N/A	Eligible	Building	1932 chemical storage	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-080	N/A	Eligible	Building	1932 seed storage	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-081	1933 Six Car Garage	Unevaluated	Building	USFS garage	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-082	1932 Tractor Storage	Unevaluated	Building	USFS storage	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-083	1941 Nurseryman Garage	Unevaluated	Building	USFS garage	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-084	N/A	Eligible	Building	paint cellar	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
TM00-085	N/A	Eligible	Building	1912 nursery office	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM00-086	N/A	Unevaluated	Structure	Revetment	APE for Visual Effects	N	Within National Forest, generally obstructed views of the R-Project transmission line	No anticipated effect
TM01-001	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-002	N/A	Unevaluated	Building	1906 abandoned house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-003	N/A	Eligible	Building	1910 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-004	N/A	Unevaluated	Building	1914 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-006	N/A	Eligible	Building	1917 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-007	N/A	Unevaluated	Building	1917 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-008	N/A	Unevaluated	Building	1927 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-009	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
TM01-010	N/A	Unevaluated	Building	1918 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-011	N/A	Unevaluated	Building	1908 abandoned house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-012	N/A	Eligible	Building	1909 house	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-013	N/A	Eligible	Building	1912 commercial building	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-014	Kenney Stockade Motel	Eligible	Building	1929 motel	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-015	N/A	Eligible	Building	1912 commercial building	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-016	N/A	Eligible	Building	1910 commercial building	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-017	N/A	Eligible	Building	1912 former hotel	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-018	1910-1960 Halsey Public School	Unevaluated	District	School	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM01-019	N/A	Unevaluated	Building	1950 service station	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
TM05-001	N/A	Unevaluated	Building	1915 commercial building	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
TM05-002	N/A	Unevaluated	Building	1925 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-003	N/A	Unevaluated	Building	1913 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-004	N/A	Unevaluated	Building	1912 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-005	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-006	N/A	Unevaluated	Building	1910 abandoned house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-007	N/A	Unevaluated	Building	1915 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-008	N/A	Unevaluated	Building	1910 former bank	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-009	Jim Weaver Hotel & Restaurant	Eligible	Building	1916 building	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
TM05-010	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-011	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-012	N/A	Unevaluated	Building	1900 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-013	N/A	Unevaluated	Building	1929 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-014	N/A	Unevaluated	Building	1915 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-015	N/A	Eligible	Building	1915 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-016	N/A	Unevaluated	Building	1910 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-017	N/A	Unevaluated	Building	1914 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
TM05-018	N/A	Unevaluated	Building	1916 house	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-020	Thomas County Jail Building	Eligible	Building		APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-021	Thedford City Park	Eligible	Building		APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
TM05-024	N/A	Unevaluated	Building	1945 service station	APE for Visual Effects	N	R-Project transmission line likely not visible (in town)	No anticipated effect
WH00-002	N/A	Eligible	Building	Farmhouse	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
WH00-004	Theo Pofahl Barn (Theo Pofahl Farmstead)	Eligible	Building	Farmhouse	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
WH00-005	N/A	Eligible	Building	Farmhouse	APE for Audible and Visual Effects	Y	Unobstructed view of R-Project transmission line	Potential introduction of audible or visual elements that may diminish the integrity of the properties' significant historic features
WH00-006	N/A	Eligible	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
WH00-008	N/A	Eligible	Building	Abandoned farmstead	APE for Visual Effects	N	Non-Extant? Not seen in aerial photography	No anticipated effect

Resource #	Name	Eligibility	Resource Type	Description	APE	Within 0.5 Miles of Transmission Line (Y/N)?	2024/2025 Viewshed Analysis	Anticipated Effects
WH00-017	N/A	Eligible	Building	Abandoned farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
WH00-018	N/A	Eligible	Building	Frame farmhouse	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
WH00-019 / WH00-HD001	Headquarters Ranch	Listed	District	1906 ranch	APE for Visual Effects	N	Unobstructed view of R-Project transmission line	No anticipated adverse effect
WH00-021	N/A	Eligible	Building	Farmstead	APE for Visual Effects	N	R-Project transmission line not visible	No anticipated effect
WH00-024	N/A	Eligible	Building	Abandoned farmstead	APE for Visual Effects	N	R-Project transmission line likely not visible (trees)	No anticipated effect
WH00-025	N/A	Eligible	Building	Abandoned farmstead	APE for Visual Effects	N	Non-Extant? Not seen in aerial photography	No anticipated effect

Source: Bedingfield, K. and C.J. Tucker. 2016. 2016 Cultural Resources Survey of the R-Project 345 kV Transmission Line. Prepared for the Nebraska Public Power District by POWER Engineers, Inc. November 3, 2016.